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October 28, 2021

Ms. Christine Matlock, Senior Environmental Engineer Hazardous Waste Section
Michigan Environment, Great Lakes and Energy
P.O. Box 30241
Lansing, Michigan 48909-7741

SUBJECT: Michigan Disposal Waste Treatment Plant (MID 000 724 831) and
First Technical Deficiency for Waste Analysis Plan
Hazardous Waste Management Facility Operating License Renewal Application

Dear Ms. Matlock,

US Ecology's (USE) Michigan Disposal Waste Treatment Plant (MDWTP) and US Ecology Detroit South (USE-DS) are providing Michigan Environment Great Lakes, and Energy's (EGLE), Materials Management Division (MMD), responses to Technical Notices of Deficiency (NOD) for both facilities' Waste Analysis Plans (WAP). Technical deficiencies for MDWTP dated June 4, 2021, and July 6, 2021, as well as May 26, 2021, and August 13, 2021, for USE-DS, consisted of over two hundred comments and three technical memos from MMD and United States Environmental Protection Agency's, Region 5 (USEPA) staff. USE expects that the revised WAPs being submitted today will resolve most of the 200+ deficiency comments made by MMD. However, USE believes that there is at least one issue raised in the NODs that warrants additional consideration, that being the requested changes to the post-treatment sampling and analysis procedures. Accordingly, the revised WAP submitted today in response to the NODs includes a placeholder for this issue pending its resolution through further discussions.

It should be noted deficiencies related to the treatment process are not addressed in this submittal. Attachment C4 Treatment contains proprietary and company confidential information and as a result it was provided in a separate submittal and should not be disclosed except as provided in 40 CFR Part 2, Subpart B and §324.11129 of Act 451.

As EGLE is no doubt aware, both facilities' permit applications have been in the EGLE renewal process for many years, with MWDTP's renewal application submitted in 2016 and Detroit South's in 2008. While USE appreciates the sense of urgency, USE does not believe it would be appropriate at this time for MMD staff to self-impose a final deadline and limit parties' ability to work through the remaining technical issues.

USE has made significant concessions in response to EGLE's NOD demands and has significantly modified its proposed WAP to accommodate those demands; however, the recommendations concerning land disposal restriction post treatment sampling and analysis provided by US EPA staff in its technical

memorandum addressed to EGLE seem to be inconsistent with nationally published guidance and the historical implementation of the RCRA hazardous waste program.

USE leadership would like some time to have direct communications with the appropriate representatives at US EPA concerning this matter and efforts to schedule these discussions have already begun. USE has witnessed prior occasions when localized regulatory misalignment has resulted in unintended consequences for permitted facilities, generators, and regulatory agencies and believes that a deliberate and thorough decision-making process is in everyone's best interest. The outcome of this issue could have significant impacts on the capacity accounted for in Michigan's hazardous waste management plan as well as the ability to effectively manage hazardous, industrial, and non-hazardous/emerging contaminants waste for industry in the State of Michigan, the Midwest, the US Army Corp of Engineers, the Department of Defense, and many others.

Given the complex nature of the regulatory issues being discussed, a final deadline at this time is not in the best interest of any of the parties. USE does not believe separating this issue from the remainder of the application will result in any delay in issuing a permit decision. As we move forward with US EPA, USE is requesting EGLE staff proceed with the technical review of the rest of the permit applications, including the Waste Analysis Plan revisions contained in today's submittal. USE is confident that an acceptable compromise can be reached on this matter, but given both the known and unknown implications, USE feels strongly that granting additional time to resolve these complex issues is the most prudent decision at this point in time.

It should be noted that (facility ID) staff made a good faith effort to respond to and incorporate comments from EGLE and US EPA received via email at 5:55 p.m. yesterday.

USE looks forward to continuing to work with EGLE to ensure we can meet our common goal of safe and compliant waste management.

Please contact me if you have any additional questions.

Sincerely,

Kerry Durnen

Kerry Durnen
Vice President and General Manger

Enclosures

cc: Aaron Keatley, EGLE (w/out enclosures)
Elizabeth Brown, EGLE (w/out enclosures)
Mr. Jim Blough, U.S. EPA
Matthew Best, Van Buren Charter Township
Michael Busse, EGLE

Overall Comments:

1. *The proposed WAP contains many caveats and qualifiers (e.g., "as appropriate"), which render the sections inadequate to specify the sampling and analytical methods, parameters, and frequencies for appropriate waste analysis, as required by Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection. Act, 1994 PA 451, as amended, and the administrative rules (Part 111), and therefore, unenforceable. Such language as "may" and "as- needed," must be replaced with "must", "shall", or "will", unless justified for situations were inappropriate.*

The language was evaluated throughout the document and changed were appropriate. If EGLE identifies specific examples in addition to the revisions already made that it believes create an enforceability problem for an otherwise required element of the WAP, please identify each and appropriate revisions can be made.

The WAP should explicitly state the purpose and objectives of the WAP, addressing the core requirements of a WAP such as:

a. *Specifying the methods that will be used to meet the waste analysis requirements for the Land Disposal Restriction (LDR) program given in the Code of Federal Regulations, Title 40 (40 CFR) 268.7, as required by Rule (R) 299.9605(1), and 40 CFR 264.13(b)(6). These methods include the required elements described in 40 CFR 264.13(b) (1-5); the WAP must specify the parameters and rationale for analysis, the test methods, sampling methods, and frequency for each hazardous waste.*

Information is included in A2.D and A.2.E.

b. *40 CFR 264.13(b) and (c) spell out the information that must be included in your WAP in order to perform the analyses described in the text above, as well as other analyses that may be needed at your facility, including:*

    i. *(b)(1) The parameters for which each hazardous waste, or non-hazardous waste if applicable under 40 CFR 264.113(d) will be analyzed, and the rationale for the selection of these parameters (i.e., how analysis of these parameters will provide sufficient information of the waste's properties as specified).*
    ii. *(b)(2) The test methods that will be used to test/analyze these parameters.*
    iii. *(b)(3) The sampling method that will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:*
        1. *Appropriate sampling method in Appendix I of Part 261 for the waste.*
        2. *An equivalent sampling method.*

iv. *(b)(4) The minimum frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate, up to date, and representative of the waste over time.*

40 CFR 264.13(b) and (c) require facilities to describes the procedures which will be used in to obtain a chemical and physical waste analysis of the waste to obtain information which must be known to treat, store, or dispose of the waste in accordance with this part and part 268 of this chapter.

Section A2.A details the facilities robust pre-approval process that includes obtaining detailed information from the generator which is required by 40 CFR 261.2 to make an accurate determination as to whether its waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations and includes the frequency the initial analysis is reviewed and repeated. The section also details the process by which MDWTP/WDI reviews the information to make an approval determination.

A2.B describes procedures utilized to inspect and if necessary, sample and analyze the waste to confirm consistency with the pre-approval information including the frequency of inspection, sampling and analysis and the methods in which the waste is sampled and analyzed. Table B.2 includes test methods utilized and the rationale and the frequency of testing.

A2.C describes precautions taken to prevent accidental ignition or reaction of ignitable or reactive waste.

A2.D provides a detailed description on land disposal restriction requirements found in 40 CFR 268.40.

2. *Documents referenced within the WAP must be provided for MMD review when they are relied upon to satisfy Part 111 application and waste analysis requirements. This includes all standard operating procedures (SOP) that are utilized to achieve this requirement.*

As discussed during the October 19,2021 discussion with EGLE, internal procedures are being provided as well as procedures for the use of sampling equipment. Methods developed in accordance with EPA's Publication SW-846, ASTM methods, or the Standard Methods for Examination of Water and Wastewater are provided by reference.

Internal facility SOPs are business tools that provide direction and guidance to USE staff regarding the implementation of the WAP, laws, rules, and license conditions applicable to the operation of USE's facility. SOPs are not intended establish or contain regulatory or license requirements. They are merely explanatory, and do not affect the rights of, or procedures and practices available to USE. While the SOP may contain a specific set of uniform procedures and methods that USE staff are expected to follow in order to maintain compliance with the WAP, there are often many other methods that would achieve the same result, flaws may be found in the methods, or new and better methods may be discovered. Accordingly, it is important that the

procedures contained within a SOP may be discontinued, revised, or replaced by USE in order to improve facility operations, to increase the safety of USE staff, or for any other reason, so long as the procedures USE employs results in compliance with the license, the approved WAP and other applicable regulatory requirements.

With that in mind, and to preserve the facility's ability to control its internal SOPs, it is appropriate to document analytical methods in the WAP which obligates the facility to meet these requirements and makes them enforceable. It is inappropriate to require the inclusion of SOPs impeding the operators to improve on those procedures in the ordinary course of business. Analytical method SOPs developed in accordance with EPA's Publication SW-846, ASTM methods, or the Standard Methods for Examination of Water and Wastewater have been referenced in the WAP. MDWTP is requesting EGLE provide the regulatory citations that specifies changes to the internal SOPs require approval so that MDWTP can understand its regulatory obligation.

3. *Where the application differs from the site's previous Hazardous Waste Management Facility Operating License (operating license), please provide justification for the proposed changes.*

The changes are a direct result of the WAP template which changed the structure and flow of the document and in response to EGLE's revised interpretations. Extensive changes have been made to address EGLE's comments including increasing the number of samples collected for pre-acceptance, identification of additional screening parameters, and the elimination of several sampling exemptions. Procedures for sampling and internal screening methods are added to the WAP. Finally, extensive discussion regard land disposal restriction requirements are included.

4. *As Michigan has a delegated hazardous waste program, please ensure consistency with Part 111, referring to federal regulations where they have been adopted by reference within Part 111 (e.g., references to "Administrator" must be changed to "Director").*

This has been addressed throughout the WAP.

5. *Please revise to ensure consistent application of well-defined terminology, ensuring that the terminology used agrees with Part 111, federal regulations, and the2015 Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes Guidance Manual (WAP Guidance). The WAP uses terms for types of waste analysis processes that are defined differently in the WAP Guidance and common industry usage. MDWTP and WDI refer to activities to gather information on waste streams before shipping to the facility as Pre-Approval (Section A2.A) instead of the WAP guidance-term Pre-Acceptance. MDWTP and WDI refer to Pre-Acceptance (Section A2.B) as the procedures used to confirm incoming waste shipments are consistent with the waste expected instead of the WAP Guidance-term Waste Acceptance. MDWTP and WDI refer to additional testing needed to correctly treat, process, or store wastes as Waste Acceptance*

(Section A2.C) instead of Treatability Acceptance (or other appropriate nomenclature). We recommend renaming these categories to be consistent with the WAP Guidance and common industry usage to avoid confusion. For the purpose of these comments, EGLE will refer to these activities using the terminology presented in the draft WAP proposed by MDWTP and WDI.

The intent of the WAP is for operations personnel on site to utilize the document for consistency. The terminology as written is consistent with the terminology that site personnel are accustomed to. If this terminology is changed it could pose a risk of misinterpretation by site personnel. Therefore, no changes to the terminology have been made.

6. *The MMD understands that the proposed WAP will be incorporated into the operating license for both MDWTP and WDI. Please revise sections and details to be more specific regarding when conditions apply to either one of the facilities or both. There should be no confusion as to which section applies to MDWTP/WDI or either one.*

The language was evaluated throughout the document and changed were appropriate. EGLE identifies specific examples of language it believes is unclear regarding this issue, please identify each and appropriate revisions can be made

7. *Please specify which staff is responsible for the following activities, along with training and qualifications required of this staff:*
   a. *Sample collection*
   b. *Sample analysis*
   c. *Evaluations and final determinations on waste streams*

Pre-approval, pre-acceptance, acceptance, treatment, and post-treatment evaluations are completed by qualified personnel (individuals who have been trained and are familiar with the procedures essential to executing the requirements of the WAP). *Please reference Section H for the training required for site personnel.*

A2 – Introduction:

8. *The Quality Assurance / Quality Control (QA/QC) Plan referenced must be provided to the MMD for review and inclusion in the WAP. The QA/QC Plan can be referenced by date and version in the WAP. Any changes to the QA/QC Plan would be considered a modification per R 299.9519.*

MDWTP/WDI provided the QA/QC Plan in its original WAP submittal. Revisions are needed to update references and as a result the updated QA/QC plan is being provided in Appendix D of the WAP.

A2.A.1(a) – Acceptable Waste Type Description:

9. *Paragraph 2: "Decharacterized" should be changed to "treated to remove the hazardous characteristic(s)." This section must specifically mention underlying hazardous constituents (UHC).*

This change was made; however, this is not a technical deficiency.

10. *Paragraph 3: Please clarify that any waste streams for which a delisting is desired, prior authorization is required for the specific waste stream and/or treatment process, and that the procedures detailed in 40 CFR 260.22 must be followed. Additionally, please note that LDRs may have attached to wastes subsequently delisted via treatment. If the treatment that results in delisting occurs after the waste was generated, the treatment residue must still meet LDR standards, even though it is no longer hazardous.*

Clarification has been added. In general, the generator applies for a delisting as defined in 40 CFR 260.22. If the generator is approved for a specific delisting, then this delisting applies at MDWTP as well. Furthermore, the use of 40 CFR 260.22 is not always a requirement.

11. *Paragraph 6: Currently, the language states that debris can be treated with any technology listed in Table 1 of 40 CFR 268.45, however, that is not what is indicated within the WAP. Please modify the language to be consistent with the WAP conditions.*

Clarification has been added. Debris can be treated with any technology listed in Table 1 of 40 CFR 268.45. The facility treatment technologies are limited to immobilization, but this does not preclude the facility from accepting waste treated by other technologies identified in the table.

12. *Paragraph 7: Clarify in the 2nd sentence that it is "universal" waste.*

Clarification has been added.

13. *Paragraph 7: Please specify which "facility" the materials may be transshipped from. MMD understands that MDWTP and WDI are destination facilities unless the universal waste is being transshipped from MDWTP.*

Clarification has been added.

14. *Paragraph 8: Please clarify which facility it is referring to, and the reason for any change, if it exists, from the current WAP.*

Clarification has been added.

15. *Paragraph 9: This section states that MDWTP may mix incompatible wastes, which is currently disallowed, in the facility's operating license (see License Conditions III.G and IV.G). Please explain the rationale behind the proposed change, specify how*

incompatibles will be identifies prior to the storage or treatment of waste, and demonstrate how precautions will be taken to adequately prevent the outcomes listed.

This is **not** a proposed operating change. The Resource Conservation and Recovery Act (RCRA) outlines the "cradle to grave" management of hazardous waste. Part of this "cradle to grave" process is treating hazardous waste which, in many cases are essentially controlled reactions, to reduce or eliminate the chemical's hazard for safe disposal. Some of the treatment methods utilized by MDWTP include stabilization, deactivation, and solidification. MDWTP/WDI does not intentionally mix incompatible waste this is defined as hazardous waste which is unsuitable for:

- Placement in a particular device or facility because it may cause corrosion or decay of containment materials.
- Commingling with another waste of material under uncontrolled conditions because the commingling might produce an adverse reaction.

This section has been revised to eliminate confusion.

16. *Paragraph 10: Specify what is approved and the conditions for the approved variances including any concentration-based standards, sampling, and analysis required.*

MDWTP/WDI are providing information included in EGLE's October 14,2021 email clarification. As discussed with EGLE on October 19,2021 information is being included in Appendix E of the WAP.

A2.A.1(b) – Prohibited Waste Type Description:

17. *Paragraph 3: Remove "...but may be accepted at MDWTP." The caveat should be removed since the WAP already clearly states what MDWTP is allowed to take, and the list shouldn't only be for items that WDI can't accept but MDWTP can accept. Where is the list that states what waste streams are prohibited from both WDI and MDWTP?*

This language has been removed.

18. *Paragraph 3: Please list out specific waste codes that are prohibited as done in the 1st paragraph.*

Clarification has been added.

19. *If waste contains a reactivity characteristic, the waste must be coded and managed as such. If the waste has been deactivated such that the reactivity characteristic no longer applies, then the reactivity code must be removed.*

For cradle-to-grave purposes it is common for deactivated waste to identify the waste codes as an administrative communication tool. The waste codes are not applicable and though this is not a

regulatory requirement, this is done by many generators and TSDFs as a best management practice. As stated, the waste does not exhibit the characteristic.

20. *Please clarify why the USEDS proposed WAP prohibits explosive waste based on the United States Department of Transportation (U.S. DOT) Compatibility Chart, but it is not done here.*

R299.9212 (3)(h) states: "a D003 is applicable to "a forbidden explosive as defined in 49 C.F.R. §173.54, or it meets the definition of a Division 1.1, 1.2, or 1.3 explosive as defined in 49 C.F.R. §§173.50 and 173.53, which are adopted by reference in R 299.11004."

The regulations cited are references to the Department of Transportation's regulations which define an explosive. WDI has stated that it will not accept reactive waste as described by Rule 299.9212(3) and MDWTP has stated waste identified in R299.9212(3)(h) may not be stored or treated.

21. *For the list of waste types that are not acceptable for disposal at WDI, but may be accepted at MDWTP, please add applicable PCB wastes such as PCBs liquids in containers and PCB and PCB-contaminated transformers containing free-flowing PCB liquids.*

Requested change has been made.

22. *Please clarify why 1975 PA 348 is applicable?*

This has been removed. Language is included in the existing WAP, but the origin of it is unknown.

A2.A.1(c) – On-site Generated Waste:

23. *Paragraph 1: Please be specific in identifying what wastes are generated onsite other than two examples.*

Paragraph 1 provides a general description of the waste types that are generated at the facility and how characterization is determined and documented.

24. *Paragraph 1: This section states that "waste generated at the facility is evaluated in the same manner as off-site waste, utilizing procedures provided in the sections below." Please specify the specific sections this is meant to refer to.*

Clarification has been added.

25. *Paragraph 2: Indicate in this section specifically where the sampling and analytical methods, frequencies, and parameters are specified for pre-approval waste profiling purposes.*

Waste generated at the facility is characterized and utilizing procedures provided in the sections A2.A.2, A2.A3(a), A2.A.4, A.2.A.5 and A2.A.6.

A2.A.2 – Pre-Approval Waste Characterization Requirements:

26. *Under "Waste Description", please add a field to require indication of whether a waste stream is an oxidizer.*

Clarification has been added.

27. *Under "Identification of Exclusions and Exemptions" - When claiming < 500 ppm VOC bearing waste, please revise to require indication of how this determination was made (generator process knowledge, analytical sampling results, etc.). Additionally, it must be specified that adequate supporting information must be documented and kept in the waste stream's approval file.*

The language in this section states, *"Knowledge of the waste provided with the generator's pre-approval information is relied upon to make a determination on whether the waste is exempt from Subpart CC. Examples of acceptable knowledge includes information included in manifests, shipping papers or waste certification notices."*

The section also includes a detailed discussion on the use of knowledge for all aspects of characterization using regulatory language from 40 CFR 262.11(c) and (d) Hazardous Waste Determination and Recordkeeping.

28. *Under "LDR", please revise to require generators to explicitly identify all UHCs present or reasonably expected to be present in the waste stream.*

Clarification has been added.

29. *Paragraph 3: Alternative analytical methods must be "demonstrated to: measure the constituent of concern, in the matrix of concern, at the concentration level of concern, at the degree of accuracy as identified as necessary to address the site- decision." (EPA 542-R-01-015) and does not apply to parameters where the method is prescribed in the regulations (Method-Defined Parameters – such as the TCLP). See 70 FR 34538 and 74 FR 36198 for more details.*

Clarification has been added.

30. *Paragraphs 3 & 4: The word "knowledge" is non-specific. Please clarify where this term is used, indicating if it is meant to refer to generator process knowledge, analytical results, any of the examples given in the second bullet under paragraph 3, or other sources of information. Additionally, please clarify circular phrasing, such as "acceptable knowledge that may be used as part of the basis for acceptable knowledge…".*

Clarification has been added based on EGLE's feedback during an October 5,2021 discussion.

31. *Paragraph 4: This section should reference section A2.A5, regarding processes for discrepancy resolution and solicitation of additional information.*

Clarification has been added.

A2.A.3(a) – On-site Generated Waste:

32. *"As practicable" and "whenever possible" are insufficient to describe compliance with approved sampling methods (e.g., 40 CFR 261 Appendix I & SW-846). Before use of an alternative analysis method, prior demonstrations of equivalency and EGLE approval is required*

Language utilized in this paragraph was taken from example Waste Analysis Plans provided in US EPA's 2015 Waste Analysis at Facilities that Generate, Treat, Store and Dispose of Hazardous Waste (here in referred to as WAP Guidance). However, it is understood that EGLE is looking for additionally clarity. Additional detail has been added to this section.

33. *Please refine this section to clarify the differences in proposed procedures between on-site and offsite generated wastes for both MDWTP and WDI.*

These sections should be read independently. Section A2.A.3(a) recognizes MDWTP/WDI's responsibility as a generator to ensuring compliance with generator waste characterization requirements. Alternatively, A2.A.3(b) identifies steps taken to evaluate off-site generator characterizations. In both instances information required by A2.A2 is required in order to obtain a detailed chemical and physical analysis of the waste.

34. *When off-site third-party labs are utilized, how will MDWTP/WDI ensure appropriate QA/QC standards are applied? MDWTP/WDI maintains the responsibility to ensure the accuracy of any information relied upon for on-site waste analysis purposes.*

Clarification has been added.

35. *Please explain how variability will be determined and documented and provide a specific example? Please define a "highly variable" waste, and the criteria that will be used to make this distinction. Also, when highly variable waste streams are identified, please specify that their evaluations "will" be more frequent, not that they "may" be more*

frequent. How will these frequencies be determined? Will this process be the same for on-site and off-site generated waste?

Clarification has been added.

36. *Paragraph 1: Last Sentence – Please clarify if "appropriate analytical parameters" are UHCs based on Table 1: Universal Treatment Standards in 40 CFR 268.40 (a).*

Clarification has been added

37. *Paragraph 10: Please clarify exactly how on-site generated wastes will be evaluated, characterized, and profiled. Some of the descriptions in this paragraph are confusing and ambiguous, (e.g., are the testing and sampling frequencies discussed here meant to refer to frequencies of revaluations of waste profiles, or pre- acceptance purposes, or something else?). This paragraph states that some wastes "may not require any testing" – please clarify this point. More specificity is needed as to when sampling and analysis must be performed, for which facilities, and exactly what exemptions are being requested.*

A2.A2 provides a description of the information required for onsite generated waste in order to obtain a detailed chemical and physical analysis of the waste. A2.A3(b) has been revised to include specifics on when sampling and analysis is performed. The section is not requesting exemptions from our responsibility to characterize using testing and/or knowledge of the waste.

38. *Table A.2: Please note the following changes are needed:*

    a. *a. The "Minimum Sample Size" column appears to contain some incorrect sample volumes. For example, a semi-volatile analysis typically requires a minimum of one liter for water analysis. However, for some waste liquid analyses, such as organic solvents and oils, a four-ounce jar may suffice. Revise the volumes in this column and/or correct the matrices, as applicable.*

The requested change has been made.

    b. *For TCLP Metals/Hg, the holding time is 28 days for mercury and 6 months for other metals.*

The table has been updated to separate mercury hold time requirements from all other metals.

    c. *Add other parameters to this table that may have to be analyzed for pre- screening, such as paint filter and ignitability.*

The requested change has been made.

d. *Will any aqueous samples contain chlorine? Please clarify why sodium thiosulfate is not listed as a potential preservative for certain aqueous samples/analyses.*

This is not expected. However, the table has been updated to include this preservation requirement.

39. *Table A.3: Please note the following changes are needed:*
    a. *Under the Rationale column, please clarify what is meant by comparing "incoming wastes" to "waste information presented during pre-approval", as this table is labeled for use during pre-approval.*

Clarification has been added.

    b. *Is MDWTP/WDI proposing to use these analytical methods for all pre-approvals, including on-site and off-site generation? Please explain how Tables A.3 andD.2 relate. It must be clearly understood by all parties when specific sampling and analysis needs to be performed. Additionally, please explain when and how it will be determined that existing waste stream knowledge must be supported.*

Table A3 is only referenced for onsite generated waste. Additionally, if confirmatory analysis is performed by MDWTP/WDI Table A3 methods are utilized to confirm generator information.

    c. *Under the ignitability rationale, the wording implies that a match test will be used to determine whether a waste is ignitable. Under 40 CFR 621.21(a)(1), applicable liquid wastes should be tested using one of the cited analytical methods to determine D001 applicability based on flashpoint instead of the match test.*

The requested change has been made.

    d. *Please clarify how MDWTP/WDI will determine ignitability for solid wastes.*

The requested change has been added to the table.

    e. *Please include a test method to screen for the presence of oxidizers.*

The requested change has been added to the table.

    f. *For the purposes of waste characterization and determining if an aqueous waste is corrosive under 40 CFR 261.22 SW 846 9040C should be utilized. pH values that differ either by more than two standard units, that switch between acidic and alkaline conditions, or exceed RCRA corrosivity limits (less than or equal to 2.0 or greater than or equal to 12.5) should be defined and evaluated as discrepancies.*

The requested change has been added to the table.

g. *Please see the separate note regarding reactivity*
h. *Add TCLP as a parameter to this table.*

The requested change has been added to the table.

i. *In the Analytical Method column, add preparation, extraction, and digestion methods for each analysis, as applicable, that will be used.*

The requested change has been added to the table.

j. *Add a column to this table to describe what constitutes a discrepancy.*

For purposes of characterization waste analysis, the properties of the waste are being identified by the analysis. Therefore, there is no potential discrepancy. However, understanding EGLE's concern A2.A.5 has been updated to explain what inconsistencies can trigger MDWTP/WDI to request additional information.

A2.A.3(b) – Off-site Generated Waste:

40. *TSDFs are responsible for ensuring the adequacy and accuracy of information relied upon at the receiving facility to satisfy waste analysis obligations and to ensure the safe and effective management of wastes. The obligations applicable to generators in regard to initial waste characterizations are not mutually exclusive of these TSDF responsibilities. This section contains at least nine instances of activities that "may" happen. Any such activities to be conducted by MDWTP/WDI should be specifically identified by the WAP using such terms as "must," "shall," and "will." For example, if a waste stream's input is highly variable, MDWTP/WDI should ("shall") require analysis prior to each disposal.*

Section A2.A outlines the information required to obtain a representative chemical and physical waste analysis of the waste. Further clarification has been added to A2.A3(b) to describe how the information is evaluated. A2.A.6 specifies the frequency at which a waste will be reevaluated by the TSDF.

41. *Paragraph 2: Please clarify this section by specifying what standards MDWTP/WDI will require for initial waste characterizations made by generators. For example, how often will these evaluations be re-examined? How will the variability of waste streams be determined and documented, to justify less frequent evaluations of certain waste streams? For waste streams determined to be highly variable, what will MDWTP/WDI do to ensure characterizations are adequate? Please remove the term "may" and address how the WAP addresses specific circumstances.*

Further clarification has been added to A2.A3(b) to describe how the information is evaluated. A2.A.6 specifies the frequency at which a waste will be reevaluated by the TSDF.

42. *Paragraph 2: The word "knowledge" is non-specific. Please clarify if this is meant to refer to generator-provided information such as generating process knowledge, analytical documentation, and/or other sources of information.*

Knowledge of the waste is defined in 40 CFR 262.11(c) and (d) Hazardous Waste Determination and Recordkeeping as well as detailed in the 2015 WAP Guidance. Additionally, Section A2.A2 also includes a detailed discussion on the use of knowledge for all aspects of characterization using regulatory language from 40 CFR 262.11(c) and (d) Hazardous Waste Determination and Recordkeeping.

43. *Paragraph 2: How will consistency of generating process inputs (e.g., what constitutes "minor variations") be determined? What constitutes "fluctuations", and what is the frequency for "periodic" re-evaluations?*

    a. *a. For clarity, please reiterate the minimum requirements to re-evaluate and re-certify (pre-approval process) a waste stream if there have been changes to the generating process, if a discrepancy has been discovered, and if the approval has expired (1 year max) – WAP Section A.2.A.6.*

A2.A3(b) to clarify how the information is evaluated

44. *Paragraph 2: The last sentence states that "generators are ultimately responsible for the determination at the point of generation". While generators have this responsibility, MDWTP/WDI is also ultimately responsible for their acceptance of generator information as accurate and sufficient, and the WAP should actively affirm this responsibility.*

MDWTP/WDI has acknowledged its responsibility as a TSDF and provided detailed description on procedures utilized to obtain information that must be known to treat, store and dispose of the waste in accordance with 40 CFR 264 and 268 of the RCRA regulations. Generator responsibility and the TSDFs ability to utilize generator provided information in recent rule making stating:

"***Generators are, and always have been, ultimately responsible for making accurate hazardous waste determinations***… *A generator's hazardous waste determination at the initial point of generation is critical to ensure proper management of the waste not only by the generator, but also by transporters and TSDFs who rely on the generator's determination to allow them to safely manage the waste and provide appropriate treatment and disposal. This proposed revision to § 262.11 is not a substantive change to the program; preambles to a number of previous rules explain that EPA has always maintained that hazardous waste determinations must be made at the initial point of generation.*" [81 FR 85750, November 28, 2016]

45. *The referenced A.2.A.5 section does not mention discrepancies or discrepancy resolution. That section, as written, only discussed scenarios where insufficient information is*

submitted. Also, what constitutes an irreconcilable discrepancy? Time limits for resolution?

Section A2.A.5 details discrepancy procedures. Inclusion of this information in A2.A3 is redundant and unnecessary.

A2.A.4 – Pre-Approval Land Disposal Restrictions (LDR) Evaluation:

46. *Clarify which LDR comments and WAP requirements are made for MDWTP, WDI, or both. For example, although the LDR applicability of on-site generated waste streams (not treatment residuals) generated by MDWTP could be determined by either testing or knowledge, such wastes to be disposed of at WDI must have periodic testing to determine LDR compliance in accordance with 40 CFR 268.7(c) (a disposal facility has a separate testing requirement from that of the treater or generator).*

"*For purposes of compliance with the land disposal restrictions rule, a waste analysis plan for an offsite disposal facility must address the procedures for screening incoming shipments of waste to ensure that waste received conform to the certification made by the generator or treatment facility. That is the waste analysis plan must address the procedures necessary for determining whether an extract of the waste or treated waste meets the treatment standards. ...For each waste stream, the waste constituents regulated under the land disposal restrictions rule must be comprehensively analyzed.... If the* ***owner/operator of the land disposal facility does not receive this information in writing from the generator or treatment facility, he must perform the analysis to determine whether the waste meets the treatment standards according to the waste analysis plan****. The test results of this comprehensive analysis must be placed in the land disposal facility's operating record."* [51 FR 40598, November 7, 1986]

WDI has been in operation for over 30 years. The requirements in the plan are consistent with the Waste Analysis Plan requirements that have been approved by EGLE for use during the lifetime of the hazardous waste disposal facility. Section A2.A describes procedures necessary to obtain information that must be known to treat, store and dispose of the waste. More specifically A2.A2 states "Generators must determine whether their waste is subject to the LDRs for each hazardous waste at the point of generation, including underlying hazardous constituents that are present or reasonably expected to be present in the waste stream and subject to treatment."

47. *This section implies that deviations from SW-846 will not occur, in contrast to previous sections and the referenced Table A.3. Please clarify.*

Clarification has been added.

48. *Paragraph 2: It is unclear what distinctions are being made between on-site and off- site waste streams, it seems to indicate that on-site analysis will never be used to determine*

LDR applicability / prohibition of disposal…etc. Also, MDWTP and WDI should actively confirm this information with generators per comment --- in Section A2.A.2.

Section A2.A3(b) describes confirmatory analysis that may be completed for off-site generated waste. See responses to comments related to A2.A.2

A2.A.4(a) – Dilution and Aggregation of Wastes:

49. *Paragraph 1: Please clarify the intent of the 2nd sentence. Dilution of characteristically hazardous non-wastewaters is not allowed under the LDR regulations, except as incidental from the addition of reagents or from appropriate aggregation. Any impermissible dilution constitutes noncompliance and must be reported as such. Please clarify what is being proposed as standards for "proper treatment" of impermissibly diluted wastes and what is being proposed to be done with the waste afterwards.*

As stated by US Ecology treatment will occur. Therefore, at the time of land disposal the waste will meet land disposal restrictions.

50. *Why was the language in the template omitted, regarding prohibition of partial treatment of listed wastes to change treatability category and/or to comply with different treatment standards?*

Template language has been added. It should be noted language regarding treatment residue dilution is included in section A2.D2(g)

51. *Please clarify the recordkeeping and reporting that will pertain to dilution and aggregation of wastes either from MDWTP or the generator.*

Clarification has been added.

A2.A.5 – Pre-Approval Generator Waste Characterization Discrepancies:

52. *This section does not discuss discrepancies, as is indicated in the title and in preceding sections. Instead, this section discusses procedures for soliciting supplemental information when insufficient information is submitted for a given waste stream, and a waste approval determination can't yet be made. Please revise to address discrepancy resolution procedures for both pre-approval and pre- acceptance.*

A2.A.5 was intended to describe the procedures identified by EGLE in this deficiency. Understanding the confusion, the title of the section has been changed to Pre-Approval Generator Waste Characterization Insufficiencies and additional explanations have been added.

53. *Detail how discrepancies will be recorded and tracked in order to flag waste profiles from generators that have patterns discrepancies.*

Documentation of communication related to the pre-approval process is retained in the approval file.

A2.A.6 – Subsequent Waste Shipment Procedures:

54. *Paragraph 2: "reviewed or repeated" should be replaced with "re-evaluated". As written, it is unclear if the previous evaluation will simply be reviewed or if the evaluation will be updated.*

The requested change has been added

55. *Paragraph 2: The phrasing "at least once in a calendar year" would mean that a waste stream may not be re-evaluated for almost two years. Please revise to make this consistent with the description later in the paragraph, in which it is specified that evaluations will only be valid for up to one year.*

The requested change has been added

A2.B – Pre-Acceptance/Fingerprinting:

56. *Please clarify that pre-acceptance fingerprinting analysis is required unless specifically exempted in Section A2.B.1(d).*

The requested change has been added.

A2.B.1 – Pre-Acceptance Procedures:

57. *"US Ecology does not have any container type restrictions in order to accommodate all waste types that may be generated." It should be clarified that this is only true so long as the containers used are complaint with Part 111 requirements.*

As discussed during the 10/05/21 call with EGLE, it is understood EGLE's concern was ensuring containers were capable of holding waste placed inside of them and it was not EGLE's intent to have MDWTP/WDI reject improper containers. This clarification has been added.

58. *Pre-acceptance visual inspection and fingerprinting analysis is required unless explicitly exempted in Section A2.B.1(d).*

The requested change has been added

59. *Paragraph 2: Sentence 1 – "After all paperwork has been reviewed and required sampling and screening is completed waste received is either accepted for treatment, storage, discrepant pending a resolution, or rejected". Please clarify wording of second half of*

sentence. It appears the intent is to state that the wastes are then "...either accepted for treatment and/or storage, marked discrepant pending a resolution, or rejected."

Clarification has been added.

60. *Please indicate where wastes are to be staged throughout the pre-acceptance process.*

The requested change has been added

61. *Paragraph 2: The discussion of discrepancy resolution here does not indicate time constraint on resolution/notification, how/where containers will be managed, nor does it reference the discrepancy resolution section of this WAP (Section A2.B.2)*

Reference to A2.B.2 has been added.

62. *Last paragraph: Note that if additional sampling/analysis is needed in order to ensure safety/compliance, MDWTP/WDI is required to do so (not optional).*

Clarification has been added.

A2.B.1(a) – Paperwork Review:

63. *Paragraph 1: Please specify that a uniform hazardous waste manifest, specifically, is required documentation for shipments of hazardous wastes.*

It is the responsibility of the generator and the transporter to utilize a uniform hazardous waste manifest for the shipment of hazardous wastes for receipt. In the event a hazardous waste arrives without a uniform hazardous waste manifest, a notification of unmanifested waste will be submitted in accordance with R 299.9610(2) of the administrative rules promulgated under Part 111 of the Natural Resources and Environmental Protection Act ("Part 111").

64. *Paragraph 1: Pre-approval waste profiling information must not be categorically limited to only "information submitted by the generator". Pre-Acceptance information must be compared to the entire waste profile.*

The language has been revised.

65. *Paragraph 1: All manifest information must be reviewed against the physical waste shipment and the waste profile. Verification of only select fields is insufficient.*

The paperwork review is not the point at which this is done. According to EPA, waste analyses do not have to be performed immediately after a waste is received in order to identify discrepancies. Only obvious discrepancies that can be immediately determined by counting or

measuring the waste and comparing the manifest with waste labels need to be noted on the manifest. [OSWER Directive 9523.00-10]

After discovering a significant discrepancy, the TSD facility owner/operator must try to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the TSD facility owner/operator must submit a notification describing the discrepancy and the attempts to reconcile it, along with a copy of the manifest.

66. *Paragraph 2: Manifest discrepancies are mentioned here, without specifics. Please include a reference to the proposed manifest discrepancy resolution procedures (Section A2.B.2).*

Reference to A2.B.2 has been added.

A2.B.1(b) – Sampling Methods and Frequency:

67. *Please provide sampling SOPs that are specific to each sampling equipment (e.g., dipper/cup, thief, auger, etc.).*

Sampling procedures are provided in Appendix E.

68. *Paragraph 1:*

    a. *Sentence 2 - "When necessary" should be clarified (i.e., "unless specifically exempted in Section A2.B.1(d)")*

This language has been removed

    b. *Sentence 2 – "information provided by the generators" should also include all other Pre-Approval information (waste profile), including USE-generated data, etc.*

This language has been removed.

69. *Paragraph 2 and throughout:*
    a. *Even when deviations from standard methods are implemented, the methods used still need to be specified in the WAP.*

Clarification has been added.

70. *Paragraph 5: The most effective tools should be used to obtain representative samples, unless there are compelling safety issues with implementation that cannot be overcome.*

The rationale for what sampling equipment is utilized is described. Additionally, procedures on the use of sampling equipment are provided.

71. *Paragraph 6:*
    a. *Decontamination of sampling equipment – please provide explanation of why MDWTP/WDI believes removing only "observable" contamination is sufficient.*

This language has been removed.

    b. *How is incompatibility to be determined for pre-acceptance fingerprinting sampling purposes, as referenced here?*

Sampling equipment is constructed of non-reactive materials. This has been demonstrated by MDWTP/WDI's operating experience.

72. *Paragraph 7 - Please clarify if screening will be performed "immediately following" sample collection, or simply "following" sample collection. Please clarify if and what contingencies are in place if analysis does not happen in a timely manner.*

Clarification has been added.

73. *Paragraph 8: Specify what containment areas are used to stage non-bulk containers during this pre-acceptance process?*

Language has been added to section A2.B.1.

74. *Paragraph 8: Please clarify when, where, and how many samples will be collected; also reference the WAP section that states what parameters will be sampled. Pre- acceptance fingerprinting has always included sampling and visual inspection. There are many parameters that could be different but not identified by visual inspection. All waste with the exceptions made in Section A2.B.1 (d) need to be sampled and visually inspected as part of the pre-acceptance process.*

Requested information has been provided

75. *Paragraph 8: 4th Sentence: "Samples will be composited by waste stream in order to form a single sample for analysis." Samples may only be composited after verification that the wastes are from the same waste stream.*

Requested language has been included

76. *Paragraph 8: 5th Sentence: "if containers contain waste materials that visually differ from each other, an additional 10% of the manifested container count from each unique non-bulk approval number per shipment will be visually inspected." The MMD concurs that an additional 10% must be evaluated, but by sampling/analysis, in addition to visual inspection.*

Requested language has been included

77. *Paragraph 8: Last Sentence: Please explain what is meant by "to the extent possible".*

The level of contamination and the types of waste in a container may be highly variable and indistinguishable making it impossible to determine if a representative or even conservative sample was collected. It may not physically be possible to collect a sample from every visually dissimilar material. Additional information has been added in A2.B.1(b) to describe procedures utilized for this type of waste.

78. *Please clarify the fingerprinting frequency for "highly variable" wastes.*

Clarification has been added.

79. *Please provide an SOP for composite sampling. In addition, please describe how volatilization (loss) of VOCs is minimized during sampling. The WAP must reference an SOP specific to sampling for volatiles.*

The procedure for composite sampling has been added directly into section A2.B.1(b).

80. *Paragraph 9: The first sentence appears to state that wastes may be transferred into storage/treatment tanks before completing pre-acceptance fingerprinting and paperwork review. Please clarify this.*

This language has been removed.

81. *Paragraph 9: Sentence 2 – Please clarify the proposed sampling frequency for bulk containers. If MDWTP/WDI is proposing to take a grab sample from every incoming bulk container, what is the intent of the addition "...from each unique approval number on a given manifest"?*

This language has been removed.

82. *Paragraph 9: Sentence 3 – Please explain rationale of when sampling of differing material would not be possible. If sampling differing materials is not possible, this should be included in the pre-acceptance exemption section of this WAP.*

See response to comment 77.

83. *Paragraph 9: Samples taken need to be more than from the superficial top, meaning deeper than 6 inches. It is also appropriate to sample multiple layers when multiple phases or layers are present. This is consistent with the WAP's stated intent to screen for "consistency" and "free liquids" which would include layers and multiple phases. The*

2015 WAP Guidance and Chapter 9 of SW-846 also address sampling to evaluate multiple layers.

This clarification has been added to A2.B.1(b). However, several factors must be considered such as the physical state of the waste, container sample size, and accessibility of the waste. As a result, a one size fits all approach to sampling is not possible.

84. *Paragraph 9: Please clarify what safety concerns are being referenced as an impediment to obtaining representative samples of wastes, and why MDWTP/WDI believes these safety concerns cannot be addressed.*

A detailed discussion on the feasibility of representative sampling is provided in A2.B.1(d).

85. *Please clarify what the labels are that are being described. Are these labels to be required on each container? Additionally, please clarify the distinction being made between bulk loads and container loads. Previous sections reference "bulk containers."*

Clarification has been added.

A2.B.1(c) – Waste Screening and Visual Inspection of Waste:

86. *Please clarify terminology. For example, it appears that "waste screening" is being used to refer to both pre-approval and pre-acceptance processes, without sufficient indication as to which is being discussed.*

Waste screening is only described in the pre-acceptance process. As stated in the introduction of section A2.B, "The pre-acceptance process outlines screening procedures taken by the TSD facility in order to inspect and, if necessary, analyze hazardous waste received at the facility in order to confirm the waste received is consistent with properties identified in the pre-approval process."

87. *MDWTP/WDI must describe criteria for the screening procedures including a discussion of detection limits and trigger concentrations.*

The screening parameter objective is to compare properties identified during the pre-approval process to the waste received in order to verify the material received was accurately described. Therefore, observations will identify whether the waste is consistent with pre-approval information or if it differs. Such an analysis does not have detection limits or concentration triggers.

Level 3 analysis includes quantitative methods for purposes of confirming information provided by the generator. Table B.2 identifies these parameters and when a discrepancy is initiated.

88. *Paragraph 1: Please clarify that the recording of Pre-Acceptance observation and analytical results means the recording of actual values and observations and not simply indicating that they match the pre-acceptance criteria.*

The screening parameters data quality objective is to compare properties identified during the pre-approval process to the waste received in order to verify the material received was accurately described. Therefore, observations will identify whether the waste is consistent with pre-approval information or if it differs.

89. *Paragraph 4: Pre-Approval waste profiles do not exclusively consist of generator-provided knowledge. All pre-approval waste profile information must be used.*

Language has been removed.

90. *Paragraph 4:*
    a. *Please detail how ranges of variability for waste streams will be determined and documented.*

Clarification has been added.

    b. *Comparisons of pre-acceptance and pre-approval information need to utilize all available information, including analytical results and thorough paperwork review.*

Further clarification has been added.

    a. *Please clarify the last sentence in the paragraph. If the intent is to indicate that pre-acceptance discrepancies will be used to trigger pre-approval profiling re-evaluations, please clarify when this will occur. Additionally, pre-approval waste profiles should not be categorically limited to or equated with only generator knowledge.*

The language has been revised

91. *Paragraph 4: Please clarify the difference between a discrepancy and confirmatory analysis during the pre-acceptance process.*

    a. *Why is the additional sampling and analytics during the pre-acceptance process not considered a discrepancy and analyzed per section A2.B2?*

Additional information on confirmatory analysis and discrepancy analysis is provided in A2.B.2.

92. *Paragraphs 5 and 6: Regarding cyanide and H2S, these parameters must be screened during the pre-acceptance process. Pre-acceptance fingerprinting is used to determine whether or not the actual waste received matches the pre-approval waste profile. If*

MDWTP/WDI is claiming an exception to pre-acceptance fingerprinting requirements, this should be included in Section A2.B.1(d) and an explicit justification must be made.

A2.B.1(d) provides exemptions from visual inspection and sampling. This section is intended to describe pre-acceptance screening analysis including the frequency with which it is performed. This section has been revised to provide a tiered analysis approach to provide clarity. See Table B.2 revisions.

A review of the May 19,1980 federal register, shows EPA did not intend to require analysis of all containers for all shipments stating:

"*Many commenters also felt that to require* ***owners or operators to sample each truckload of waste*** *for these four properties [physical appearance, pH, specific gravity, and vapor pressure]* ***was unreasonable for multiple truckloads of waste which have uniform physical and chemical characteristics****. The* ***Agency agrees*** *that measuring for the four properties specified in proposed 250.43(g) may be inappropriate for certain categories of waste and may be unnecessary for multiple truckloads of uniform waste. Instead, the final rules require that owners or operators develop and follow a waste analysis plan which specifies the tests to be used and the frequency with which these tests will be conducted, to determine the identify of incoming waste managed at the facility."* [45 FR 33180]

The frequency with which these parameters are proposed to be analyzed is more than required by MDWTP/WDI's existing permit and it is unnecessary to test each sample for these parameters. To confirm initial characterization MDWTP/WDI have committed to screening these parameters on the first shipment of the waste.

93. *Note that EGLE and EPA are developing additional comments regarding the management of reactive wastes, to be provided at a later date.*

Reactive waste comments refer to MDWTP's Attachment C4 Treatment. Information provided in this attachment are confidential business information and as such are being submitted separately.

94. *Paragraph 7: Clarify the purpose of this paragraph and why it doesn't refer to the already-established discrepancy resolution section (A2.B.2) of the WAP.*

Language has been changed to address this comment.

95. *Clarify how acceptable ranges for pre-acceptance fingerprinting parameters are determined. These ranges must not be unreasonably wide. For example, pH values that differ either by more than two standard units, that switch between acidic and alkaline conditions, or exceed RCRA corrosivity limits (less than or equal to 2.0 or greater than or equal to 12.5) should be defined and evaluated as discrepancies.*

A column has been added to Table B.2 to clarify what qualifies as a discrepancy.

96. *It is mentioned that the conditions of leachate are similar to the properties of dolomitic kiln dust (reagent), but that has not been supported. Please specify exactly what the waste will be screened for if it is going to the landfill? Such as reactivity, organics, and etc.*

This language has been removed.

97. *Provide QA/QC and SOPs for all internal screening and analytical methods.*

The QA/QC Plan has been added to Appendix D. Procedures are provided in Appendix E.

98. *Please clarify why PCBs will only be screened for if the waste stream contains unexcepted incidental free liquids? Will a paint-filter test be performed to ensure that there are no free liquids?*

The paint filter test is unnecessary. Screening of PCBs in incidental liquids means liquids were identified by visual inspection.

40 CFR 761.60(a) prohibits disposal of non-incidental liquids unless information is provided to or obtained by the owner or operator of a chemical landfill that shows that the liquids do not exceed 500ppm PCB and are not an ignitable waste as described by 40 CFR 761.75(b)(8)(iii). Generator information provides the source of the liquids. The screening method is used to confirm information obtained.

It should be noted this requirement is applicable to the facility TSCA permits which are not administered by EGLE.

99. *Table B.2:*

a. *Under consistency, please include visual assessment for the presence of oil- water phases or multi-phases.*

Requested revision has been added

b. *Include description of positive or negative results in reactivity testing.*

Requested revision has been added. It should be noted a separate table has been created for reactivity screening.

c. *The match test specifically identifies liquid wastes as undergoing the analytical procedure, and other tests use a descriptor for 'wet waste'. Please confirm solid wastes will be sampled and undergo the analyses outlined in Table B.2.*

This has been revised.

d. Specify how testing for ignitability of solids vs. liquids will be performed.

This has been revised.

e. Will a PID or FID be used to screen for volatile organic content of wastes?

A PID or FID are not proposed screening tools.

f. Include pre-acceptance fingerprinting test to identify oxidizers.

Test has been included

A2.B.1(d) – Sampling Methods and Frequency Exceptions:

100. Wastes identified in A2.B.1(d) meant for treatment and/or storage at MDWTP must still be tested to ensure compatibility using a mock tank compatibility test. Procedures for lab compatibility must be detailed in this WAP.

MDWTP/WDI recognize the importance of sampling and have committed to collecting samples when feasibly possible. Exemptions are only requested in limited circumstances. When samples are not taken, logically it is not possible to analyze a waste sample. The pre-approval processes obtain the chemical and physical properties of the waste and assess each facility's ability to manage the waste safely and compliantly, which includes evaluating the compatibility requirements of the waste. The pre-acceptance process confirms the consistency of the waste with the pre-approval information.

101. Please list the on-site generated wastes. Describe how the waste properties are well known, including spills. On-site generated wastes must be inspected as described in A2.B per 40 CFR 264.13(a)(4) and 264.13(c), including additional analytical testing required if the wastes are identified as highly variable. Also, on-site generated wastes to be disposed of at WDI must also be periodically tested for compliance with LDR standards in accordance with 40 CFR 268.7(c). Generator knowledge is not allowed for testing to meet 268.7(c).

In addition to the MDWTP/WDI being familiar with its onsite waste and its chemical and physical properties, as stated in the 2015 WAP Guidance, *"The requirements for permitted and interim status TSDFs can be found primarily in Parts 264 through 268 and 270. Concerning the waste analysis requirements, §§264/265.13 require a TSDF to: Inspect incoming shipments that are received at TSDFs from **off-site sources** for hazardous waste management."*

102. Please clarify why multiple exceptions have the reason: "Material cannot reasonably be sampled."? Many of these items could be sampled safely and effectively using various tools

such as tinsnips. Several such methods are also discussed in Section 1.2.2 (page 28) of the WAP Guidance.

a. *a. For example, filters and cartridges can be opened with a tool such as tinsnips and sampled. This sample should go through the appropriate fingerprinting analysis and lab compatibility.*
b. *b. For example, wipe sampling or surface chipping could be utilized to collect samples from debris surfaces.*

As we have stated in past deficiencies, we agree exceptions must be limited. It is in the best interests of the facility to inspect and sample waste. In that spirit, the list of exceptions was thoroughly reviewed and several exceptions that currently exist in our permit have been removed. The language in 40 CFR 264.13 says sampling and analysis must be completed "if necessary" to ensure the waste matches the identity of the accompanying manifest. The 2015 WAP Guidance document includes two example WAPs that both identify exclusions from sampling materials that cannot be reasonably sampled, further confirming sampling and analysis is not always required. The requested exceptions include waste types that are capable of confirming the waste is consistent with the pre-approval information without testing and instances when samples cannot feasibly be collected without substantial risk to employee safety and contamination control. This is consistent with RCRA requirements to protect human health and the environment. Statements made by EPA/EGLE during the October 19,2021, conference call which suggested employees should enter into a container and crawl through waste utilizing tools that apply force to the waste to obtain samples, exposes employees to unnecessary risk of harm. The facilities hazardous waste operation is capable of managing hazardous materials safely and compliantly. This is demonstrated by the site's impeccable safety record. When administrative controls can eliminate hazards to employees, it is most appropriate to apply such controls instead of potentially putting employees in harm's way. MDWTP requests that EGLE carefully consider the list of requested exemptions and the rationale offered before making any decision that would limit our facilities ability to protect the health and safety of our employees. As previously stated, samples are always collected whenever feasible.

103. *Please clarify why "Waste capable of causing offsite odor issues" is not fingerprinted within the West or East Treatment Buildings? The MMD understands that odors should not be detected offsite, however, MDWTP has two buildings that are capable of managing odors where fingerprinting could happen in a safe and effective manner.*

As stated whenever possible it is preferred to sample waste received from off-site facilities. Non-bulk containers can be sampled in treatment buildings and will be. However, the treatment buildings are not equipped with platforms that would allow safe access to the contents of bulk containers. The nature of sampling bulk containers requires the sampler to maneuver awkward sampling equipment with both hands at a high elevation. It is not reasonable to perform such activities on a working surface such as a ladder which requires the employee to maintain three points of contact. For this reason, the treatment buildings do not offer a reasonable alternative for sampling wastes that may cause off-site odor issues if they were to be opened for sampling

upon arrival. It should be noted that the very presence of the strong odor, which has already been identified as present during the pre-approval process is a very good indicator that the waste received is in fact what was pre-approved.

104. *Please clarify why "Waste with an acute health hazard...." Is not fingerprinted. MMD has the understanding that personnel performing the fingerprinting process has the proper PPE to prevent any acute health hazards.*

MDWTP/WDI provide employees with proper personal protective equipment. Using personal protective equipment is often essential, but it is the last line of defense after engineering controls, work practices, and administrative controls. Sampling has a high to moderate risk of skin exposure during (i.e., exposed skin while reaching or unknown damage to PPE) and after sampling (i.e. During the removal of PPE). The exceptions to sampling have been limited to instances where sampling is not necessary to confirm the waste is consistent with the preapproval information.

105. *Please clarify why "Waste in sealed, special packaging..." is not fingerprinted off- site. The current WAP allows for this process when approved by the department. Also, if any of the wastes excepted here will be treated at the facility to meet standards, MDWTP/WDI should sample and screen these materials.*

Testing of these waste streams is unnecessary. The chemical and physical properties necessary to treat, store and dispose of the waste is provided during the preapproval process. These waste streams are special waste streams with limited variability.

106. *Off-site fingerprinting: Please change "264.13(b)(14)" to "264.13(b) (1-8)." Also, please limit any such screening, sampling, and analysis that may occur off-site to that conducted by MDWTP/WDI personnel under direct control by the Belleville facility and limited to shipments that are not altered or bulked after screening in any way prior to arrival. All commensurate requirements for discrepancies and recordkeeping as required by the permit and this WAP must also be fully maintained for any such screening conducted off-site.*

The requested citation reference is not appropriate as it outlines the requirements in the written plan and not the requirements to inspect and, if necessary, analyze the waste. This requirement is specified by 40 CFR 264.14(a)(4) and (c) as described in this section.

EGLE appears to imply 40 CFR 264.13(a)(4) and (c) specifically require inspection, sampling and analysis must occur at the TSDF. The rule neither explicitly prohibits nor explicitly requires the TSDF perform these activities at an alternate location so long as the procedures which will be used to "inspect and, if necessary, analyze" the waste are outlined within the WAP.

During the October 19,2021 call with EGLE and EPA, EPA stated the inspection and analysis requirements of 40 CFR 264.13(a)(4) and (c) must be performed at the facility based upon

language that reads "each movement of hazardous waste received" at the facility. The point at which transportation functions of hazardous material regulated by DOT transitions to RCRA hazardous waste requirements is when the driver relinquishes possession of the package and is no longer responsible for performing functions subject to the hazardous material regulations with respect to that particular package. It is only at this time the waste is "received". Pre-acceptance procedures identified in the WAP are always initiated before the transporter relinquishes possession of the waste and are therefore always initiated before the waste is received. This is further supported by manifest discrepancy requirements outlined in 40 CFR 264.72, which allow facilities to reject to an alternate facility without taking on responsibilities delegated to a person who offers a hazardous waste for transportation. To make such a rejection determination a TSDF must execute the inspection and testing requirements described in the WAP.

Furthermore, the rule also does not prohibit the off-site facility from designating an authorized individual to perform the visual inspection and, if necessary, analysis. It only requires that the WAP describe procedures that will be used. Generators have an obligation by rule to ensure that the waste characterization (including the chemical and physical analysis provided), and the waste shipping document (which includes reference to the approved waste characterization via the approval number designated on the document), is true and accurate. Knowing these obligations exist and educating generators or other authorized individuals of the expectations of the waste and the WAP procedures, the TSD facility can determine whether the individual is qualified to perform the necessary evaluations on behalf of the TSD facility.

A2.B.2 – Pre-Acceptance Discrepancy:

107. *Paragraph 1: It should be clarified that any inconsistencies between any waste shipment paperwork and waste profile information will also be identified, documented, and appropriately addressed. It is unclear if such inconsistencies are intended to be included under the description of "incorrect, incomplete, or missing documentation."*

Clarification has been added.

108. *Paragraph 1: Please clarify the last sentence in the paragraph. What additional sampling and analysis is being proposed for discrepant waste streams, and how will the results be used in resolving discrepancies?*

Clarification has been added.

109. *Paragraph 2: Resolutions may be noted... ". Please clarify that such documentation will in fact be made on the waste profile and that this is not optional. Discrepancies and resolutions must be well-documented, and records maintained to identify trends and prevent future issues.*

Requested change has been made.

110. *Paragraph 2: "If a significant manifest discrepancy (defined by 40 CFR 264.72(b)) is discovered...". The requirement to report discrepancies which are not promptly resolved applies to all manifest discrepancies and must not be limited to only those considered to be significant.*

This language is consistent with regulatory requirements. Part 111 Rule 608(12) Upon discovering a manifest discrepancy, as defined in 40 CFR 264.72(a), including a significant difference as defined in 40 CFR 264.72(b), the owner or operator shall comply with 40 CFR 264.72(c) to (g) and distribute copies of the manifest pursuant to subrules (1) and (2) of this rule.

40CFR 264.72(c) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Regional Administrator a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

111. *What is the process for developing a trigger that identifies the waste as a discrepancy? If the presence of VOCs is an important factor in how wastes are stored and treated, why wouldn't PID or FID screening be appropriate for incoming wastes – especially those claimed to not contain VOCs?*

Table B.2. has been updated to include when a screening parameter identifies a discrepancy.

112. *This section does not clearly spell out process for resolving a discrepancy. Specific steps need to be identified.*

    a. *Where will drivers be staged while a discrepancy is being resolved? If driver is allowed to leave, specifically identify where will containers be placed?*

Additional information has been provided.

    b. *What is the time limit on all steps of the process?*

MDWTP/WDI are not aware of a specific regulatory time limit for this process. If a discrepancy cannot be resolved within 15 days of receipt, notification will be made to the director in accordance with 40 CFR 264.72(c).

    c. *Please clarify how the discrepancy process is different for pre-approval vs. pre-acceptance.*

See response to comment 52.

A2.C.1(a) – Wastes Container Compatibility:

113. *Table C.1: Segregation and Separation Chart of Hazardous Materials – This is referenced as the U.S. DOT Compatibility Chart from 49 CFR 177.848, but it has been modified in multiple ways. Please revise to clarify this reference if modifications are to be made, and provide rationale for the modifications, or use the original chart.*

This reference has been struck.

A2.C.1(b) – Containers without Secondary Containment System:

114. *While the presence of free liquid can be identified using visual inspection or the Paint Filter Test, the absence of free liquid can only be determined using the Paint Filter Test. A container cannot be said to have no free liquids by only visual inspection.*

For over 30 years of operation MDWTP/WDI have been able to successfully determine the presence of free liquids in a batch by visual observations. A visual inspection is capable of providing enough information of a waste to determine free liquids are not present. This has been specifically approved in the current facility permit demonstrating past permit approvals have supported this position.

A2.C.2(b) – Waste Compatibility with and within Tanks:

115. *This section needs to refer to the "approved Lab Compatibility Workplan."*
EGLE has indicated it is not prepared to have discussions on MDWTP's tank compatibility testing. As indicated in past discussions MDWTP feels it is important to ensure the requirements of tank compatibility testing are documented directly in the WAP. As a result, MDWTP has provided proposed improvements to this section without reference to a separate workplan.

A2.C.3 – Waste Bulking and/or Consolidation Compatibility:

116. *Paragraph 1: Please revise the compatibility evaluation requirements referenced, as Table B.2 in this WAP is labeled "Pre-Acceptance Analysis Procedures" and does not discuss mock tank compatibility testing.*

Table C.2 identifies compatibility screening requirements. Mock tank compatibility is described in detail in A2.C.2(b).

117. *Paragraph 2: 1st sentence is ambiguous. Please clarify if MDWTP/WDI is proposing to bulk solids and liquids together. If MDWTP is going to bulk liquids and solids, please clarify what permitted container storage areas will be used.*

Clarification has been added.

118. *Please clarify how impermissible dilution will be prevented during bulking/consolidation operations.*

Bulking characteristic or listed hazardous waste shipments and/or consolidating compatible hazardous wastes to achieve efficient transportation may result in an incidental reduction of the hazards of the waste mixture. However, such activities are not treatment, because they are not designed to render the waste nonhazardous, less hazardous, or safer to transport, store, or dispose. In other words, as long as materials handled in this manner are still sent to a TSD facility to receive adequate treatment to achieve compliance, any reduction of the hazard due to combining the wastes is incidental (i.e., not the intent of the activity), and the process is not considered hazardous waste treatment. [RO 11497, 12458, 13764]

A2.C.3 states, "MDWTP does not selectively bulk RCRA hazardous waste in order to achieve a reduction in concentrations rendering the waste non-hazardous, less hazardous or safer to transport, store or dispose of. Bulking/consolidation may result in an incidental reduction of the hazards associated with the waste, but it is not intentional. The waste will continue to carry all applicable waste codes and UHCs and be shipped to an off-site facility to receive adequate treatment to achieve compliance."

A2.C.4 – Transshipped Waste:

119. *Please specify that when wastes intended for transshipment are stored in licensed tanks or container storage areas, these wastes are subject to all WAP storage requirements.*

This section states, "Any waste to be transshipped off-site to other permitted TSDF's will be managed in accordance with the WAP. While awaiting transportation to the off-site permitted TSDF, containers will be stored in permitted tanks or container storage areas." Adding language to specifically identify WAP storage requirements will be met is redundant and unnecessary.

A2.D.1 – Treatment for Purposes of Land Disposal:

120. *Paragraph 1: Remove "as identified by generator." UHCs that are found by MDWTP/WDI that are not added or created by the treatment process but are reasonably expected to have been present at the waste's point of origin, still need to be treated to LDR standards, regardless of who identified them.*

Clarification has been added

121. *Paragraph 1: Please clarify how MDWTP/WDI will track and report UHCs that were missed by the generator but found by MDWTP/WDI. Even if the non-compliance is not submitted to EGLE, there should be a system in place to report back to the generator, so they know what to look for in the future.*

Identification of UHCs in waste is managed as a discrepancy. Reference to A2.B.2 procedures has been provided.

122. *Paragraph 1: "MDWTP will test the waste according to the specification of this plan and such testing will be performed by the methods identified in Table A.3". Does this section intend to refer to Table D.2? Please clarify what sampling and analysis will be performed.*

The requested change has been made

123. *Table D.1:*
    a. *In the row for "Ignitable waste," please separate out ignitable waste that are oxidizers and non-oxidizers.*
    b. *In the row for "Oxidizer," please separate out oxidizer waste that is non-ignitable and ignitable.*
    c. *Please clarify when stabilization is not used when treating oxidizer wastes.*

Clarification has been added.

124. *Paragraph 2: Please clarify that any new generation processes occurring during treatment will trigger additional evaluation of UHCs. This would include changes in treatability groups (such as a non-wastewater filter cake derived from a characteristic hazardous wastewater). Additionally, please describe how MDWTP/WDI will detect new hazardous characteristics in treatment residues.*

Clarification has been added.

125. *Attachment C4: Comments will be submitted under a separate cover.*

A2.D.2 – Land Disposal Restrictions:

126. *Neither EGLE, nor the U.S. EPA agree with a single grab sample for post-treatment LDR verification. Please see the attached memo: EPA Comments on US Ecology Belleville Waste Analysis Plan (WAP) Revision 2.*

As noted in the cover letter to this submittal, due to the complexity of this issue and US EPA's and EGLE's apparent departure from past practices, USE cannot respond to this comment until we have had further discussions with all parties involved. USE therefore requests that this issue be separated from EGLE's other comments, and USE will respond separately. USE is confident that an acceptable compromise can be reached on this matter. Although USE remains committed to reaching an acceptable compromise, the following presents our position on this matter. As was outlined in EPA's WAP Guidance (excerpted below), MDWTP documents compliance with concentration based LDR standards using a single grab sample prior to land disposal because it "ensures conformity with the LDR program goals." While the EPA Guidance highlights the fact that a single grab sample approach does make EPA's enforcement of the treatment standards easier, it also acknowledges that the process for establishing the treatment standards accounted

for the use of a single random grab sample as the proposed method for determining LDR compliance as well. Considering EPA's published guidance on this issue, MDWTP is confused by EGLE/EPA's claim that the facility's proposed WAP "continues to call for, *without justification*, the collection, and analysis of only one grab sample..." to demonstrate compliance with LDR treatment standards. The EPA Guidance goes on to say that "a facility may choose to employ alternate sampling methods" but that both enforcement and compliance with the LDR treatment standards are based on a single grab sample. MDWTP has simply chosen to align its LDR compliance sampling practices with the approach envisioned when the treatment standards were established as well as the approach outlined in the EPA's most recent published nationally published guidance on this issue, rather than choosing to employ an alternate sampling method. It should be noted that this method of demonstrating compliance with LDRs has been in place and approved by EGLE for over 20-years now and is in line with the standard approach used by TSDFs throughout the country.

MDWTP has repeatedly stated it performs a robust, well designed mixing procedure on all waste batches, as described in detail in C4 Treatment. This robust mixing procedure ensures that waste and treatment reagents are uniformly distributed throughout each batch. Although the individual waste streams in some batches may start out as variable, the ultimate treatment residue is uniform.

The fact that a robust, well designed mixing procedure achieves a uniform treatment residue, and that a uniform treatment residue is adequately represented by a single grab sample has been demonstrated at US Ecology's facilities. For example, in 2018 EPA collected multiple grab samples from a treated batch of waste at a US Ecology facility in Detroit, Michigan, which has similar operations to MDWTP. The concentrations in all grab samples were uniform and met applicable LDRs. Also, in 2017, EGLE collected multiple grab samples of MDWTP treatment residue and found the same outcome – uniform, passing concentrations, demonstrating that MDWTP's robust, well designed mixing procedure achieves a uniform treatment residue that is adequately represented by a single grab sample..

As stated in the cover letter accompanying today's submission, given the complex nature of the regulatory issues being discussed, a final deadline at this time is not in the best interest of any of the parties. USE does not believe separating this issue from the remainder of the application will result in any delay in issuing a permit decision. As we move forward with US EPA, USE is requesting EGLE staff proceed with the technical review of the rest of the permit applications, including the Waste Analysis Plan revisions contained in today's submittal. USE is confident that an acceptable compromise can be reached on this matter, but given both the known and unknown implications, USE feels strongly that granting additional time to resolve these complex issues is the most prudent decision at this point in time.

127. *Bullet #1: "All hazardous constituents in the waste or in the treatment residue must be at or below the values found in the table for that waste ("total waste standards")". Please note that this requirement is to ensure that hazardous constituents are below these values in all portions of the waste.*

Deficiency does not identify

128. *Paragraph 2: Please specify what alternative treatment methods will be utilized by MDWTP, and what alternative treatment standards will be used in association with the method.*

This is provided in subsequent section. Inclusion with A2.D.2(e), A2.D.2(f), and A2.D.2(g). Inclusion in this paragraph is redundant and unnecessary.

A2.D.2(a) – Characteristic Wastes:

129. *Paragraph 1: "Waste codes" should be replaced with "wastes", in the third sentence.*

Requested revision has been made.

130. *Paragraph 1: Please use consistent, clear language. For example, "appropriate demonstration" here appears to be referring to post-treatment LDR verification sampling and analysis.*

Requested revision has been made.

131. *Paragraph 1: In the last sentence, please revise to specify that "...all portions of the waste has met applicable LDRs and has been appropriately treated to remove hazardous characteristics...".*

Post treatment LDR verification requirements are provided in A2.D3. The section includes regulatory language from 40 CFR 268 regarding concentration based standard requirements for land disposal. As a result, the language has been revised to reference to this section.

132. *Paragraph 1: All testing that is performed to ensure LDR compliance needs to be kept in the operating record.*

This is described in A2.F.3 Recordkeeping.

133. *Paragraph 2: Please specify on which form the decontamination will be documented. Please clarify that tanks will also be decontaminated when a treatment batch is incompatible with the prior treatment batch, and how this compatibility will be verified.*

Clarification has been added.

A2.D.2(b) – Listed Wastes:

134. *Paragraph 1: Please clarify the use of the term "delisting" here, and whether it is meant to refer to hazardous waste exclusions as specified in 40 CFR 260.22.*

Clarification has been added. In general, the generator applies for a delisting as defined in 40 CFR 260.22. If the generator is approved for a specific delisting, then this delisting applies at EQD as well. Furthermore, the use of 40 CFR 260.22 is not always a requirement.

135. *Paragraph 2: Please clarify what is being claimed in this paragraph. All applicable treatment standards must be met for all waste codes associated with a given waste stream.*

The language provided is consistent with 40 CFR 268.9(b) requirements. The language does not circumvent applicable treatment standards.

136. *Paragraph 2: Please revise to address the typo: "the waste the waste".*
Revision has been made.

137. *Paragraph 4: 1st Sentence: Please add "prior to treatment", at the end of the sentence.*

Language has been added.

A.2.D.2(e) – Contaminated Debris:

138. *Immobilization:*
   a. *a. Please provide a specific container that would be used for macroencapsulation.*
   b. *Provide a demonstration that the container, of MDWTP's choosing, will be compatible with contaminants.*
   c. *Since the last demonstration, new waste codes have been added to the acceptable list of codes.*

Treatment information is business confidential information that is contained in Attachment C4.

139. *Paragraph 3: Please ensure that Attachment C4 is consistent with the WAP. The WAP states that extraction, destruction, and immobilization will be used to treat contaminated debris but that is not consistent with Attachment C4. Either clarify in the WAP that extraction and destruction will not be used or modify Attachment C4 to address extraction and destruction.*

Clarification has been made.

A2.D.2(f) – Soil:

140. *Paragraph 2: Please clarify what is being claimed in the last sentence, regarding polychlorinated biphenyl (PCB) treatment.*

This language is consistent with 40 CFR 268.48(d) which states, "PCBs are not constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals."

A2.D.2(g) – Dilution and Aggregation of Wastes:

141. *If MDWTP is to treat wastes with different treatment categories in the same batch, please detail how MDWTP will demonstrate impermissible dilution does not occur. For example, if organic wastes were first treated with oxidization, how will the efficacy of this treatment step be demonstrated prior to the introduction of metal- bearing wastes and subsequent stabilization?*

EPA rejected a proposal that would have required the quantification of the extent of treatment in the case of aggregated waste streams. 55 Fed. Reg. at 22665-666. EPA recognized that such a requirement would be unreliable and unworkable, stating:

"The Agency's proposal to require reduction of a BDAT constituent as a means of evaluating if impermissible dilution has occurred did not indicate how much reduction would be deemed adequate, and thus without further elaboration not only fails to provide clear guidance but also potentially fails to achieve the objective of assuring that wastes are treated by an appropriate treatment method. More importantly, quantifying the extent of removal necessary to be considered legitimate treatment leads to a very complicated system given the number of prohibited wastes, treatability groups, treatment methods and treatment train configurations." 55 Fed. Reg. at 22665

No changes are being made because section A2.D.2(g) states, "If the wastes are all amenable to the same type of treatment to be performed, the facility can combine wastes to perform the acceptable treatment. Aggregation for centralized waste treatment may result in dilution which occurs in conjunction with adequate treatment. Incidental dilution may also occur when reagents are added to the waste in order to perform treatment. This too is considered dilution inherent to an effective treatment process as so long as the reagents are capable of effectively treating the constituents subject to treatment. For example, batches that require both oxidation and stabilization must have reagents that will oxidize and stabilize the constituents subject to treatment."

A2.D.3 – Post-Treatment Sampling and Analysis (MDWTP):

142. *Paragraph 1: At the end of the first sentence, insert "...in all portions of the waste."*

Clarity regarding the regulatory requirements specified in 40 CFR 268 has been added.

143. *Paragraph 2: In the first sentence, insert "all portions."*

Clarity regarding the regulatory requirements specified in 40 CFR 268 has been added.

144. *Paragraph 2: Single grab samples compared to the UTS concentration values are insufficient to ensure treatment residuals meet LDR requirements for large treatment*

batches, without detailed demonstrations of batch homogeneity, waste stream variability, and treatment process variability.

Our response to Comment 126, above, is incorporated here by reference.

145. *Please clarify that MDWTP will keep records of all failed LDR testing, specifying how this documentation will be maintained.*

Requested information has been added.

146. *Paragraph 7: Please clarify what MDWTP is proposing not to decontaminate, and under what circumstances. If decontamination will not be performed, how will MDWTP prevent incompatible wastes from reacting, or listed wastes from contaminating characteristic or non-hazardous wastes?*

Tank decontamination was provided in A2.D.2(a).

A2.E.1 – Landfilled Wastes:

147. *This section needs to be consistent, and reference the appropriate sections in the WAP, for the entire process.*

As stated in A2.E this section outlines additional requirements specific to landfilled waste. Repeating information already provided in previous sections of the WAP is redundant and unnecessary.

148. *All wastes meant for the landfill must go through the same process as waste meant for treatment, except as noted in this section. If there is an exception, it must be justified.*

The WAP does not disagree with this statement. Processes that are specific to MDWTP or WDI are identified as such. For example, A2.D.3 Post Treatment Sampling and Analysis is identified as specific to MDWTP, while A2.E identified as Landfilled Waste specific to WDI.

A2.F.3 – Record Keeping:

149. *Please clarify what information will be included under "TSD facility certifications and demonstration".*

This is referring to the certification requirements identified in 40 CFR 268.7 which is already referenced in this sentence.

Appendix A – Hazardous Wastes Identification:

150. *As the Appendix flow charts are identified as tables from a U.S. EPA document, please include the actual unmodified document.*

The inclusion to the complete document is unnecessary. A reference to the document has been provided and the relevant flow charts have been included in the plan.

151. *Please include a narrative explanation of the purpose of the appendix, and how it will be used by MDWTP/WDI personnel.*

This is explained in A2.A.2.

TABLE D-2:

1. *Additional clarification is needed as to how Table D.2 will be implemented within the framework of the WAP. Please see items 2 and 3 below.*

2. *Please clarify what is meant by wastewater table rows included for listed wastes. It appears the treatment standard for non-wastewaters are applied to the rows described as wastewater, so the intent behind including listed wastewaters is unclear. We strongly recommend limiting the table to only those waste codes and treatment scenarios permitted for treatment and disposal.*

This has been removed

3. *Additional clarification is needed regarding how the sampling methods prescribed in Table D.2 will be used with regards to waste characterization and LDR verification.*

    a. *The sampling method column states a scoop, trowel, or trier will be used to collect a single grab sample.*

Sampling methods for generated waste are described in section A2.A.3(a) and Appendix E provides sampling procedures.

    b. For the purpose of waste characterization, a single grab sample with that sampling equipment is unlikely to collect a representative sample from many wastes such as liquid wastes and heterogeneous solid wastes.

Table D.2 describes post-treatment sampling requirements for purposes of LDR compliance. Additionally, A2.A.4 has been revised to reference it for purposes of characterization and LDR compliance of generated waste

    c. *As previously discussed, the prescription of one grab sample per tank to ensure LDR compliance does not account for waste heterogeneity. Reference to a singular number of samples may not be appropriate within a revised Table D.2. While hazardous waste determinations are made with representative samples, LDR compliance is ensured by demonstrating that all portions of the waste must meet the standard. This difference may require different sampling types and strategies. Please specify.*

Our response to Comment 126, above, is incorporated here by reference.

4. *The description of D001 wastes accepted for treatment and disposal (as opposed to transshipment) does not match that presently described in the current operating license, where only D001 wastes with >90°F flashpoint is accepted for treatment. Please revise Table D.2 to reflect wastes accepted for treatment at MDWTP.*

Table has been revised

5. *The descriptions included in the column for rationale need revision. The description "Determine if waste is RCRA hazardous for characteristic of toxicity" is applied to treatment standards for both characteristic and listed wastes where the description may be more appropriately described as "Determine if waste or residual meets LDR treatment standard."*

Requested revision has been made.

6. *Please modify Table D.2 to include the method used to determine deactivation of reactive sulfides.*

40 CFR 268.40 specifies the deactivation treatment technology as the treatment standard for D003 reactive sulfide waste. As stated by 40 CFR 268.40(b), "For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology." Furthermore, 40 CFR 268.7(b) does not require the inclusion of any testing of technology-based standards in the WAP.

7. *MDWTP should provide SOPs for all analytical methods cited in Table D.2 and reference the SOPs in Table D.2. The SOPs should also include any sample preparation methods (such as digestion or extraction methods). References to the SOPs can include wording to include updates to the SOP to allow MDWTP to make changes to SOP, as necessary.*

Reference to the methods has been provided. Methods are all SW-846 methods and ASTM methods.

8. *Table D.2 largely describes (with a few exceptions) the analytical method used to quantitate the analyte of interest. Correct sample preparation methods (digestion, extraction, cleanup) methods are critical in ensuring adequate identification, quantitation, and recovery of analytes of interest from waste samples. Please provide additional information as to how sample preparation methods are selected. Detailed discussion of the preparation methods may be more appropriately described within the main body of the WAP.*

Requested revision has been made to the table. Preparations are selected based on laboratory capabilities.

9. *Please revise Table D.2 to include omitted constituents from waste listings. Examples of omissions are listed below:*

   a. *D012 – Endrin Aldehyde*
   b. *D031 – Heptachlor Epoxide*
   c. *K157 – Carbon Tetrachloride*
   d. *K171 – Chrysene*
   e. *K172 – Nickel*
   f. *P051 – Endrin Aldehyde*

Requested revision has been made.

10. *Please revise Table D.2 to include omitted analytical methods from waste listings. For example, omissions of analytical method are seen for D016, D017, K014- Acrylamide, and many other waste entries.*

Requested revision has been made.

11. *The treatment standard for D005 wastes is identified as 100 mg/L TCLP and does not match the treatment standard identified in 40 CFR 268.40.*

Requested revision has been made.

12. *The analytical method for cyanides (such as F006 and other listed wastes) propose the use of SW846 9010C or 9012B, with many entries listing only 9010. While EGLE MMD encourages details regarding sample preparation methods, 9010 is not a quantitative method. Please provide the method used to quantitate cyanide for wastes, listed in Table D.2.*

Requested revision has been made.

13. *Please clarify the treatment standards for the Table D.2 entry "F001 or F005 (containing only 3 solvents)". The table states no LDR treatment standard applies for the listed chemical constituents, however under 40 CFR 268.40, there are concentration-based treatment standards for both wastewater and non- wastewater.*

The table has been revised to be consistent with 40 CFR 268.40.

14. *Please revise Table D.2 entries regarding the Cyanide Treatment standard. For several entries (such as F007), the treatment standard for total cyanides is listed as 590 mg/L TCLP instead of 590 mg/kg for non-wastewaters.*

Requested revision has been made.

15. *Please clarify the method proposed for quantification of nickel in waste code F024. It is listed as SW 846 7011 as opposed to 6010 for other waste nickel analyses.*

Requested revision has been made.

16. *In Table D.2, several analytical methods were proposed for analytes which are not included in the scope and application of the standard method. Please confirm if these analytical methods are proposed for the analysis, and if so, please provide documentation of method performance for the waste matrices is satisfactory for the purposes of waste characterization and LDR verification. Examples include, but are not limited to:*

    a. *2,4,5-trichlorophenol and 2,4,6-trichlorophenol (such as under F039) are proposed to be analyzed using SW-846 8260*
    b. *Hexachlorobenzene (such as under D032) are proposed to be analyzed using SW-846 8260*
    c. *Fluoranthene (such as under F039) is proposed to be analyzed using SW-846 8081.*
    d. *Isosafrole (such as under F039) is proposed to be analyzed using SW-846 8081.*
    e. *Kepone (such as under F039) is proposed to be analyzed using SW-846 8081.*
    f. *2,4-Dichlorophenoxyacetic acid (such as under F039) is proposed to be analyzed using SW-846 8270.*
    g. *Phorate (such as under F039 and K038) is proposed to be analyzed using SW-846 8081.*
    h. *Saphrole (such as under F039) is proposed to be analyzed using SW-846 8260.*
    i. *Pentachloroethane (such as under K018 and K095) is proposed to be analyzed using SW-846 8270.*
    j. *Hexachloroproplene (such as under K030) is proposed to be analyzed using SW-846 8260.*
    k. *Pentachlorobenzene (such as under K030 and K149) is proposed to be analyzed using SW-846 8260.*
    l. *Disulfoton (such as under K036) is proposed to be analyzed using SW-846 8081.*
    m. *Nitrobenzene (such as under K104) is proposed to be analyzed using SW-846 8081.*
    n. *p-Dichlorobenzene (such as listed under K105) is proposed to be analyzed using SW-846 8081.*
    o. *Hexachlorobenzene (such as under K149) is proposed to be analyzed using SW-846 8260.*
    p. *Phorate (such as under P089) is proposed to be analyzed using SW-846 8081.*
    q. *Famphur (such as under P097) is proposed to be analyzed using SW-846 8081.*

r. *Cyclohexanone (such as under U057) is proposed to be analyzed using SW-846 8015 and 8260.*

Requested revision has been made.

17. *There are several typographic errors present in Table D.2 which reduce clarity or omit alternative methods. In future revisions of Table D.2, please revise if items are identified. Examples include:*

    a. *U128 and U131 wastes have SW-846 8260 methods listed twice where it is presumed that 8270 may also be proposed to be used.*
    b. *Numbered footnotes are carried over into the analyte name from the CFR reference table. Is Table D.2 intended to include the footnotes as well?*
    c. *"All F034 wastes" listed under parameters for the F024 CMBST technology treatment standard row.*

Requested revisions have been made.

18. *SW-846 9040 was proposed for corrosivity neutralization of non-wastewater D002 wastes. Application of SW 846 9040 to certain non-wastewaters may be outside the scope and application of the method and may require modifications to the procedure. Please provide clarification on any alternative methods or method modifications that may be employed when verifying neutralization of D002 wastes.*

Neutralization is a performance technology. As stated by 40 CFR 268.40(b), "For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology." Furthermore, 40 CFR 268.7(b) does not require the inclusion of any testing of technology-based standards in the WAP.

19. *For ease of use of table D.2, it would be beneficial to repeat the header row on each page for the final version included in the operating license.*

Requested revision has been made.

20. *Some Michigan waste codes such as 088u and 001k are included in Table D.2. However, these waste codes have been removed from the Michigan waste code listing Part 111 of 1994 P.A. 451. Please update the Michigan waste codes in the table to reflect current codes in Part 111 that are accepted at the facility for treatment.*

Requested revision has been made.

QA/QC Plan:

1. *The currently submitted QA/QC plan describes the Laboratory Quality Assurance Program. Please refer to the comment under section A.2-Introduction regarding the submission of the QA/QC Plan itself. The MMD will review the complete submission of the QA/QC plan (consisting of the Laboratory Quality Assurance Program and supplemental documents), however a response to the following comments or incorporation into the updated QA/QC plan submission should be submitted.*

MDWTP has previously submitted a QA/QC plan and is including a revised plan to address the requested revisions below.

2. *Does the laboratory at MDWTP retain any third-party accreditation?*

No. We are not aware of any laboratory accreditation requirements within RCRA.

3. *Please provide additional detail on how laboratories are chosen for subcontracting. The QA/QC plan description makes reference that a third-party accreditation can be used to demonstrate competency, however it is unclear what additional information may be used to make this determination.*

Language has been added to the QA/QC plan to provide further clarification.

4. *The WAP specifies that "preservation requirements may not be necessary if samples are brought directly to the laboratory after sampling and analyzed upon receipt". The QA/QC plan or WAP should specify holding times applicable to these unpreserved samples.*

Requested change has been made.

5. *Please provide a copy of the batch ticket or chain of custody forms used to track sample receipt and management for reference.*

QA/QC plan has been updated to reflect required information for sample traceability.

6. *The QA/QC plan or the main WAP document should describe what field quality control samples (such as field blanks, field duplicates, and trip blanks) are collected and the frequency of the field QC samples.*

Field quality control samples are not collected and are not necessary.

7. *The QA/QC plan, method specific SOPs, or the main WAP document should describe the frequency of laboratory quality control samples (including but not limited to method blanks, sample duplicates, and matrix spike samples).*

These requirements are method specific.

CHEMICAL AND PHYSICALWASTE ANALYSIS PLAN (WAP)

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), being R 299.9504, R 299.9508, and R 299.9605, and Title 40 of the Code of Federal Regulations (CFR) §§264.13(a), (b), and (c) as well as §§270.14(b)(2) and (3) establish requirements for chemical and physical analyses and WAPs at hazardous waste management facilities. All references to the 40 CFR citations specified herein are adopted by reference in R 299.11003

This license application addresses requirements for chemical and physical WAPs at the hazardous waste management facility for the Michigan Disposal Waste Treatment Plant (MDWTP) and Wayne Disposal Inc. (WDI) in Belleville, Michigan. The information included demonstrates how the facility meets the chemical and physical analyses requirements for hazardous waste management facilities. All activities associated with the WAP will be conducted at the MDWTP and WDI, Belleville facility unless otherwise specified.

Type of applicant: (*Check as appropriate)*

- ☒ Applicant for Operating License for Existing Facility
- ☐ Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility

Type of Facility: (*Check as appropriate)*

- ☒ On-site Facility (generates hazardous waste)
- ☒ Off-site Facility (accepts hazardous waste from other generators)

Type of Units to be Constructed or Operated at the Facility: (*Check as appropriate)*

- ☒ Containers
- ☒ Tank(s)
- ☐ Waste Pile(s)
- ☒ Landfilled Waste
- ☐ Waste Incineration
- ☐ Land Treatment
- ☐ Miscellaneous Unit(s)
- ☐ Boilers and Industrial Furnaces

Ensure that all samples collected for the purposes of waste characterization are collected, transported, analyzed, stored, and disposed by trained and qualified individuals in accordance with the Quality Assurance/Quality Control (QA/QC) Plan. The QA/QC Plan should, at a minimum, include the written procedures outlined in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. Environmental Protection Agency (EPA) Publication No. SW-846, Third Edition, Chapter 1 (November 1986), and its updates.

Table of Contents

Appendices

A2 INTRODUCTION

Michigan Disposal Waste Treatment Plant (MDWTP) and *Wayne Disposal Inc. (WDI)* are commercial facilities that receive wastes generated from off-site locations. *MDWTP and WDI* have developed this shared chemical and physical waste analysis plan to ensure that only wastes that are authorized and properly characterized are received at the facility. Pre-approval, pre-acceptance, acceptance, treatment, and post-treatment evaluations are completed by qualified personnel (individuals who have been trained and are familiar with the procedures essential to executing the requirements of the Waste Analysis Plan (WAP)). All on-site and offsite generated waste will be evaluated through the procedures outlined in this plan unless otherwise specified. The WAP shall not conflict with the facilities obligation to operate in accordance with 40 CFR 264 or 268.

The purpose of the WAP is to specify the methods that will be used to meet the waste analysis requirements for the Land Disposal Restriction (LDR) program found in the Code of Federal Regulations, Title 40 (40 CFR) 268.7, as required by Rule (R) 299.9605(1), and 40 CFR 264.13(b)(6). These methods include the required elements described in 40 CFR 264.13(b) (1-5); the WAP must specify the parameters and rationale for analysis, the test methods, sampling methods, and frequency for each hazardous waste.

All analysis performed pursuant to this WAP will be consistent with the Waste Analysis Plan QA/QC Plan (included in Appendix D). All samples of the facility's waste being characterized will be collected, transported, stored, and disposed by trained and qualified individuals in accordance with the QA/QC Plan.

The parameters selected for analysis of wastes managed by the facility and the rationale for their selection is based on the following:

- physical/chemical characteristics of the waste;
- the regulatory and operating license requirements for treatment and/or storage at MDWTP or disposal at WDI;
- the information and analytical data supplied to the facility by the generator; and
- the process control data necessary to manage, store, treat, or dispose of the waste at MDWTP or WDI.

In accordance with R 299.9609 and 40 CFR §264.73 and Part 264, Appendix I, *MDWTP and WDI* will retain all records and results of waste determinations performed as specified in 40 CFR §§264.13, 264.17, 264.314, 264.1034, 264.1063, 264.1083, 268.4(a), and 268.7 in the facility operating record until closure of the facility. The current version of this plan shall be available on-site.

A2.A PRE-APPROVAL

[R 299.9504(1)(c) and 40 CFR §270.14(b)(2)]

The pre-approval process outlines procedures used by the TSD facility in order to characterize their on-site generated waste. It also defines the information that the TSD facility requires for off-site generated waste in order to obtain detailed chemical and physical analysis that is representative of the waste.

A2.A.1 WASTE TYPE DESCRIPTION

(GENERATED ON-SITE WASTES AND OFF-SITE WASTES THAT MAY BE RECEIVED)

[R 299.9504(1)(c) and 40 CFR §270.14(b)(2)]

A2.A.1(a) Acceptable Waste Type Description

The waste types that may be generated on-site or received from offsite generators and are acceptable for treatment and/or storage at MDWTP or disposal at WDI are the hazardous waste identified by waste code in Appendix A, asbestos waste, TSCA regulated PCB waste, and radiological waste identified in Appendix B. Additional information regarding the waste that may be received is outlined below.

Characteristic waste codes that may be approved into MDWTP or WDI are provided in Appendix, A along with land disposal restriction (LDR) requirements for treatment and disposal. Waste with analytical concentrations exceeding characteristically hazardous levels is required to be characterized with the appropriate waste code. Waste exceeding applicable land disposal restrictions including applicable underlying hazardous constituents will be approved for treatment at MDWTP or transshipment to an off-site location for further treatment. Waste meeting applicable LDRs will be approved for land disposal at WDI. If disposal will occur at a Subtitle D landfill the waste must be treated to remove applicable hazardous characteristic(s) and meet applicable LDRs prior to disposal.

Generator process knowledge significantly contributes to the documentation of the applicability of a listed waste code. Analytical concentrations exceeding applicable land disposal restrictions may be approved for treatment at MDWTP or be transshipped to an off-site location for further treatment. Waste meeting applicable LDRs may be disposed of at WDI but will carry the waste code through to disposal. Delisting of waste codes must utilize procedures detailed in 40 CFR 260.22 to be delisted. This refers to waste streams in which generators have obtained and executed the requirements of their delisting permits which would allow MDWTP or WDI to accept the material and transship to a Subtitle D landfill. It also accounts for solid waste that has been exempted by 40 CFR 261.3(c) and (g) from being a hazardous waste after treatment occurs (i.e., K062 is not applicable when the process waste is treated with lime).

Generator process knowledge, analysis, and/or information provided on the waste characterization form (see A2.A.2) will be used to demonstrate waste mixtures and wastes with multiple codes are properly characterized. Each waste that has more than one characteristic will be identified with a waste code for each corresponding characteristic. Waste identified as meeting a listing and exhibiting a characteristic will be identified with the listed waste code for the purpose of manifesting, etc.

The laboratory packs accepted at the facility are not land disposed without meeting applicable Subpart D treatment standards. Lab pack waste received or generated with an LDR requesting lab pack alternatives to Subpart D treatment standards, will be transshipped offsite for incineration in accordance with 268.42(c). Lab packs received with the appropriate LDR designation indicating the compliance status of Subpart D treatment standards may be received and processed to applicable 268.40 treatment standards.

Hazardous debris can be treated using technologies identified in Table 1 of 40 CFR §268.45. Debris as defined in 40 CFR 268.2 may be treated at MDWTP prior to land disposal at WDI or an alternate Subtitle C landfill utilizing the immobilization technologies defined in 40 CFR 268.45 in order to meet the alternative treatment standards for hazardous debris provided in 40 CFR 268.45.

Rule 299.9228 establishes an alternate set of standards under which universal wastes may be managed instead of full regulation as hazardous waste under these rules. Universal waste that meets the criteria established by the rule may be transshipped from MDWTP for recycling or disposed of at WDI in accordance with the requirements of the rule.

Asbestos containing waste may be accepted for treatment (MDWTP) or disposal (WDI). This includes asbestos waste that also contains PCBs and/or is also a RCRA hazardous waste exempt from the requirement to sample for review and acceptance and visual inspection at the facility, if all of the following conditions are met:

- The waste contains ≥ 1% asbestos;
- The waste is properly bagged/containerized;
- Bulk asbestos waste will be handled in such a manner as to not cause any visual emissions; and
- The generator verifies that the asbestos-containing waste contains no free liquids, and it is recorded on the approval.

The WAP describes precautions that will be taken to prevent uncontrolled conditions which could do any of the following:

- Generate extreme heat or pressure, fire or explosions, or violent reactions.
- Produce uncontrolled toxic mists, fumes, or gasses in sufficient quantities to threaten human health or environment.
- Produce uncontrolled flammable fumes or gasses in sufficient quantities to threaten human health or the environment.
- Damage the structural integrity of the device or facility.
- Through other means threaten human health or environment.

Wastes are banned from landfilling by 40 CFR Part 268, unless the wastes meet the applicable Land Disposal Restriction (LDR) treatment standards, or a variance has been obtained from the Director. The following variances have been approved (*see A2.D2(g) for variance details)*:

- May 23, 2016, Guardian Industries Corporation (MID 048 784 896) Air Pollution Control Dust
- December 15, 2017, Strebor, Inc. (MID 005 342 134) Spent Carbon, Contaminated Soil, and Personal Protective Equipment.

A2.A.1(b) Prohibited Waste Type Description

The following waste streams are prohibited at MDWTP:

- Ignitable wastes (D001 when flashpoint is <140F) with a flashpoint <90F may be stored but may not be treated.
- Reactive wastes (D003, K027, K044, K047, K161, and K045):
    - Wastes identified in R299.9212 (3)(a, f, g, h) may not be stored or treated.
    - Wastes identified in R299.9212 (3)(b, c, d) may be stored only in the NCSA and transshipped for off-site treatment.
    - Wastes identified in R299.9212 (3)(e) may be stored in any permitted container storage area.
    - D003 deactivated (no longer exhibits the characteristic of reactivity) and wastes identified in R299.9212 (3)(e) as sulfide bearing wastes may be received for storage and treatment.
- Dioxin-containing waste requiring treatment for F020-F023, F026-F028, K043, and K099 may be stored and/or treated for constituents other than dioxins and furans (because dioxins and furans already meet applicable treatment standards prior to acceptance at the facility and other constituents of concern may still require treatment.)

MDWTP and WDI do not accept low level radioactive mixed waste. Appendix B Radiological Waste Acceptance Criteria identifies radiological waste that is acceptable.

The following waste types are **NOT ACCEPTABLE** for disposal at WDI:

- Waste prohibited from land disposal as defined by 40 CFR 268, Subpart C, will not be disposed of at WDI.
- D001 Ignitable wastes as described in R299.9212(1);
- D003 Reactive wastes as described in R299.9212(3) unless the waste no longer exhibits the

characteristic of reactivity;

- Bulk or non-containerized liquid waste in accordance with 40 CFR 264.314;
- Containers holding free liquids, including laboratory packs;
- Wastes which will:
  - Adversely affect the permeability of the clay liner;
  - Produce a leachate that is incompatible with the synthetic liner, leachate collection system (LCS), discharge piping, and the off-site sewer system;
  - Generate gases which will adversely affect the permeability of the clay cap; and
- TSCA regulated PCB waste prohibited from disposal in a chemical landfill *(Note: WDI's TSCA approval to dispose of PCBs is independent of its Part 111 Hazardous Waste Operating License. Delegated authority of these requirements is not authorized to EGLE.)*
  - Liquid PCBs (as defined in 40 CFR 761) prohibited from disposal in a chemical waste landfill by 40 CFR 761.60(a)
  - Transformers containing free flowing PCB liquids
  - Large capacitors which contain 500ppm or greater PCBs

A2.A.1(c) On-site Generated Waste

Housekeeping, maintenance, laboratory and waste processing and disposal activities may result in the on-site generation of waste at the facility (i.e., landfill leachate filter cake and process debris generated as a result of waste handling) and may include any of the acceptable wastes listed in the Appendix A. Waste generated at the facility is characterized utilizing procedures provided in sections A2.A.2, A2.A3(a), A2.A.4, A.2.A.5, and A2.A.6. Laboratory reports and waste characterizations are maintained at the facility as part of the operating record. Hazardous waste generated at the facility is also reported to the Director as part of the facility operating report in accordance with Rule 610(3) of Part 111.

All samples collected for the purposes of on-site waste characterization are collected, analyzed, stored, and disposed of by trained and qualified individuals in accordance with the Quality Assurance/Quality Control (QA/QC) Plan. The QA/QC Plan includes written procedures outlined in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. Environmental Protection Agency (EPA) Publication SW-846 Compendium.

A2.A.2 PRE-APPROVAL WASTE CHARACTERIZATION REQUIREMENTS
[R 299.9605(1) and R 299.9504(1)(c) and 40 CFR §264.13(b)(5)]

The initial step of the waste stream approval process is a review of the waste characterization as prepared by the generator. A person who generates a solid waste, as defined in 40 CFR 261.2, must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations. Without relieving a generator of its responsibility to properly characterize its waste for purposes of treatment, storage, and disposal, and to fully and accurately communicate that information to MDWTP or WDI in accordance with this WAP, MDWTP and WDI acknowledge their responsibility to comply with 40 CFR 264.13 by obtaining all information which must be known to treat, store or dispose of the waste in accordance with Parts 264 and 268 of the RCRA regulations.

To aid generators in complying with the requirements and to ensure the TSDF obtains sufficient chemical and physical information from generators, MDWTP and WDI require the submittal of waste characterization information. In accordance with the generator requirements set forth in 40 CFR 262.11, *MDWTP and WDI* will require the following waste profile information for initial waste shipments from all off-site generators and on-site generated waste prior to processing the waste:

- Generator information

- Generator Name
- EPA ID Number
- Address
- Phone Number

- Waste Description
  - A hazardous waste determination for each solid waste at the point of waste generation, before any dilution, mixing, or other alteration of the waste may have occurred such that the RCRA classification of the waste may change.
  - A determination of the applicability of listed hazardous waste codes using knowledge of the waste to determine whether the waste meets any description(s) under subpart D of 40 CFR part 261.
  - A determination of whether the waste exhibits one or more hazardous characteristic(s).
  - A determination of the ignitability and/or reactivity of waste, including whether a waste stream is an oxidizer.
  - Presence of radiological material (i.e., NORM/TENORM)
  - A determination of whether the waste qualifies as a Universal Waste
  - Whether biodegradable sorbents have been used to absorb free liquid
  - Physical characteristics of the waste (i.e., odor, color, pH, consistency (including free liquids), odor)
  - Chemical composition of the waste
- Identification of Exclusions and Exemptions
  - Materials excluded from the definition of solid waste
  - Solid waste excluded from the definition of hazardous waste
  - Hazardous waste exempt from Subtitle C regulations
  - RCRA Waste with <500ppm VOC bearing waste
    - Knowledge of the waste provided with the generator's pre-approval information is relied upon to decide whether the waste is exempt from Subpart CC. Examples of acceptable knowledge include information included in manifests, shipping papers or waste certification notices.
- LDR
  - 40 CFR 268.7(a)(1) Generators must determine whether their waste is subject to the LDRs for each hazardous waste at the point of generation, including underlying hazardous constituents that are present or reasonably expected to be present in the waste stream and subject to treatment.

- Generator certification
  - Written or electronic signature from individuals authorized to make waste characterization decisions certifying information provided is representative, true, and accurate.

For the purposes of compliance with 40 CFR Part 268 or if the waste is not listed in Subpart D of 40 CFR Part 261 (R299.9213), per 40 CFR 262.11, the generators must determine whether their waste is identified in Subpart C of 40 CFR Part 261 (R299.9212) by utilizing one of or a combination of the following:

- Testing a representative sample of the waste according to the methods set forth in Subpart C (of 40 CFR Part 261) or according to an equivalent or recognized laboratory method. Alternative methods must be capable of measuring the constituent of concern, in the matrix of concern, at the concentration level of concern, at the degree of accuracy necessary to decide. Method defined parameters must utilize the prescribed method or a combination of an alternate method and knowledge (e.g., total metals analysis coupled with 1 in 20 dilutions provided by the TCLP fluid can demonstrate leachable concentrations are not exceeded without performing a TCLP test)
- Applying knowledge of the hazard characteristic in light of the materials or processes used.
  - Acceptable knowledge (referred to in this WAP as "knowledge") that may be used

includes but is not limited to: waste origin, composition, feedstock, knowledge of products, by-products, and intermediates produced by the manufacturing process; material balances for the source or process generating the hazardous waste; chemical and physical properties of chemicals used or produced by the process or otherwise contained in the waste, constituent-specific chemical test data for the hazardous waste from previous testing that are still applicable to the current waste; previous test data for other locations managing the same type of waste; knowledge based on information included in manifests, shipping papers, waste certification notices, and Safety Data Sheets; or other reliable and relevant information. The basis for the knowledge will be documented in the waste streams file.

The required information provides the facility with detailed information regarding the chemical and physical properties of the waste. Appendix C outlines the process flow in which characterization and LDR compliance is evaluated. A waste is considered hazardous by being specifically listed as a hazardous waste or by exhibiting a characteristic of hazardous waste. Once it is determined that the waste is hazardous the applicability of LDRs is evaluated.

The source of the waste and/or the process that produced the waste is evaluated to identify potential chemical and physical hazardous, constituents and characteristics that are reasonably expected to be present in the waste, as well as confirm generator characterization of a listed waste. Analysis to support the characterization is requested unless knowledge of the waste can support the generator characterization. Knowledge also contributes to the potential scope of analysis-based determinations that are required. For example, a manufacturing process that identifies the use of heavy metals will require evaluation of leachable metal contamination but can eliminate the need for volatile organic compounds if adequate process knowledge determines they are not present.

The waste is assessed for treatment and compatibility in order to ensure it can be safely and compliantly managed at the facility.

If the information provided is not sufficient, procedures identified in A2.A.5 will be utilized to solicit more information until appropriate characterization is documented. If the characterization cannot be supported, an approval will not be issued, and the waste will not be received. Once it is determined that the information is complete, and characterization is supported, a handling method and approval number is assigned to the waste stream. The handling method identifies the treatment(s) (if any), disposal destination (Subtitle C or D), or the need for transshipment to an off-site facility. Waste that is designated for Subtitle D disposal may be conservatively managed in a Subtitle C landfill. Waste streams that do not require additional treatment may be assigned a handling method that allows for direct disposal at WDI.

An approval letter is sent to the generator, serving as notification that the waste as represented may be shipped to the facility, and that the facility has the appropriate permit(s) to accept the waste. All approval files are maintained in the facility operating record in a paper, electronic or other archival form. Approval files with no shipments before expiration will not be kept in the facility operating record.

A2.A.3 Sampling and Selection of Waste Analysis Parameters

[R 299.9605(1) and 40 CFR §264.13(b)(1)]

A2.A.3(a) On-site Generated Waste

Unlike off-site generated waste, MDWTP or WDI are the generators of on-site generated waste and are responsible for ensuring compliance with generator waste characterization requirements. Knowledge of the process and/or analytical testing will be used to determine if the hazardous wastes exhibit one or more characteristics to: (1) ensure compliance with LDR regulations and (2) provide waste compatibility

information to determine appropriate waste storage. Generator process knowledge is also utilized to document the applicability of a listed waste code including a determination of whether waste is derived from listed waste. The source of the waste and/or the process that produced the waste is evaluated to identify potential chemical and physical hazards, constituents expected to be present in the waste, as well as identify contaminants of concern in listed waste. When generator knowledge is not sufficient to characterize a waste stream generated at the facility *MDWTP and/or WDI* will analyze the waste. When available, knowledge will be utilized to determine constituents expected to be present. Table A.3 lists the potential waste analysis parameters. The table includes the rationale for the selection of these parameters, test methods that will be used to test for these parameters, the appropriate reference.

Each waste stream must be individually evaluated to determine its characterization and treatment requirements, as well as decide if sampling and analysis is necessary. Knowledge of the waste is a critical component of the evaluation as it identifies properties of the waste expected to be present. The following provides the thought process used in evaluating on-site generated waste characterization:

- A generating process that is not listed and that does not have any characteristically hazardous constituents placed in or created by the generating process, will not require testing as knowledge can be utilized to determine it is not hazardous.
- A generating process that has an input with fluctuations that do not alter the characterization, as demonstrated by knowledge (e.g., historic analysis) will not require reoccurring sampling analysis unless there is a change to the generating process that impacts the characterization (which includes the constituents subject to treatment).
- Waste streams generated at the highest input levels expected will provide a worst-case characterization and will not require periodic sampling and analysis as the characterization and management of the waste will be conservative for subsequent waste streams.
- Waste streams can be managed conservatively and characterized as hazardous with all potential contaminants of concern reasonably expected to be present being treated for.
- When a thorough understanding of the waste and its variability is not available one of the following approaches may be used:
    - Tiered sampling
        - Grab samples of solids can be a single point from the container or a multi-incremental grab samples with at least three points from a decision unit (the container) collected at random varying depths and locations or a single core sample that is mixed together to distribute the sample.
        - A single-phase liquid can utilize a single point.
        - A multiphasic waste sample will be collected reasonably proportional to each phase in the container in order to best represent the waste.

      At a minimum a second sample will be collected in the same manner after the next container generation in order to evaluate consistency with the initial sample's characterization. If the waste is demonstrated to have a consistent characterization (i.e., Same waste codes and constituents. Concentrations may be variable, but not to a point where waste codes changes or constituents that need treatment are changing) the waste will be sampled and reevaluated again during the following quarter to confirm consistency and then again upon its annual re-evaluation. Thereafter, no analysis is required unless a change in the process occurs. If the characterization varies the waste can be characterized on a per container basis utilizing the same sampling method performed during initial sampling.

    - Waste will be reanalyzed annually to confirm consistency with the waste characterization.

If upon visual inspection or through knowledge of the process the waste is determined to be heterogeneous, the sample will be collected from each layer, or each material will be sampled individually and either composited based on estimated proportions or evaluated separately. A composite may be used for purposes of characterization and a representation of the waste at the point of generation. Individual grabs may be used to determine the worst-case scenario and establish conservative handling procedures.

As practicable, sampling techniques used for specific types of waste will correspond to those referenced in 40 CFR 261, Appendix I and Table A.1. The sampling equipment and procedures described represent recommended sampling protocol for general types of waste material. Waste may require different sampling techniques than those outlined. Therefore, deviations from the recommended protocol do not constitute an excursion from acceptable sampling practices or the conditions of this WAP. All methodologies will be updated and revised as the references are updated and revised.

The rationale for what sampling equipment will be used is determined by considering a number of factors. Waste properties are considered when determining the type of sampling equipment that will be used. Sample devices will vary according to whether the sample is liquid, solid or multiphasic and whether the liquids are viscous or free-flowing and solids are hard, soft, powdery, or clay-like. Table A.1 outlines typical sampling equipment that will be utilized based on the physical state of the waste. Appendix E describes sampling procedures used.

If the waste is heterogeneous, as much as practicable, the sample will be composed of each layer or sampled individually and either composited based on estimated proportions or evaluated separately. Alternatively, the sampler can randomly select samples or select samples from portions of the waste expected to have the highest level of contamination. The feasibility is determined by the sampler using reasonable judgment considering numerous factors including safety, visual appearance, extent of apparent variability, accessibility, level of contamination on the material, etc.

The horizontal location in which the waste is sampled is also at the discretion of the sampler. The vertical depth of the sample is limited by the sampling equipment utilized and the physical properties of the waste.

Ease of use of the sampling devices is a contributing factor in determining which specific sampling tool will be utilized. For example, a coliwassa is commonly utilized to collect samples from multiphasic waste streams. However, if sampling in a ditch a dipper may equally be capable of collecting a representative sample and is more practical.

Sampling equipment is constructed of non-reactive materials. All equipment used in the collection of waste samples will either be disposable (e.g., scoops or container thieves) or sufficiently cleaned to remove observable contamination prior to sampling. Sampling equipment will either be cleaned by wiping, water-rinsing into a container, or managing the equipment as a waste. Decontamination is only required if the material previously sampled is incompatible with the waste that will be sampled or if contamination on the sampling equipment may dilute the sample being collected.

Minimum sample sizes and preservation techniques utilized for the specific constituent types are outlined in Table A.2. Preservation requirements are not necessary if samples are brought directly to the laboratory after sampling and analyzed upon receipt.

In the event a third-party laboratory will be utilized to perform testing, the sampling requirements will be consistent with the third-party laboratory instructions, but equivalent analytical methods may be utilized. The third party selected shall be competent in analyzing the parameters of interest. Often a third-party

accreditation agency such as NELAP, A2L2, ISO, etc., can be used to substantiate the competency of the third-party laboratory. In the absence of an accreditation MDWTP/WDI's Quality Assurance/Quality Control (QA/QC) Plan will be followed. Where a test method is specified in subpart C of 40 CFR part 261, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste if knowledge or other supporting information cannot be used.

TABLE A.1 REPRESENTATIVE SAMPLING PROCEDURES FOR ONSITE GENERATED WASTE

The sampling equipment and procedures described represent recommended sampling protocol for general types of waste material. Waste may require different sampling techniques than those outlined.

Sampling Method/ Rationale	Sampling equipment	Viscous liquid	Single-Phase Liquid	Multi-Phase Liquid	Free flowing liquids and slurries/sludge	Hard Packed Solids/ Sludge	Soil or soil-like material	Dry powders and granules	Moist powders and granules
SW-846, Ch. 9	Dipper/Cup*	Y	Y	Y	Y	N	N	N	N
	Coliwasa/Tube/Drum Thief	Y	Y	Y	Y	N	N	N	N
	Thief	N	N	N	N	N	N	Y	N
	Trier	N	N	N	N	Y	Y	Y	Y
	Scoop/Cup*/Spoon/Trowel	N	N	N	N	Y	Y	Y	Y
	Auger	N	N	N	N	Y	Y	Y	Y

*Cup may act as dipper and/or a scoop

TABLE A.2 SAMPLING PRESERVATION

Parameter	Matrix	Sample Size[1]	Hold Time	Preservation (when not analyzed within 4 hours of receipt)	Container Type
Semivolatiles, Pesticides, and Herbices	Aqueous samples with no residual chlorine present	1L	Extracted within 14 days and extract analyzed within 40 days of extraction	0-6°C	Amber glass with PTFE lined lid
	Aqueous samples WITH residual chlorine present	1L	Extracted within 14 days and extract analyzed within 40 days of extraction	Add 3 mL 10% sodium thiosulfate solution per gallon (or 0.008%). Cool to 0 - 6 °C.	Amber glass with PTFE lined lid
	Concentrated Waste Sample	125mL	Extracted within 14 days and extract analyzed within 40 days of extraction	0-6°C	Glass with PTFE lined lid
	Solid	250mL	Extracted within 14 days and extract analyzed within 40 days of extraction	0-6°C	Glass with PTFE lined lid
Volatiles	Aqueous samples with no residual chlorine present	120mL	7 days	Cool to 4 ± 2C	3X 40mL VOA vials
	Aqueous samples WITH residual chlorine present	120mL	14 days	Collect sample in a prepreserved container containing either 25 mg ascorbic acid or 3 mg of sodium thiosulfate per 40- mL of chlorinated sample volume containing less than 5 mg/L of residual chlorine. Cool to 4 ± 2°C and adjust pH to less than 2 with HCl or solid NaHSO4	3X 40mL VOA vials
	Concentrated Waste Sample	125mL	14 days	Sample container cooled to 4 ± 2C for 48 hours or less then frozen to < -7°C OR preserved with methanol.	Glass with PTFE lined lid no headspace
	Solid	125	14 days	Sample container cooled to 4 ± 2C for 48 hours or less then frozen to < -7°C OR preserved with methanol.	Glass with PTFE lined lid no headspace
Cyanides	Water	500mL	14 days	4 °C / NaOH to pH ≥12	Plastic or Glass
	Solid	100g	14 days	4 °C	Plastic or Glass
PCB	Aqueous samples with no residual chlorine present	1L	None	0-6°C	Amber glass with PTFE lined lid
	Aqueous samples WITH residual chlorine present	1L	None	Add 3 mL 10% sodium thiosulfat solution per gallon (or 0.008%). Addition of sodium thiosulfate solution to sample container may be performed in the laboratory prior to field use. Cool to 0 - 6 °C.	Amber glass with PTFE lined lid
	Concentrated Waste Sample	125mL	None	0-6°C	Glass with PTFE lined lid
	Solid	250mL	None	0-6°C	Glass with PTFE lined lid

TABLE A.2 SAMPLING PRESERVATION

Parameter	Matrix	Sample Size[1]	Hold Time	Preservation (when not analyzed within 4 hours of receipt)	Container Type
Mercury	Water	400mL	28 days	HNO3 to pH<2	Plastic or Glass
	Solid	200g	28 days	≤6°C	Plastic or Glass
Metals	Water	600mL	6 Months	HNO3 to pH<2	Plastic or Glass
	Solid	200g	6 Months	NONE	Plastic or Glass
TCLP Metals	Solid	120g	180 days to TCLP extraction and additional 180 days from Preparative Extraction to determinative analysis	NONE	Plastic or Glass
TCLP Metals	Liquid	600g	180 days to TCLP extraction and additional 180 days from Preparative Extraction to determinative analysis	NONE	Plastic or Glass
TCLP Mercury	Solid	120g	28 days to TCLP extraction and additional 28 days from Preparative Extraction to determinative analysis	NONE	Plastic or Glass
TCLP Mercury	Liquid	600g	28 days to TCLP extraction and additional 28 days from Preparative Extraction to determinative analysis	NONE	Plastic or Glass
Paint Filter	All Matrices	250g	NONE	NONE	Plastic or Glass
Water Reactivity	All Matrices	25g	NONE	NONE	Plastic or Glass
Ignitability	All Matrices	25g	NONE	NONE	Plastic or Glass
Flashpoint	Liquid	125mL	14 days	4°C	Glass minimal headspace
Radioactivity	All Matrices	125mL	none	NONE	Plastic or Glass
pH- Screen	All Matrices	25mL	none	NONE	Plastic or Glass

TABLE A.2 SAMPLING PRESERVATION

Parameter	Matrix	Sample Size[1]	Hold Time	Preservation (when not analyzed within 4 hours of receipt)	Container Type
pH characterization	All Matrices	50mL	24 hours	NONE	Plastic or Glass
PCB Screen	Liquid	50mL	None	0-6°C	Glass
Reactivity: Caustic/ Acid/ Bleach/ Kiln dust (or similar)	All Matrices	100g	None	NONE	Plastic or Glass
Cyanide Screen	All Matrices	25g	24 hours	0-6°C	Plastic or Glass
Sulfide Screen	All Matrices	25g	24 hours	0-6°C	Plastic or Glass

1. Container capable of holding the mass or volume. In some instances, smaller sample sizes may be used if the laboratory's data objectives can be met.

TABLE A.3 PRE-APPROVAL/WASTE CHARACTERIZATION ANALYSIS PROCEDURES

Alternative methods may be required on a case by case basis in order to properly analyze the waste

Table D.2 protvdes waste code specific methods

Parameter	Rationale	Analytical Method	Frequency*
Color	Color is identified during preapproval so that staff will have a reference for the preacceptance process to confirm the proper waste is received.	Visual Assessment	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability (when knowledge must be supported)
Consistency	Consistency is identified during preapproval so that staff will be have a reference for the preacceptance process to confirm the proper waste is received.	Visual Assessment: Examples of consistency descriptors are as follows: dust, solid, semi-solid, sludge, liquid and/or debris. Identifies presence of oil-water phases or multiphases	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Odor (Incidental)	Odor is identified during preapproval so that staff will be have a reference for the preacceptance process to confirm the proper waste is received.	Potentially problematic odors detected in the routine laboratory handling of a sample may result in rejection of the load unless the waste can be managed in such a way as to minimize odor emissions.	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
pH Solid	pH is identified during preapproval so that staff will be have a reference for the preacceptance process to confirm the proper waste is received.	Internal Procedure: The pH of the material will be measured using wide range pH paper (mentioned in SW846 9041) on a single aliquote of waste. If not visually apparent after looking at pH paper, an electronic measurement may be performed after mixing solid sample with an equal aliquot of water. See Appendix E	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
pH Liquid	pH is identified during preapproval so that staff will be have a reference for the preacceptance process to confirm the proper waste is received. pH is used in corrosivity characterizations.	SW846 9040- pH Electrometric Measurement	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Ignitability liquid	Quantify flashpoint of waste.	SW 846 1010A or SW 846 1020B	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Ignitability Screen	Screening for ingitability in solid waste	Internal procedure: Attempt ignition of waste with flame for 5 seconds. See Appendix E	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Reactivity-Water	Verify potential for adverse reaction. Reactions are assessed to determine if the material is inconsistent with expected waste; whether additional handling and controls are required; and whether the waste reaction occurs may qualify as water reactive as specified by 40 CFR 261.23.	Internal Procedure: The test method is as follows: Approximately ten milliliters (mls) or equal volume of waste is mixed rapidly with approximately ten mls of water. See Appendix E	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
H2S Screening	Verify potential for adverse reaction. Reactions are assessed to determine if the material is inconsistent with expected waste; whether additional handling and controls are required.	Internal Procedure: Mix waste in cup with acid. Detect sulfide using lead acetate paper. See Appendix E	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Free Liquids	Intended to verify presence of free liquids	SW846, 9095 Paint Filter Liquids Test	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability

TABLE A.3 PRE-APPROVAL/WASTE CHARACTERIZATION ANALYSIS PROCEDURES

Alternative methods may be required on a case by case basis in order to properly analyze the waste

Table D.2 proivdes waste code specific methods

Parameter	Rationale	Analytical Method	Frequency*
Cyanide Screening	Verify potential for adverse reaction. Reactions are assessed to determine if the material is inconsistent with expected waste; whether additional handling and controls are required.	Internal Procedure: SW846 9014 coloring method reagents are added to a mixture of water and waste. In the presence of cyanide color change will occur. A violet color may be an indication that cyanides are present. A dark purple is an indication that the cyanide concentrations are potentially high. The detection when not expected or a dark color change will trigger an investigation of the waste. See Appendix E	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Cyanide	Quantification of Cyanide Concentration	SW846 9010 and 9014 Total and Amenable Cyanide: Distillation; Cyanide in Waters and Extracts Using Trimetric and Manual Spectrophotometric Procedures.	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
PCB	Quantification of PCB Concentration	SW846 8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution Cleanup:SW846 3665-Sulfuric Acid/ Permanganate Cleanup Cleanup:SW846 3620 - Florisil Cleanup	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Metals	Quantification of Regulated Metal Concentration	SW846 6010 - Inductively Coupled Plasma-Atomic Emission Spectrometry Prep: SW846 3051A Microwave Assisted Acid digestion of Sediments, Sludges, Soils, and Oils Prep: SW846 3015A- Microwave Assisted Acid Digestion of Aqueous Samples and Extracts	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Mercury	Quantification of Regulated Mercury Concentration	SW846 7473- Mercury in Solids and Solutions by Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry SW846 7470 Mercury in Liquid Waste EPA 245.1 Determination of Mercury in Water by Cold Vapor Atomic Absorption Spectrometry	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Semi-volatiles	Quantification of Semi-volatile Concentration	SW846 8270 Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510C- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Volatiles	Quantification of Volatile Concentration	SW846 8260- Volatile Organic Compounds by Gas Chromatography /Mass Spectrometry SW846 8015- Nonhalogenated Organics by Gas Chromatography Prep: SW846 5030- Purge and Trap for Aqueous Samples Prep: SW846 5035- Closed system Purge and Trap and Extraction for Volatil Organics in Soil and Waste Samples	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Pesticides	Quantification of Pesticide Concentrations	SW846 8081- Organochlorine Pesticides by Gas Chromatography Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510C- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability

TABLE A.3 PRE-APPROVAL/WASTE CHARACTERIZATION ANALYSIS PROCEDURES

Alternative methods may be required on a case by case basis in order to properly analyze the waste

Table D.2 provides waste code specific methods

Parameter	Rationale	Analytical Method	Frequency*
Herbicides	Quantification of Herbicide Concentration	SW846 8151- Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization SW846 8270 Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510C- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
TCLP	Preparatory Extraction method for applicable characterization or LDR confirmation purposes.	Sw846 1311- Toxicity Characteristic Leaching Procedure To be followed by Analyte specific aqueous preparatory method and analytical method	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability
Oxidizer Screen	Screening of Possible Oxidizer	ASTM D4981-08 Standard Test Method for Screening of Oxidizers in Waste	•Initial Approval (when knowledge must be supported) • Change in the process generating the waste which will alter the characterization or treatability

A2.A.3(b) Off-site Generated Waste
[R 299.9605(1) and 40 CFR §264.13(B)(1)]

As stated in 262.11, a person who generates a solid waste, as defined in 40 CFR 261.2, must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations. The information provided to MDWTP and WDI by the generator is used as the basis for the chemical and physical analysis, and generators are responsible for ensuring the information is true, accurate, and up-to-date. Generators or an authorized representative must certify that the information provided is representative of the waste. Generators must provide information described in A2.A.2 in order to validate the characterization. All the information available to MDWTP and WDI is reviewed is reviewed to confirm the generator's characterization information.

The general thought process when evaluating the waste for analytical requirements is as follows:

- Generators can conservatively characterize waste as hazardous for all potential waste codes and contaminants of concern expected to be present above LDRs. This is supported by knowledge.
- A generating process that is not listed and that does not have any characteristically hazardous constituents placed in or created by the generating process, will not require any testing as knowledge can be utilized to determine it is not hazardous.
- A generating process that does involve characteristically hazardous constituents and/or physical properties must be able to sufficiently characterize the waste to determine compliance with characteristic standards and applicable LDRs. This can be accomplished through knowledge and/or testing that provides the minimum and maximum representative constituent concentrations as determined by the generator. Concentrations that exceed applicable LDRs will require treatment. Concentrations that meet the LDR standards can be landfilled.
- A generating process that is listed must demonstrate compliance with applicable LDRs through knowledge and/or testing providing the minimum and maximum representative constituent concentrations as determined by the generator. Constituents of concern associated with the listing as well as any other characteristics that are exhibited by the waste will be evaluated for compliance with LDR. Concentrations that exceed applicable LDRs will be treated. Concentrations that meet the LDR standards may be landfilled.

A2.A.4PRE-APPROVAL LAND DISPOSAL RESTRICTIONS (LDR) EVALUATION

[R 299.9605(1) and 40 CFR §264.13(B)(1)]

On-site generated waste streams are evaluated for LDR applicability and prohibition of land disposal restriction concurrently with the hazardous waste determination made in accordance with 40 CFR 262.11. This is done by determining if the hazardous waste meets treatment standards, as applicable, in 40 CFR 268.40, 268.45 and 268.49 by testing the waste or using knowledge of the waste. When testing of the waste is used to demonstrate LDR compliance Table D.3 will be utilized. Characteristic waste along with underlying hazardous constituents (UHCs) reasonably expected to be present above their concentration-based levels (see Table UTS in §268.48) are identified to meet or exceed the applicable land disposal restrictions at the point of generation.

Off-site waste will be reviewed by qualified personnel for LDR applicability and prohibition of disposal. The determination is based on information provided by the generator as required by 40 CFR 268.7(a)(1) and A2.A. Additionally, generator process knowledge, analysis, and/or information provided on the waste characterization form will be used to determine whether waste meets treatment standards in 40 CFR 268.40, 268.45 and 268.49 (as applicable). For characteristically hazardous waste that is subject to alternative treatment standards, generators have an obligation to identify whether UHCs reasonably expected to be present above their concentration-based levels (see Table UTS in §268.48) at the point of generation, meet the applicable land disposal restrictions.

For both on-site and off-site generated waste, constituents exceeding applicable LDRs will be treated at MDWTP/WDI by acceptable treatment methods or sent off-site to a facility that can appropriately treat the waste. Waste meeting applicable LDRs can be disposed of at WDI or sent to an off-site Subtitle D landfill (waste must be treated to remove applicable hazardous characteristic(s) and meet applicable LDRs prior to disposal).

In the event that the generator notification (required by 268.7(a)(2)) states, "*The hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination*", MDWTP will test the waste according to the specification of this plan and such testing will be performed by the methods identified in Table D.3.

A2.A.4(a) Dilution and Aggregation of Wastes

[R 299.9627 and 40 CFR §268.3]

Listed wastes and characteristic wastes, if destined for land disposal, may not be impermissibly diluted as a substitute for adequate treatment from the point of generation to the point of land disposal. Characteristic wastes may be permissibly diluted if, (1) the waste is managed in a Clean Water Act (CWA)/CWA-equivalent surface unit or a Class I Safe Drinking Water Act injection well, (2) the waste has a concentration-based treatment standard or is treated using the DEACT technology-based treatment standard, and (3) the waste is not a D003 reactive waste. Knowledge of impermissible dilution will result in MDWTP and WDI managing the waste as prohibited from land disposal and treatment of constituents that exceeded LDRs prior to dilution will occur. Information will be documented in the generator approval file.

The constituents of concern for on-site generated waste are identified via process knowledge and/or analysis of the waste to determine whether treatment is required. Constituents that may fluctuate will either be analyzed more frequently for a determination of their treatment requirements, or the waste will be managed to require treatment of those constituents at the highest range of known variable concentrations.

A2.A.5 INSUFFICIENT PRE-APPROVAL GENERATOR WASTE CHARACTERIZATION

[R 299.9605(1) and R 299.9504(1)(c) and 40 CFR §§264.13(a)(3) and (4), 264.13(b)(c), and 264.72]

Waste streams are reviewed with respect to waste characterization requirements and the Land Disposal Restrictions (LDR) requirements in 40 CFR Part 268. Waste generators or individuals with the authority to make characterization and LDR decisions on the generator's behalf must certify the information provided is representative, true, and accurate. The analytical data, waste type, process description, chemical and physical characteristics provide the facility with sufficient information to decide if the waste can be accepted or if additional data is required before a decision can be reached. If the generator does not provide sufficient information to evaluate the waste or if MDWTP/WDI disagree with the waste characterization, the generator or their representative is contacted and asked to provide additional information and make appropriate revisions to the waste characterization before the approval process will continue. Examples of insufficiencies or clarifications that must be addressed before an approval is issued include, but are not limited to:

- Information required in A2.A.2 is not provided.
- Waste generated from a listed process that is not identified with the listed waste code.
- Analysis indicating a constituent exceed concentration-based requirement that is not identified with applicable waste codes or UHC.
- Conflicting information (e.g., information indicates waste has a pH of <2, but material safety data sheet indicates the waste is neutral)
- Lack of adequate knowledge and/or analysis that supports the generator characterization

If sufficient information is not provided the waste is not approved. Confirmatory analysis can be performed to obtain information necessary. A representative sample will be requested from the generator if the waste stream is suspected to have additional relevant chemical and/or physical properties that have not been adequately identified. Parameters analyzed are based on contaminants suspected to be present based on site history and process information utilizing methods identified in Table A3.

The profile, with supporting information, including resolutions to insufficiencies, forms the basis of information upon which the facility determines if the waste can receive an approval for disposal at WDI or storage, transshipment, and treatment at MDWTP. If the information supports the generator characterization and the waste can be safely handled at the facility in accordance with the operating license requirements, it is assigned a unique identification number and a management process that identifies how the waste will be handled at the facility once accepted. An approval letter is sent to the generator directly or via the customer to serve as notification that the waste as represented may be shipped to the facility, and that the facility has the appropriate permit(s) to accept the waste. All approval files are maintained in the facility operating record in an electronic, paper, or other archival form. Approval files with no shipments received upon annual review will not be kept in the facility operating record.

A2.A.6 SUBSEQUENT WASTE SHIPMENT PROCEDURES

[R 299.9605(1) and R 299.9504(1)(c) and 40 CFR §§264.13(a)(3) and 264.13(b)(4)]

The facility requires that the profile, supporting information, and/or documentation be updated whenever any one of the following occur:

- There has been a change in the process generating the waste. When a change in a waste stream's characterization or treatment requirements occur, generators are required to provide notification of the change.
- Inspection of a waste shipment reveals that the waste does not meet the description/classification of the approval values.

The initial evaluation of waste from each generator will be re-evaluated at least once a year to ensure that the information provided is accurate and up to date. For each hazardous waste approval, the generator will be provided with a notification that informs them that their annual review is required. The generator must provide certification that the information previously provided is still a factual and accurate representation of the waste. The generator is instructed not to provide this certification if changes have occurred to the waste stream or if they cannot be confident in their representation that the previously provided information is still accurate. Changes that impact the wastes characterization result in an amendment of the existing approval, or if the changes are too extensive, a new approval may be issued. Waste approvals that have not received an updated generator certification within one year of the last review will not be approved for receipt at the facility until a certification is obtained or any changes in the characterization have been approved.

A2.B PRE-ACCEPTANCE

The pre-acceptance process outlines screening procedures used by the TSD facility in order to inspect and, if necessary, analyze hazardous waste received at the facility in order to confirm the waste received is consistent with properties identified in the pre-approval process. Pre-acceptance sampling and screening/fingerprint analysis will be performed on all incoming waste unless exempted by Section A.2.B.1(d).

A2.B. 1 PRE-ACCEPTANCE PROCEDURES

[R 299.9605(1) and R 299.9504(1)(c), and 40 CFR §§264.13(c), 264.72(a) and (b), and 264.73(b)]

Waste shipments arrive at the facility in the following containers:

☒ Drums	☒ Totes	☒ Tanker trucks
☒ Carboys	☒ Wrangler box	☒ Filter bags
☒ Roll-off boxes	☒ Vacuum trucks	

☒ Other: Dump trailer, Flo- bin, Cubic yard boxes, etc.

***All container types cannot be accounted for. Generators are responsible for ensuring waste is properly packaged for transportation. US Ecology does not have any container type restrictions in order to accommodate all waste types that may be generated. Containers received must be in good condition and capable of retaining the waste.*

Each manifested/shipping document line item receives a unique receipt number that contains approval information (handling method) determined during the pre-approval process described above. Containers that will be placed in storage will be labeled with the receipt information. During the pre-acceptance process *MDWTP/WDI* will perform all the following tasks on waste received from off-site generators:

- Review paperwork
- Visually inspect the waste unless exempted by Section A2.B.1(d)
- Perform waste screening/fingerprint analysis of waste as required by A2.B.1(b), (c) and (d) unless exempted by Section A2.B.1(d)

Prior to allowing the transporter to relinquish possession paperwork is reviewed as described in section A2.B.1(a). Containers are inspected to ensure they are in good condition and the labels are confirmed to match information on the shipping document. WDI and MDWTP make acceptance determinations while the containers remain in possession of the transporter or containers are relinquished from the transporter, received, and placed in permitted container storage areas (WDI container or bulk storage area, or MDWTP NCSA, ECSA, SECSA, ETB, WTB) while awaiting an acceptance determination. After all paperwork has been reviewed and required sampling and screening is completed waste received is either accepted for treatment, storage, or disposal, or identified as discrepant pending a resolution or rejection. Discrepancies will be managed as described in A2.B.2

It should be noted that the facility will collect additional samples and perform additional analysis when knowledge of the waste identifies potential safety and/or compliance concerns.

A2.B.1(a) Paperwork Review

[R 299.9605(1) and R 299.9504(1)(c), and 40 CFR §§264.13(c), 264.72(a) and (b), and 264.73(b)]

All shipments of wastes (subject to LDRs) received at the facility will be accompanied by appropriate generator notification (as required) in accordance with R 299.9627 and 40 CFR §268.7 as well as an appropriate shipping paper. It is the responsibility of the generator and the transporter to utilize a uniform hazardous waste manifest for the shipment of hazardous wastes. In the event a hazardous waste arrives without a uniform hazardous waste manifest, a notification of unmanifested waste will be submitted in accordance with R 299.9610(2) of the administrative rules promulgated under Part 111 of the Natural Resources and Environmental Protection Act ("Part 111"). Complete shipping and LDR paperwork will be compared to information submitted by the generator during the pre-approval process to ensure the accuracy of information provided. The LDR notification will be verified to confirm the waste codes and constituents subject to treatment are consistent with pre-approval information which established the handling method assigned to the waste. The shipping document will also be compared to the number of containers, the volume, and/or the weight of the waste in the shipment.

Paperwork discrepancies will be resolved as described in A2.B.2.

A2.B.1(b) Sampling Methods
[R 299.9605(1) and R 299.9504(1)(c) and 40 CFR §§264.13(b)(14) and 264.13(c)(2)]

The equipment used to obtain a representative sample of the waste to be evaluated are summarized in Table B.1. 40 CFR 260.10 defines representative sample as, *"a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole."* The purpose of the sampling is to determine if the material in the waste containers conforms to the pre-approval information. The sampling is not intended to characterize the waste. It is merely intended to compare the information provided during the pre-approval process to the waste received.

As practicable, sampling techniques used for specific types of waste will correspond to those referenced in 40 CFR 261, Appendix I and USEPA SW-846 whenever possible. The sampling equipment and procedures described represent recommended sampling protocol for general types of waste material. Appendix E provides procedures on the use of sampling equipment. Waste may require different sampling techniques than those outlined. Therefore, deviations from the recommended protocol do not constitute an excursion from acceptable sampling practices or the conditions of this WAP. When deviations from standard methods are implemented, the methods used need to be specified in the WAP. Methods not specified will require an update of the WAP. Appendix E provides procedures utilized for sampling.

The rationale for what sampling equipment will be used is determined by considering a number of factors. Waste properties are considered when determining the type of sampling equipment that will be used. Sample devices will vary according to whether the sample is liquid, solid or multiphasic and whether the liquids are viscous or free-flowing and solids are hard, soft, powdery, or clay-like. Table B.1 outlines sampling equipment that will be utilized based on the physical state of the waste and the size of the container.

The feasibility of sampling is determined by the sampler using reasonable judgment considering numerous factors including safety, visual appearance, extent of variability, level of observed contamination on the material, etc. If upon visual inspection, the waste is heterogeneous, as much as practicable, the sample will be composed of each layer or sampled individually and either composited based on estimated proportions or evaluated separately. Alternatively, the sampler can randomly select samples or select samples from portions of the waste expected to have the highest level of contamination. Samples collected at random are equally capable of demonstrating consistency with pre-approval information.

The horizontal location in which the waste is sampled is also at the discretion of the sampler. The vertical depth of the sample is limited by the sampling equipment utilized and the physical properties of the waste. Grab samples will usually be collected from the top portion of the material as far down into the waste as

the sampling apparatus allows. Surficial grab samples under certain conditions can quickly demonstrate whether material sampled does or does not match the waste profile. When possible, sampling devices that allow core samples to be collected will be used to collect as far into the sample containers as is practicable. This is influenced by factors such as the physical state of the waste, container sample size, and accessibility of the waste.

Ease of use of the sampling devices is a contributing factor in determining which specific sampling tool will be utilized. For example, a roll-off box of soil may not be able to use an auger to sample the waste as it would require unsafe entry into the container in order to properly core into the waste. However, sampling may occur with a scoop/cup. A coliwassa is the preferred method for sampling liquids. However, if the waste is solid with a puddle of free-standing liquids, a cup is utilized.

Sampling equipment is constructed of non-reactive materials. Care is taken in the selection of the sampling device to prevent cross-contamination of the sample and to ensure the compatibility of materials. All equipment used in the collection of waste samples will either be disposable (e.g., scoops or container thieves) or sufficiently cleaned to remove contamination prior to sampling. Sampling equipment will either be cleaned by wiping, or water-rinsing into a container. Decontamination is only required if the material previously sampled is incompatible with the waste that will be sampled; contamination on the sampling equipment may dilute the sample being collected; the waste is non-hazardous or characteristically hazardous waste intended for Subtitle D disposal, but the equipment was previously utilized on listed waste. When decontamination is not feasible the sampling equipment will be properly disposed of.

Screening tests do not necessitate any sample preservation because screening is performed following the sample collection. Resamples are collected if analysis is not performed within parameter hold times.

Upon completion of the paperwork review, non-bulk containers received are accounted for and placed in containment areas where waste screening sampling will occur. Except for material exempted in section A2.B.1(d), for shipments received from off-site locations *MDWTP and WDI* will perform screening analysis as specified in A2.B.(c) on *at least 10 percent* of the manifested container count from each unique non-bulk approval number per shipment *with at least 2 containers being opened for visual inspection comparison* when the manifested count would require only one container. Containers which contain waste materials that are visually similar will have one grab sample (collected in sealable containers) collected from the containers that are visually inspected. Samples will be composited by waste stream to form a single sample for analysis. Alternatively, each sample collected can be evaluated individually. Samples are composited in the laboratory under fume hoods. Equal volumes of each sample collected are added to an HDPE compositing container with a lid. Samples will be mixed to ensure homogeneity of samples and then immediately sealed. If the containers contain waste materials that visually differ from each other, an *additional 10 percent of* the manifested container count from each unique non-bulk approval number per shipment will have a minimum of one grab sample collected from the container that are visually inspected. Each sample will be analyzed separately. Sample discretion will be utilized to determine what is sampled and if additional samples are collected.

Bulk containers (i.e., roll- offs, end dumps, etc.) are sampled upon arrival at the facility while paperwork is being reviewed. Except for material exempted in section A2.B.1(d), a grab sample will be taken from 100% of the manifested bulk containers. If the containers contain waste materials that visually appear different, a sample will be collected of each type of differing material (to the extent possible) and individually evaluated. The horizontal location in which the waste is sampled is at the discretion of the sampler. Core samples are unlikely to be collected because of safety concerns associated with the container types and sampling equipment. The following information is included on the sample label:

Type of Sample	Label Requirements:

Bulk Loads	Transporter Name Truck #
Container Loads	Waste Code Manifest # Approval # Drum #

A2.B.1(c) Waste Screening and Visual Inspection of Waste

[R 299.9605(1) and R 299.9504(1)(c) and 40 CFR §264.13(c)]

The screening parameter objective is to compare properties identified during the pre-approval process to the waste received in order to verify the material received was accurately described. Therefore, observations will identify whether the waste is consistent with pre-approval information or if it differs.

Table B.2 identifies the waste screen analysis procedures, including screening parameters, rationale for the parameter, analytical method, the frequency of waste screening, and discrepancy triggers. A tiered screening approach is utilized for incoming shipments. Screening procedures developed by MDWTP/WDI are provided in Screening levels are as follows:

- **Level 1**
  Evaluates the physical characteristics of the waste. Comparison is made to information obtained during pre-approval. The screening parameters determine the general physical characteristics of the waste and compare it to the information obtained during the pre-approval process. Level 1 will be performed on all incoming waste streams.

- **Level 2**
  Level 2 analysis will be completed to supplement Level 1 analysis unless samples cannot be collected as described in A2.B.1(d). Level 2 analysis will be performed for initial shipments of waste sampled to obtain reasonable assurance that the pre-approval information was accurate, by analyzing additional parameters on the first receipt as identified in Table B.2. Parameters analyzed are qualitative and are intended to verify properties identified in the preapproval information. Subsequent shipments that remain consistent with the pre-approval information for screening parameters performed on the first receipt will not be required.

- **Level 3**
  Level 3 analysis is performed when a waste discrepancy cannot be resolved without additional analysis. Additional information on when the analysis would be performed is provided in A2.B.2.

Visual observations and screening results of samples collected as specified in A2.B.1(b) will be recorded and compared to the profiled information. Expected screening results are assigned to a waste. This information is utilized to identify consistency with the approved waste. If the results of the pre-acceptance screening agree with the pre-approval information, the container is accepted. If screening results vary from pre-approval information the discrepancy procedures identified in A2.B.2 will be initiated.

Table B.1 Equipment for Representative Sampling for Pre-Acceptance Screening

The sampling equipment and procedures described represent recommended sampling protocol for general types of waste material. Waste may require different sampling techniques than those outlined.

Sampling Method/ Rationale	Sampling equipment	Viscous liquid		Single-Phase Liquid		Multi-Phase Liquid		Free flowing liquids and slurries		Hard Packed Solids/ Sludge		Soil or soil-like material		Dry powders and granules		Moist powders and granules	
		Non-Bulk	Bulk	Non-Bulk	Bulk	Non-Bulk	Bulk	Non-Bulk	Bulk	Non-Bulk	Bulk	Non-Bulk	Bulk	Non-Bulk	Bulk	Non-Bulk	Bulk
SW-846, Ch. 9	Dipper/Cup	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
	Coliwasa/Tube/Drum Thief	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
	Thief	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	N	N
	Trier	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
	Scoop/CupSpoon/Trowel	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
	Auger	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y

*Cup may act as dipper and/or a scoop

Table B.2 Pre-Acceptance Analysis Procedures

Preacceptance: Incoming waste evaluation at the time of receipt to determine acceptability with permit conditions and handling procedures

Alternative methods may be required on a case by case basis in order to properly analyze the waste

**Frequencies will be completed as specified unless exempted as specified by A2.B.1(d)*

Parameter	Frequency*	Rationale	Analytical Method	Discrepancy
Level 1 Necessary for all incoming waste streams except as exempted by A2.B.1(d)				
Color	Each incoming waste stream	Determine the general physical characteristics of the waste.	Visual Assessment	Color is not as profiled
Consistency	Each incoming waste stream	Determine the general physical characteristics of the waste.	Visual Assessment: Examples of consistency descriptors are as follows: dust, solid, semi-solid, sludge, liquid and/or debris. Identifies presence of oil-water phases or multiphases	Consistency is not as profiled or differs from the ratios profiled (example profiled at 90% debris and 10% soil and arrives 60% soil and 40% debris)
Odor (Incidental)	Each incoming waste stream	Determine the general physical characteristics of the waste.	Potentially problematic odors detected	Odor is strong and has potential to be detected offsite
Level 2 Necessary for waste streams require analysis to verify the consistency with preapproval values except as exempted by A2.B.1(d). Also performed on the sampled waste to obtain more information on the properties of the waste.				
pH screen	Each incoming waste stream sampled except for solids and nonaqueous wastes	Identify the general corrosive nature of the waste.	Internal procedure. See Appendix E	Varies from preapproval range such that 1. It falls below the low corrosivity limit (pH <2) 2. It falls above the high corrosivity limit (pH>12.5) 3. pH is inconsistent with pH range provided during preapproval
Free Liquids	First receipt of waste stream sampled and when deemed necessary by visual consistency.	Verify presence of free liquids	SW846, 9095 Paint Filter Liquids Test	Presence of free liquid
Radioactivity	First receipt of waste stream.	Identify waste streams that may contain radioactivity, but were not identified as radiological waste during the pre-approval process.	Internal procedure. See Appendix E	Greater than 3X background when radiological properties are not expected
Ignitability Screen	Each incoming waste stream sampled	Identifies potential for ignitable waste	Internal procedure. See Appendix E	Ignition of material not expected to be combustible (examples of combustible materials include paper, cardboard, wood, plastic, rubber)
Level 3 triggered by Level 1or Level 2 discrepancy and inability for discrepancy to be resolved				
pH Liquid	Waste streams with discrepant pH screen	Identify the general corrosive nature of the waste.	SW846 9040- pH Electrometric Measurement	Varies from preapproval range such that 1. It falls below the low corrosivity limit (pH <2) 2. It falls above the high corrosivity limit (pH>12.5) 3. pH is inconsistent with pH range provided during preapproval

Table B.2 Pre-Acceptance Analysis Procedures

Preacceptance: Incoming waste evaluation at the time of receipt to determine acceptability with permit conditions and handling procedures

Alternative methods may be required on a case by case basis in order to properly analyze the waste

**Frequencies will be completed as specified unless exempted as specified by A2.B.1(d)*

Parameter	Frequency*	Rationale	Analytical Method	Discrepancy
Flashpoint	Waste streams which fail match test.	Quantify flashpoint of waste that failed the match test to confirm D001 applicability when flashpoints are <140F.	SW 846 1010A or SW 846 1020B	Unexpected flashpoint <140F
PCB Screen	TSCA PCB waste stream that contain unexpected incidental free liquids	Confirm presence of PCBs in TSCA regulated wastes to confirm generator knowledge of liquids being from an incidental source. The "incidental liquid" determination is made by the generator at the time of waste characterization or characterized by the generator during the discrepancy resolution process. This is to comply with 40CFR 761.60(a)(3)(ii). The screening method may also be utilized if additional information is needed in order to confirm a generators characterization.	Internal procedure. See Appendix E	Presence of PCB pattern indicative of PCB presence >50ppm by screening method. Results indicating PCB concentration >50ppm by screening method will have the full method 8082 performed to document PCBs are <500ppm.
Cyanide	Quantification of Cyanide Concentration	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 9010 and 9014 Total and Amenable Cyanide: Distillation; Cyanide in Waters and Extracts Using Trimetric and Manual Spectrophotometric Procedures.	Cyanide detection above applicable LDRs
PCB	Quantification of PCB Concentration	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution Cleanup:SW846 3665-Sulfuric Acid/ Permanganate Cleanup Cleanup:SW846 3620 - Florisil Cleanup	PCB above applicable LDRs or waste is >50ppm and not identified as TSCA regulated waste.
Metals	Quantification of Regulated Metal Concentration	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 6010 - Inductively Coupled Plasma-Atomic Emission Spectrometry Prep: SW846 3051A Microwave Assisted Acid digestion of Sediments, Sludges, Soils, and Oils Prep: SW846 3015A- Microwave Assisted Acid Digestion of Aqueous Samples and Extracts	Metals detection above applicable LDRs.
Mercury	Quantification of Regulated Mercury Concentration	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 7473- Mercury in Solids and Solutions by Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry	Mercury detection above applicable LDRs
Semi-volatiles	Quantification of Semi-volatile Concentration	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 8270 Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510C- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution	Semi-volatiles detection above applicable LDRs

Table B.2 Pre-Acceptance Analysis Procedures

Preacceptance: Incoming waste evaluation at the time of receipt to determine acceptability with permit conditions and handling procedures

Alternative methods may be required on a case by case basis in order to properly analyze the waste

**Frequencies will be completed as specified unless exempted as specified by A2.B.1(d)*

Parameter	Frequency*	Rationale	Analytical Method	Discrepancy
Volatiles	Quantification of Volatile Concentration	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 8260- Volatile Organic Compounds by Gas Chromatography /Mass Spectrometry SW846 8015- Nonhalogenated Organics by Gas Chromatography Prep: SW846 5030- Purge and Trap for Aqueous Samples Prep: SW846 5035- Closed system Purge and Trap and Extraction for Volatil Organics in Soil and Waste Samples	Volatiles detection above applicable LDRs
Pesticides	Quantification of Pesticide Concentrations	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 8081- Organochlorine Pesticides by Gas Chromatography Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510C- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution	Pesticides detection above applicable LDRs
Herbicides	Quantification of Herbicide Concentration	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 8151- Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization SW846 8270 Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) Prep: SW846 3550- Ultrasonic Extraction Prep: SW846 3510C- Separatory Funnel Liquid-Liquid Extraction Prep: SW846 3580- Waste Dilution	Herbicides detection above applicable LDRs
TCLP	Preparatory Extraction method for applicable characterization or LDR confirmation purposes.	When information provided is insufficient to determine characterization and LDR compliance. See A2.B.2	SW846 1311- Toxicity Characteristic Leaching Procedure To be followed by Analyte specific aqueous preparatory method and analytical method	TCLP detection above applicable LDRs or characteristic levels

A2.B.1(d) Sampling Methods and Frequency Exceptions

[R 299.9605(1) and R 299.9504(1)(c) and 40 CFR §§264.13(b)(14) and 264.13(c)(2)]

When evaluating the feasibility of representative sampling the following must be considered:

- Incompatibility with a solvent during sampling may cause an adverse reaction. The use of mechanical force (e.g., potential sparking or heat generating tools, hammering, or scrapping) has the potential to apply friction or force on the waste also initiating an adverse reaction. In both sampling techniques the sampler is in close proximity and places the sampler at unnecessary risk of harm.
- The level of contamination may be highly variable and indistinguishable making it impossible to determine if a representative or even conservative sample was collected. It may not physically be possible to collect a sample from every visually dissimilar material.
- Requiring employees to sift, crawl or enter a container to sample materials is considered an unreasonable means of sampling as it exposes employees to significant and unnecessary risk of harm from chemical exposure and uneven walking and working surfaces. Falls from heights and on the same level (a working surface) are among the leading causes of serious work-related injuries and deaths. Occupational skin diseases are the second most common type of occupational disease. Studies show that absorption of chemicals through the skin can occur without being noticed by the worker, and in some cases, may represent the most significant exposure pathway. Employees are provided the personal protective equipment necessary to perform their tasks, however, there is a high to moderate risk of skin exposure during sampling (i.e., exposed skin while reaching or unknown damage to PPE (Personal Protective Equipment)) and after sampling (i.e., during the removal of PPE). The use of PPE is considered the last line of defense against worker injury and illness and is acceptable only when controls higher in the hierarchy such as using engineering and administrative controls do not eliminate the hazard. PPE is the last level of control. Furthermore, crawling through waste or dumping the contents of waste onto an area that will allow employees to sift through the waste have a high probability of contamination track out. Such activities are contradictory to protecting human health and the environment.

Whenever possible waste received from off-site facilities will be visually inspected and sampled. Exceptions are only used when inspection and/or sampling may cause injury; collecting a sample would be unreasonably difficult if not impossible due to the nature of the waste (e.g. a steel object that would require a welding torch to cut off a sample) or the packaging in which the waste is shipped; visual inspection and/or sampling may damage the integrity of special packaging designed to shield the waste from contact with leachate or prevent emission of dust or odors or other protections that such packaging may be intended to provide. All waste received from offsite is inspected, sampled, and analyzed as specified in A2.B.1(b) and (c) unless one of the following exemptions is applicable and documented in the receiving file.

Exceptions:

- On-site generated waste
  - Facility: MDI/WDI
  - Exception: Visual inspection and sampling not required.
  - Reason for exception: The generating process and properties of the waste are well known and as a result waste screening procedures are not needed. There is no need to confirm the waste is consistent with preapproval information because MDWTP/WDI are the generators.
- Empty containers defined as no more than 1 inch of residue remains; or no more than 3% the weight of total capacity of the container remains (when container size is 110 gallons or less); or no more than 0.3% by weight of total capacity of the container remains (when container size is 110 gallons or more)
  - Facility: MDI/WDI

  - Exception: Sampling is not required. Visual inspection required
  - Reason for exception: Residue cannot reasonably be sampled due to the small quantities. Information on previous contents in the container will be documented on the approval information.
- Debris (e.g., demolition debris, equipment, machinery, pumps, piping, glass, wood, concrete, rebar, metal, syringes, etc.)
  - Facility: MDI/WDI
  - Exception: Debris is sampled as much as possible. Sampling is not required only if it is not reasonably possible to collect a sample. Visual inspection is still required.
  - Reason for exception: Not all wastes are amendable to sampling because of the physical nature of the waste. Knowledge of contaminants present will be documented in the approval file. Containers may contain a wide variety of materials and contamination making the ability to obtain representative samples technically impracticable. A visual inspection provides sufficient information to confirm the identity of the waste on the accompanying shipping paper and pre-approval information. The data quality objective is met without sampling or analysis.
- Articles/chemical-containing devices, such as transformers, ballasts, capacitors, cathode ray tubes (CRTs), fluorescent lights, batteries.
  - Facility: MDI/WDI
  - Exception: Sampling is not required. Visual inspection required
  - Reason for exception: Articles and devices are objects that are not amenable to sampling or that can be sampled but in doing so can change the waste management requirements of the waste. A visual inspection provides sufficient information to confirm the identity of the waste on the accompanying shipping paper and pre-approval information. The data quality objective is met without sampling or analysis.
- Asbestos-containing waste.
  - Facility: MDI/WDI
  - Exception: Sampling and visual inspection not required. Visual inspection will still occur, but it is not necessary for the sampler to undo packaging, if applicable, inside the shipping container to perform the visual inspection. For example, if the profile states that waste is double bagged, the sampler is only required to visually verify that there are bags inside the shipping container but is not required to open the bags to inspect contents or to collect samples of the asbestos waste.
  - Reason for exception: The reason for the sampling exception is worker safety; it is best practice is to minimize asbestos fiber touch points. Asbestos regulatory requirements (40 CFR 61 Subpart M) include leak tight wrapping of waste which precludes visual and sampling of waste. Packaging supports the landfills' ability to manage asbestos with no visible emissions. The reason for the visual inspection exception is safety concerns with accessing and opening wrapping (e.g., double bagged asbestos inside a bulk shipping container). If the waste can be viewed without opening wrapping, then a visual inspection should occur.
- Waste with an acute health hazard such as potentially infectious waste/ medical waste (MI, Part 138 of Act 368).
  - Facility: WDI
  - Exception: Sampling and visual inspection not required.
  - Reason for exception: Accidental exposure could be detrimental to employee health. Additionally, medical waste must be contained for disposal in individual leakproof, rigid, puncture-resistant containers that are secured to preclude loss of the contents.
- Waste in sealed, special packaging not readily or safely opened by facility employees and the purpose of the packaging is to prevent contact of the waste with leachate (e.g., PFAS) prevent emission of highly toxic substances (e.g., dioxins) or some other protective function. If there is no protective purpose for

the packaging, then the presence of such packaging does not exempt the waste from the inspection and sampling requirement.
    - Facility: WDI
    - Exception: Sampling and visual inspection are not required only if the packaging is not readily or safely opened or opening the packaging would irreversibly remove the protection the packaging is intended to provide.
    - Reason for exception: To prevent injury to facility employees from attempting to open packaging not readily opened and/or to ensure the integrity of packaging intended to achieve a protective function such as preventing leaching, containing odors, and preventing emission of highly toxic substances.
- Small containers of waste inside a larger container of waste. Note that there are times when there is not enough waste in a small container to collect a sample and there are times when the collection of a sample would be a large portion (or all) of the waste quantity. Example: lab pack chemicals in jars, bottles, cans, etc.
    - Facility: MDI/WDI
    - Exception: Sampling is not required.
    - Reason for exception: Material cannot reasonably be sampled due to the small quantities of waste.
- Other waste streams approved by the Director on a case-by-case basis.

For some waste streams, it may be necessary to conduct the waste screening before arrival at MDWTP/WDI, such as at the site of generation. 40 CFR 264.13(a)(4) and (c) require an owner and operator of an off-site facility (i.e., the TSDF) to establish procedures utilized to inspect, and if necessary, analyze each hazardous waste movement received at the facility. If these evaluations must be completed at a location other than MDWTP/WDI, approval must be obtained from the Director. The request for approval must include the following:

- a description of why the exception is requested.
- a detailed description of what screening procedures as well as frequency of screening will be performed off-site.
- who will perform the off-site activities; training that will occur to ensure conformance with the WAP.
- certification from the generator waste conforms to the approval information.
- certification from the transporter the waste was not tampered with during transportation.
- documentation that must be transmitted to the applicable receiving facility (MDWTP or WDI) prior to the waste being treated or disposed (i.e., with the waste shipment or before), including the results of the required pre-acceptance screening and discrepancies identified by the screening.
- records that will be maintained on-site.

An inspection of the shipping document (generator must include the approval number and a certification stating the waste is fully and accurately described on the shipping document) and land disposal restriction certification (if necessary) must however still be executed. The facility may request the Director approve an exception to sampling and analysis if it can demonstrate that it has obtained a detailed chemical and physical analysis of the waste and the waste will not be altered. In these instances, the frequency in which off-site screening is performed is reduced. Such a demonstration should be included in the request to the Director.

A2.B.2 PRE-ACCEPTANCE DISCREPANCY

Inconsistencies between the waste received and the waste profile information compared with pre-approval information, or inaccurate or incomplete shipping documents will result in a discrepancy which will be recorded on the receiving document when the receipt is created. MDWTP/WDI will make every effort to resolve the discrepancy and accept the waste. A representative of the generator or customer will be notified to resolve the discrepancy if the facility receives a shipment of waste that is inconsistent with the waste profile information and/or if the waste shipment has incorrect, incomplete, or missing documentation, including but not limited to the LDR notification or shipping paper. Discrepancies in paperwork or sample analysis may result in changes that require additional handling procedures or modifications to the paperwork or waste characterization. Confirmatory analysis utilizing Level 3 screening will be performed on the waste to verify information provided by the generator or their representative if the generator cannot support their assessment of the waste through knowledge or analysis. Information obtained from the generator, or their representative will be utilized to evaluate the waste and determine the Level 3 parameters that will be analyzed. Samples tested will either be samples obtained for pre-acceptance or additional samples will be collected as described by A2.B.1(b). Alternatively, the waste will be rejected.

During the discrepancy process the waste can remain in possession of the transporter or containers are relinquished by the transporter, received, and placed in a permitted container storage areas (WDI container or bulk storage area, or MDWTP NCSA, ECSA, SECSA, ETB, WTB) while awaiting a resolution. Information that indicates a change in characterization and/or LDR requirements of the waste stream will not be treated or disposed of until the generator amends the characterization. If a resolution cannot be obtained; the assessment of the waste determines it cannot be treated at MDWTP or WDI or disposed of at WDI; or if MDWTP/WDI disagrees with the generator characterization of the waste, the waste will be rejected back to the generator, or an alternate facility and the hazardous waste manifest will document the rejection in accordance with 40 CFR 264.72. The transporter can retain custody while arrangements are made to reject the material, or the designated facility will provide for secure, temporary custody of the waste. Waste that remains in MDWTP/WDI custody will be placed in a permitted storage area. The physical, ignitable, and reactive properties of the waste are evaluated to determine whether the material can be safely stored in the container storage areas and/or placed in transportation. Re-packaging may be necessary to meet all pre-transportation requirements to place the container back in transportation.

Resolutions will be noted on the receiving documents or by an alteration of the waste approval information resulting in correction in the receipt documentation. If a significant manifest discrepancy (defined by 40 CFR 264.72(b)) is discovered that cannot be resolved with the generator or transporter within 15 days of receipt, facility personnel will submit to the Director, a letter describing the discrepancy and all attempts to reconcile the discrepancy. The letter will include a copy of the discrepant manifest or shipping document.

A2.C WASTE ACCEPTANCE

The waste acceptance process outlines procedures that will be utilized to safely store and treat waste that has gone through the pre-acceptance process and meets the requirements specified by the generator in the pre-approval process.

A2.C.1 CONTAINERIZED WASTE

[R 299.9504(1)(c) and 40 CFR §264.172]

Bulk containerized waste accepted by the pre-screening procedures is either directed to the treatment plant for storage and treatment or to the landfill for storage or disposal. Non-bulk containers will be placed container storage areas until it may be treated or disposed of.

A2.C.1(a) Wastes Container Compatibility

All waste received by the facility is expected to arrive in a DOT compliant container. If compatibility issues with the container are identified, the contents of the container will be transferred to a more appropriate container, or the container will be placed in an overpack drum.

Stored containerized waste at MDWTP is segregated according to Table C.1. Based on the hazard assessment of the waste, the containerized waste is organized into segregated storage areas within the NCSA, ECSA, SECSA and the East and West Loading/Unloading Bays. MDWTP takes precautions to prevent the accidental ignition or reaction of ignitable or reactive waste being stored or processed per the requirements of 40 CFR §264.17. This waste must be separated and protected from sources of ignition or reaction including but not limited to open flames, smoking, cutting, and welding hot surfaces, frictional heat, sparks, spontaneous ignition, and radiant heat. Ignitable and reactive waste are not approved for disposal at WDI.

TABLE C.1 SEGREGATION AND SEPARATION CHART OF HAZARDOUS MATERIALS

CLASS OR DIVISION		2.1	2.2	3	4.1	4.3	5.1	5.2	6.1*	8A	8B	9
Non-Flammable Gases	**2.1**	C	C	C	C	C	C	C	C	C	C	C
Non-Toxic, Non-Flammable Gases	**2.2**	C	C	C	C	C	C	C	C	C	C	C
Flammable Liquids	**3**	C	C	C	C	C	X	C	C	C	C	C
Flammable Solids	**4.1**	C	C	C	C	C	C	C	C	X	X	C
Dangerous when wet materials	**4.3**	C	C	C	C	C	C	C	C	X	X	C
Oxidizers	**5.1**	C	C	X	C	C	C	C	C	X	X	C
Organic Peroxides	**5.2**	C	C	C	C	C	C	C	C	X	X	C
Poisonous Liquids (NOT PG I, Zone A materials)	**6.1***	C	C	C	C	C	C	C	C	C	C	C
Corrosive Liquids-Acids	**8A**	C	C	C	X	X	X	X	C	C	X	C
Corrosive Liquids-Bases	**8B**	C	C	C	X	X	X	X	C	X	C	C
Other Regulated Materials	**9**	C	C	C	C	C	C	C	C	C	C	C

Notes:

✓ Acids have a pH ≤ 2.0 and bases have a pH ≥ 12.5.

* = Other than Poisonous Liquids PG I, Zone A will not receive wastes with Class 1, or Division 2.3, 4.2, 6.1 PG I, Zone A Hazardous Material classification.

C = Compatible

X = non-Compatible

A2.C.1(b) Containers without Secondary Containment System

Containers holding waste without free liquids are exempt from secondary containment requirements. The presence of free liquids can be determined through screening identified in A.2.B.

F020, F021, F022, F023, F026, and F027 waste streams with or without free liquids will only be stored in concrete container storage areas which provide sufficient secondary containment.

Hazardous waste spilled in secondary containment would be managed as the incoming waste was approved.

A2.C.2 WASTE TANK SYSTEMS (MDWTP)

[R 299.9504(1)(c) and 40 CFR §§264.190(a), 264.191(b)(2), 264.192(a)(2)]

A2.C.2(a) Tank Assignment

During the pre-approval process treatment requirements are assessed based on the concentrations of the constituents of concern and applicable waste codes and UHCs that make up the waste. The generator LDR notification (which has been verified for consistency with the pre-approval information during the pre-acceptance process) is used as verification of the contaminants present requiring treatment. Individual waste streams are consolidated into treatment tanks based on similar waste codes and treatment requirements.

A2.C.2(b) Waste Compatibility with and within Tanks

Table C.2 details compatibility screening parameters, test methods, the frequency of waste screening, and when something is identified as an incompatibility. The screening described is performed prior to transferring waste into treatment or storage tanks.

Level 1 Paperwork Compatibility

Incompatibilities are identified during the waste pre-approval process and assigned handling methods to prevent an adverse reaction. Upon receipt of the waste, the chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.

Level 1 Compatibility Assessment

Table C.3 identifies compatibility groupings and their potential incompatibilities. Compatibility grouping is not combined with incompatible waste or reagents that may cause adverse reactions.

TABLE C.3 COMPATIBILITY GROUPING EVALUATION

Compatibility Grouping	May Cause Adverse Reaction	Notes
Acids	Sulfide; cyanide; oxidizers	Can be neutralized and then handled with incompatibles
Caustic	Strong acids	Monitor direct contact with acids carefully.
Cyanide containing waste	Non-neutralized acids	
Microencapsulation Chemox	None	
Microencapsulation Solvent	Acids	Process with solvent only
Microencapsulation Standard	None	
Neutral Metals	None	
Chemox- Organic	Non-neutralized acids	
Oxidizers • *Hypochlorite* • *Nitrates/Nitrites* • *Permanganates* • *Persulfates*	Acids; combustible material	*Supervisors may evaluate waste type for chemical oxidization properties.*

• *Peroxides*		Single oxidizer type will most commonly be processed by itself followed by deactivation confirmation and then addition of other waste types.

Level 2 Reactivity Screening

Reactivity screening of samples collected during the pre-screening process exposes waste to reagents that may be utilized during treatment as well as extreme conditions it may be subjected to, in order to evaluate whether additional handling considerations are needed. Extreme conditions are intended to force reactions rapidly to obtain conservative reactivity information. Reactivity information obtained during the fingerprinting process provides an indication of how the waste may behave during compatibility testing and confirms compatibility determinations made during the waste approval process. The information obtained determines the waste incompatibility with reagents and other waste properties.

Level 2 Compatibility Assessment

A reaction is considered adverse if it results in excessive gas evolution, flammable vapor and/or excessive heat, or an adverse consistency in the mock tank as follows:

- Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame in the mock tank or a flare up of the match.
- Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs.
- Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.

Level 3 Mock Tank Compatibility

Mock tank compatibility testing evaluates the potential for reactions to occur inside when waste and reagents are aggregated, by combining samples of the waste and reagents that are expected to be in the tank. In the absence of a sample (see A2.B.1(d)), compatibility is determined by performing Level 1 compatibility screening.

Tanks are scheduled based on approval information, waste codes, treatment requirements, special handling comments and compatibility determined during pre-approval. Conservative reactivity information obtained during Level 2 screening is utilized to develop and confirm the sequence in which waste and reagents are added is appropriate before assigning waste to a treatment tank.

Whenever possible, the previous mock tank performed for the tank is emptied and scraped. This will simulate small amounts of residue left from the prior tank at the treatment plant. If the mock tank must be replaced, a new 2L disposable container with the top 1/2 cut off is utilized (this improves visibility to help observe waste reactions and perform flammable gas testing). A small amount of residue from the tank's previous batch testing sample or mock tank (i.e., If a mock tank is being created for Tank A, Tank A's tank clearance sample or mock tank) is added. The new batch number is labeled on the mock tank.

In addition to residue, a small amount of wood, paper, and plastic is added to each mock tank (matchsticks, shredded fingerprint cups, etc.). This is to simulate any pallets, packing materials, or liners expected to be in the tank, but not included in the waste samples.

Waste samples utilized for mock tank compatibility are samples collected during the waste acceptance process as described in A2.B.1(b). If a waste stream is being stored in one of the approved storage areas, then the sample will be stored in the lab until a tank is available. If the fingerprint sample is no longer available, then a new sample is taken for compatibility testing. Alternatively, samples of the waste tank contents can be collected and utilized for mock tank compatibility. Prior to placement of reagents into the tank, treatment plant personnel confirm that reagent compatibility was completed, and no adverse reaction occurred allowing them to proceed with addition of reagents into the tanks.

Expected reagents and amounts of usage are communicated to the lab and plant personnel each day based on the treatment needs of each tank. Waste and reagents are added to the mock tank in the expected order and approximate volume ratios. If the tank is open and bulk waste will be offloaded into the tank in the order in which shipments arrive, the chemist will add waste to the mock tank after performing the fingerprint, but before assigning the waste to a tank. If the tank is not open, or a specific order must be followed (e.g., chrome treat reduction first) the mock tank will not be performed until the waste is ready to be sent to the plant.

When performing drum compatibility testing, drums are compatibilized by the compatibility grouping. For example, acid liquid drums will be compatibilized first, followed by a neutralization procedure with kiln dust, followed by metal contaminated wastes.

Specific ratios to be used are as follows:

- 1 Drum- ¼ tsp
- 2 drum ½ tsp
- 1 tote/ cyb (5 drums) - ½ tbsp.
- 2 totes/cyb (10 drums) 1tbsp
- 1 bin of Ferrous- 1tbsp
- 100 gallons- ½ tsp
- 10 tons of dust- 20cc
- 1,000 gallons bleach- 15mL
- 1 20 yard roll off- 40cc
- 1 end dump – 60cc
- 5,000-gallon tanker- 60mL

NOTE: Ratios between bulk and non-bulk wastes are intentionally skewed such that non-bulk waste will be slightly over-represented by the mock batch (about 4x). This is done conservatively to make reactions more noticeable to the mock tank observer.

Waste is assigned to a tank if no adverse reaction is observed. If a batch is to be retreated, it is expected that the reagents used to retreat are compatibilized with the mock tank. Alternatively, the reagents may be compatibilized with an actual sample of the well-mixed tank.

Level 3 Reactivity Assessment

Waste treatment requires the creation of reactions between waste streams and treatment reagents. Reactions are therefore anticipated, but the severity and type of reaction determines if a reaction is an adverse reaction.

Compatibility is determined based on an absence of an adverse reaction. A reaction is considered adverse if it results in excessive gas evolution, flammable vapor and/or excessive heat, or an adverse consistency in the mock tank as follows:

- Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame in the mock tank or a flare up of the match.
- Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs.
- Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.

The treatment process requires reactions to occur. The type of reaction, rate of the reaction and the severity of the reaction are evaluated during the compatibility testing. Observations made during the evaluation may alter the inclusion or order in which waste and reagents are placed in the tanks. The sampling and analysis of a representative sample does not eliminate the potential for an adverse reaction. 40 CFR 260.10 defines representative sample as, *"a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole."* It must be acknowledged if only a small portion of the waste exhibits undesirable properties analysis of a representative sample may not exhibit such properties.

After Compatibility Testing

Observations made during the evaluation may alter the inclusion or order in which waste and reagents are placed in the tanks. If an adverse reaction observed in the mock tank cannot be avoided through an appropriate change to what wastes and reagents are combined and the order they are combined, the waste in question may be considered for treatment in a tank that does not yield an adverse reaction or rejected back to the generator or alternate facility.

If material shows no signs of being incompatible, waste will be assigned to a tank and tank compatibility is documented on the lab data sheets. Reagent addition and volumes added to treatment tanks are documented in the treatment tank record.

Table C.2 Compatibility Screening

Compatibility: Evaluate potential for an adverse reaction

Alternative methods may be required on a case by case basis in order to properly analyze the waste

**Frequencies will be completed as specified unless exempted as specified by A2.B.1(d)*

Parameter	Frequency*	Rationale	Method	Incompatibility Determination
Level 1: Necessary for all incoming waste streams				
Paperwork Compatibility Review	Each incoming waste stream	Review of expected incompatibles identified based on chemical and physical properties of the waste.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	The properties of the waste identify handling methods that have the potential to cause an adverse reaction based on the chemical and physical properties of the waste. See Table C.3 Compatibility Grouping Evaluation
Paperwork Review: Reactivity-Stabilization or solidification agent	Each incoming waste stream	Verify potential for adverse reaction. Reactions are assessed to demonstrate; whether additional handling controls are required.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Chemical and physical properties of similar waste properties has demonstrated an adverse reaction. See Table C.3 Compatibility Grouping Evaluation
Paperwork Review: Reactivity-Bleach	Each incoming waste stream	Verify potential for adverse reaction. Reactions are assessed to demonstrate; whether additional handling controls are required.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Chemical and physical properties of similar waste properties has demonstrated an adverse reaction. See Table C.3 Compatibility Grouping Evaluation
Paperwork Review: Reactivity-Caustic	Each incoming waste stream	Verify potential for adverse reaction. Reactions are assessed to demonstrate; whether additional handling controls are required.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Chemical and physical properties of similar waste properties has demonstrated an adverse reaction. See Table C.3 Compatibility Grouping Evaluation
Paperwork Review: Reactivity-Acid	Each incoming waste stream	Verify potential for adverse reaction. Reactions are assessed to demonstrate; whether additional handling controls are required.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Chemical and physical properties of similar waste properties has demonstrated an adverse reaction. See Table C.3 Compatibility Grouping Evaluation
Paperwork Review: Oxidizer Screen	Each incoming waste stream	Verify potential for adverse reaction. Reactions are assessed to demonstrate; whether additional handling controls are required.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Required information identified in A2.A.2 identifies the presence of oxidizers
Paperwork Review: Cyanide Screening	Each incoming waste stream	Verify potential for adverse reaction. Reactions are assessed to demonstrate; whether additional handling controls are required.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Required information identified in A2.A.2 identifies the presence of cyanide
Paperwork Review: H2S Screening	Each incoming waste stream	Verify potential for adverse reaction. Reactions are assessed to demonstrate; whether additional handling controls are required.	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Required information identified in A2.A.2 identifies the presence of sulfide
Paperwork Review: Mock Tank Compatibility	Each incoming waste stream	Verify potential for adverse reaction when waste and reagents are aggregated	Chemical and physical properties of the waste obtained during the pre-approval process, combined with knowledge of the treatment process and known behavior are utilized to make compatibility determinations and evaluate the potential for an adverse reaction.	Chemical and physical properties of similar waste has demonstrated an adverse reaction with waste intended to be added. See Table C.3 Compatibility Grouping Evaluation
Level 2: Necessary to confirm management of waste activity will not create an adverse reaction when combined with these properties except as exempted by A2.B.1(d).				
Reactivity-Stabilization or solidification agent	Each incoming waste stream sampled for analysis.	Qualitative test to determine compatibility with stabilization reagents.	Internal procedure. See Appendix E	•Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame or a flare up of the match. •Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs. •Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.

Table C.2 Compatibility Screening

Compatibility: Evaluate potential for an adverse reaction

Alternative methods may be required on a case by case basis in order to properly analyze the waste

**Frequencies will be completed as specified unless exempted as specified by A2.B.1(d)*

Parameter	Frequency*	Rationale	Method	Incompatibility Determination
Reactivity-Water	Each incoming waste stream sampled for analysis.	Qualitative test to determine compatibility with water.	Internal procedure. See Appendix E	•Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame or a flare up of the match. •Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs. •Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.
Reactivity-Bleach	Each incoming waste stream sampled for analysis.	Qualitative test to determine compatibility with oxidizing reagents.	Internal procedure. See Appendix E	•Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame or a flare up of the match. •Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs. •Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.
Reactivity-Caustic	Each incoming waste stream sampled for analysis that will be exposed to caustic conditions	Qualitative test to determine compatibility with caustic materials	Internal procedure. See Appendix E	•Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame or a flare up of the match. •Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs. •Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.
Reactivity-Acid	Each sampled incoming waste stream that will be exposed to acidic conditions	Qualitative test to determine compatibility with acidic materials	Internal procedure. See Appendix E	•Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame or a flare up of the match. •Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs. •Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.
Oxidizer Screen	First receipt of waste stream not identified as an oxidizer	Qualitative test used to identify oxidizing properties that require special handling.	ASTM D4981-08 Standard Test Method for Screening of Oxidizers in Waste	Positive test when waste not identified as containing an oxidizer
Cyanide Screening	First receipt of waste and each waste stream that could be exposed to acidic conditions.	Qualitative test to monitor the potential presence of cyanide	Internal procedure. See Appendix E	Slight purple coloration when not expected to contain cyanides or known coloring interferences such as nitrates or high organics
H2S Screening	First receipt of waste and each waste stream that could be exposed to acidic conditions.	Qualitative test to monitor the potential presence of hydrogen sulfide	Internal procedure. See Appendix E	Positive test strip when waste not expected to contain sulfides

Table C.2 Compatibility Screening

Compatibility: Evaluate potential for an adverse reaction

Alternative methods may be required on a case by case basis in order to properly analyze the waste

**Frequencies will be completed as specified unless exempted as specified by A2.B.1(d)*

Parameter	Frequency*	Rationale	Method	Incompatibility Determination
Level 3: Necessary to confirm management of waste activity will not create an adverse reaction when combined with these properties except as exempted by A2.B.1(d).				
Mock Tank Compatibility	Each incoming waste stream that will be placed into a waste treatment/storage tank except as exempted by A2.B.1(d)	Verify potential for adverse reaction when waste and reagents are aggregated	**See A2.C.2(b) Level 3 Mock Tank Compatibility for detailed description**	•Excessive Gas Evolution - Materials that upon mixing, appear to liberate significant amounts of vapors, fumes, or mists. This is determined through visual observation. If a reaction is observed a match test is completed to determine if the gas generated is ignitable. Ignitable gas is demonstrated through popping noises as the match approaches, flame or a flare up of the match. •Excessive Heat Generation - Materials that, upon mixing, generate excessive amounts of heat. This is determined by the touch of the mock tank and visually if steam generation occurs. •Adverse Consistency- Materials that, upon mixing, result in the formation of a large amount of sludge, or solid or gel that causes a removal or subsequent handling problem. This is determined through visual observation of the consistency.

A2.C.2(c) Tanks without Secondary Containment System

All liquid storage tanks at the facility are in secondary containment.

A2.C.3 WASTE BULKING AND/OR CONSOLIDATION COMPATIBILITY (MDWTP)

Different like-wastes that are combined in a container, (excluding empty containers, debris or closed and intact containers of non-hazardous waste) are subjected to the same compatibility (Table C.2) evaluations as applied to wastes that are mixed in the treatment tanks. The individual waste streams comprising the mixture are similar in composition and are amenable to the same type of treatment or are treated by the same type of treatment on which the treatment standard for that prohibited waste is based. MDWTP does not selectively bulk RCRA hazardous waste to achieve a reduction in concentrations rendering the waste non-hazardous, less hazardous, or safer to transport, store or dispose of. Bulking/consolidation may result in an incidental reduction of the hazards associated with the waste, but it is not intentional. The waste will continue to carry all applicable waste codes and UHCs and be shipped to an off-site facility to be properly managed.

Pending compatibility confirmation, liquid and solid hazardous and non-hazardous wastes may be bulked or consolidated into larger or fewer containers in any MDWTP permitted storage area. Bulking of liquids in a container storage area will occur in areas permitted to store liquids, (i.e., SECSA liquid containment, NCSA, ECSA, ETB, WTB). If a roll-off box or other bulk reusable shipping container will be used for bulking or consolidation of listed hazardous waste to an off-site location, a liner will be utilized to prevent contamination when switching from listed wastes to characteristic wastes.

The following waste streams will not be bulked or consolidated: reactive, incompatibles and wastes that alone or when mixed can cause excess odor at the facility property line.

A2.C.4 TRANSSHIPPED WASTE (MDWTP)

Waste that is transshipped is temporarily stored at the facility and sent to an authorized TSDF that can manage the material for treatment and/or disposal. Any waste to be transshipped off-site to other permitted TSDF's will be managed in accordance with the WAP. While awaiting transportation to the off-site permitted TSDF, containers will be stored in permitted tanks or container storage areas.

A2.D POST TREATMENT AND LAND DISPOSAL RESTRICTION

This section outlines post-treatment and land disposal restriction requirements.

A2.D.1 TREATMENT FOR PURPOSE OF LAND DISPOSAL

[R 299.9627, R 299.9208, and R 299.9212 and 40 CFR §261.3(d)(1), 264.13(a)(1), 268.7, 268.9, 268.37, 268.40, 268.41, 268.42, and 268.43 and Part 268, Appendix I and Appendix IX]

As stated in the 1997 preamble, the ultimate objective of the LDR program is to ensure all the hazardous waste to be land disposed is treated in a way that minimizes the threats that land disposal could pose. MDWTP treats wastes that require treatment to comply with the LDRs using well designed treatment methods such as stabilization, immobilization, neutralization, deactivation, oxidation, and/or reduction using such treatment reagents as inorganic binders (e.g., cement, fly ash, kiln dust), organic binders (e.g., activated carbon), ferrous sulfate, ferric chloride, sodium sulfide, acids, bases, oxidizers and/or reducing agents. WDI has proposed to treat hazardous debris by immobilization. No other hazardous waste treatment is proposed to be treated at WDI. Treatment reagents may be commercially available materials, other untreated waste (e.g., an acid waste used to treat a base waste and vice versa), and/or treated waste (e.g., a stabilized waste meeting LDRs used to absorb free liquids in a non-hazardous waste only requiring solidification to pass the paint filter test). Treatment of the constituents of concern associated with the waste codes characterized and UHCs (when required) reasonably anticipated to be present at the point of generation as identified during the pre-approval process occurs in accordance with Attachment C4 Treatment. UHCs reasonably anticipated to be present at the point of generation above LDRs that were not identified by the generator but are independently identified by MDWTP/WDI will be managed as a discrepancy as described in A2.B.2 and will be treated to applicable LDR standards.

If the generator notification (required by 268.7(a)(2)) states, "*The hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination,*" MDWTP will sample as specified in Table B.1 and test the waste utilizing the methods identified in Table D.3. Table D.1 details the recommended treatment that may occur for the characteristic category.

TABLE D.1 CHARACTERISTIC TREATMENT IDENTIFICATION

CHARACTERISTIC	RECOMMENDED TREATMENT
Ignitable waste (non-oxidizer)	Deactivation 40CFR Part 268 Appendix VI • Chemical Reduction • Chemical Oxidation • Stabilization
Oxidizer	Deactivation 40CFR Part 268 Appendix VI • Chemical Reduction
Corrosive	Deactivation 40CFR Part 268 Appendix VI • Neutralization • Chemical Oxidation • Chemical Reduction
Reactive	Deactivation 40CFR Part 268 Appendix VI or an equivalent • Chemical Reduction • Chemical Oxidation • Stabilization
Metal bearing waste	Stabilization, Precipitation, Chemical Reduction, Chemical Oxidation
Cyanide bearing waste	Chemical Oxidation
SVOC and VOC bearing waste	Chemical Oxidation
Pesticide/Herbicide Bearing Waste	Chemical Oxidation

Hazardous Debris	Immobilization

Constituents that do not qualify as UHCs in the original waste but are concentrated above UTS levels during treatment are not required to meet UTS levels in the treatment residual. If after treatment a hazardous waste displays a characteristic for the first time, the characteristic waste code will be added to facility records. Waste will be retreated, as appropriate, to meet the applicable characteristic treatment standards.

A2.D.2 LAND DISPOSAL RESTRICTIONS

[R 299.9627, R 299.9208, and R 299.9212 and 40 CFR §261.3(d)(1), 264.13(a)(1), 268.7, 268.9, 268.37, 268.40, 268.41, 268.42, and 268.43 and Part 268, Appendix I and Appendix IX]

In accordance with 40 CFR 268.40, prohibited waste identified in the table "Treatment Standards for Hazardous Wastes" will be land disposed at WDI or another landfill that is permitted to dispose of the material, only if it meets the requirements found in the table. Hazardous constituents in waste or in treatment residual will be disposed of only if the following applicable conditions are met:

- All hazardous constituents in the waste or in the treatment residue must be **at or below** the values found in the table for that waste ("total waste standards"); or
- The hazardous constituents in the extract (Method 1311, the Toxicity Characteristic Leaching Procedure (TCLP) is utilized except for D004 and D008 which may also utilize 1310B) of the waste or in the extract of the treatment residue must **be at or below** the values found in the table ("waste extract standards"); or
- The waste must be treated using the technology specified in the table ("technology standard"), which are described in detail in § 268.42, Table 1 Technology Codes and Description of Technology-Based Standards.

Applicable alternative treatment standards specified in §40 CFR 268.44-46 and 268.49 may be applied to waste or treatment residual. The presence of a listed code or use of a treatment method or standard requiring Subtitle C disposal will result in disposal at WDI or an alternative Subtitle C landfill. Characteristic wastes that are decharacterized and meet other applicable treatment standards may be disposed of at a non-hazardous permitted Subtitle D landfill, WDI or an alternative Subtitle C landfill.

A2.D.2(a) Characteristic Wastes

Characteristic wastes acceptable for storage, treatment and disposal are outlined in Appendix A. Wastes that carry more than one characteristic will be identified with a number for each corresponding characteristic and treated for each of the constituents of concern. Waste codes will be treated to treatment standards identified in 40 CFR 268.40. In addition to the waste codes, UHCs reasonably anticipated to be present at the point of generation will be treated to universal treatment standards (UTS) found in 40 CFR 268.48. Upon treatment and post-treatment verification as specified in A2.D.3 waste will be landfilled.

MDWTP tanks will be decontaminated if changed from the storage/treatment of listed wastes to characteristic or non-hazardous wastes that are intended to be disposed of in a Subtitle D landfill. Tanks will also be decontaminated when a treatment batch is incompatible with the prior treatment batch. Incoming waste compatibility is evaluated utilizing compatibility screening procedures identified in A2.C.2(b) and comparing it to the properties of the treatment residue from the previous tank. Decontamination consists of water washing and/or dry decontaminating the tank. The rinse waters and/or dry decontamination material is directed to a listed batch tank (containing a compatible waste). The decontamination step is noted on the treatment batch record for the receiving the rinse waters and/or dry decontamination material.

A2.D.2(b) Listed Wastes
[R 299.9627, R 299.9213, and R 299.9214 and 40 CFR, Sections 264.13(a)(1), 268.7, 268.30, 268.31, 268.33, 268.34, 268.35, 268.36, 268.39, 268.40, 268.41, 268.42, and 268.43]

Generator process knowledge strongly determines the applicability of the listed waste code. Listed waste codes acceptable for storage, treatment and disposal are outlined in Appendix A. Unless delisting (utilizing procedures detailed in 40 CFR 260.22) provisions are applicable to the listed waste code, once applicable treatment standards are met listed waste will be disposed of in a Subtitle C landfill. This includes waste streams in which generators have obtained and executed the requirements of their delisting permits which would allow MDWTP to accept the material and transship to a Subtitle D landfill (or dispose of it at WDI), and solid waste that has been exempted by 40 CFR 261.3(c) and (g) from being a hazardous waste after treatment occurs (i.e., K062 is not applicable when the process waste is treated with lime).

Where a waste is both listed under 40 CFR 261, subpart D and exhibits a characteristic under 40 CFR 261, subpart C the treatment standard for the waste code listed in 40 CFR part 261, subpart C will be applicable unless the treatment for the listed waste does not include a treatment standard for the constituent that causes the waste to exhibit the characteristic.

Treatment standards for F001-F005 non-wastewater constituents carbon disulfide, cyclohexanone, and/or methanol apply to wastes which contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311, the Toxicity Characteristic Leaching Procedure found in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA Publication SW-846, as incorporated by reference in § 260.11. If the waste contains any of these three constituents along with any of the other 25 constituents found in F001-F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, and/or methanol are not required.

Dioxin waste (F020-F023, F026-F028, K043 and K099) are acceptable for disposal at WDI and may be present in waste treated at MDWTP, as so long as the dioxin and furan constituents associated with the waste codes do not exceed the concentration-based standards prior to treatment. Waste accepted for treatment will receive treatment for other constituents subject to LDRs, but MDWTP does not perform treatment or analysis of dioxins.

A2.D.2(c) Laboratory Packs
[R 299.9627 and 40 CFR §268.7, 268.42(c) and Part 268, Appendix IV and Appendix V]

☒ The laboratory packs generated at the facility are not land disposed without meeting applicable Subpart D treatment standards

Laboratory Packs accepted for disposal in the WDI landfill must also meet the requirements of 40 CFR 264.316. Lab pack waste generated with an LDR requesting lab pack alternatives to Subpart D treatment standards, will be transshipped offsite for incineration in accordance with 268.42(c). Lab packs received with the appropriate LDR designation indicating the compliance status of Subpart D treatment standards may be received processed to applicable 268.40 treatment standards.

A2.D.2(d) Radioactive Mixed Waste
[R 299.9627 and 40 CFR §§268.7, 268.35(c), 268.35(d), 268.36, and 268.42(d)]

☒ The facility does not generate or accept radioactive mixed waste for treatment or disposal.

See Appendix B Radiological Waste Acceptance Criteria for acceptable waste.

A2.D.2(e) Contaminated Debris
[R 299.9627 and 40 CFR §§268.2(g), 268.7, 268.9, 268.36, 268.45, and 270.13(n)]

Debris means solid material exceeding a 60 mm (2.36 inches) particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D, Part 268, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by § 268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

Hazardous debris is debris that contains a hazardous waste listed in subpart D of part 261 of this chapter, or that exhibits a characteristic of hazardous waste identified in subpart C of part 261 of this chapter. Any deliberate mixing of prohibited hazardous waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in § 268.3.

Hazardous debris that exhibits the characteristics of ignitability, corrosivity, or reactivity can be treated using one of the extraction, destruction, or immobilization technologies identified in Table 1 of 40 CFR §268.45. MDWTP and WDI treat hazardous debris in accordance with immobilization technologies specified in 40 CFR 268.45. There are no contaminant restrictions for the immobilization technologies nor are there limitations on the type of debris that may be treated by the immobilization technologies. If immobilization technologies are used, they must be performed as defined in 40 CFR 268.45.

If immobilization is used in a treatment train, it will be the last treatment technology applied. Hazardous debris will be treated for each contaminant subject to treatment as specified by 40 CFR 268.45(b) for toxicity characteristic debris and debris contaminated with listed wastes.

A2.D.2(f) Soil
[R 299.9627 and 40 CFR §§268.2(g), 268.7, 268.9, 268.36, 268.49 and 270.13(n)]

Soil includes any unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (*i.e.*, from waste to contaminated soil) is not allowed under the dilution prohibition in § 268.3.

Constituents subject to treatment are any constituents listed in § 268.48 Table UTS that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the UTS. PCBs are not constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals. In situations where contaminated soil contains both analyzable and non-analyzable organic constituents, treating the analyzable constituents to meet the soil treatment standards is also reasonably expected to provide adequate treatment of the non-analyzable constituents. In situations where contaminated soil contains only non-analyzable constituent's treatment using the specified method for the appropriate waste code.

Prior to land disposal hazardous constituents subject to treatment may be treated to the non-wastewater standard for the hazardous waste contaminating the soil, or in accordance with alternative treatment standards set forth in 40 CFR 268.49 which allow hazardous constituents to be reduced by at least 90-percent through treatment or hazardous constituents must not exceed 10 x UTS at 40 CFR 268.48. Soils that exhibit the characteristic of ignitability, corrosivity, or reactivity must be treated to eliminate these characteristics.

The alternative soil treatment standards provide different data collection options for remediation projects:

- If the 90% treatment standard is selected and analytical testing is used to confirm compliance, two sets of samples are required—one at the point of generation and one after treatment.
- If the 90% treatment standard is selected and process data are used to show that the process always operates at greater than 90% efficiency, no routine sample analyses would be required. Instead, compliance could be confirmed by monitoring process variables, controls, and operating conditions.
- If the 10-times-UTS option is chosen, only one set of samples is required—after waste treatment

MDWTP collects a single grab sample from an aggregated waste treatment tank (utilizing the same tank sampling procedures identified in A2.D.3) to obtain the initial concentration of the waste. Sampling and analysis procedures described in A2.D.3 are utilized to obtain the post-treatment concentrations and demonstrate the waste treatment process reduced concentrations by 90%.

A2.D.2(g) Variance from a treatment standard

Treatability variances may be granted for wastes that have LDR standards that are expressed as concentrations of hazardous constituents in the waste or waste extract (i.e., a numerical standard). The requirements for treatability variance petitions are contained in 40 CFR 268.44. In order to be granted, treatability petitions must demonstrate that the waste of concern cannot be treated to the specified levels because its physical or chemical properties differ significantly from the waste used to establish the LDR standard. Treatability variances may be generic or site-specific. A generic variance can result in the establishment of a new treatability group and a corresponding LDR treatment standard that applies to all wastes that meet the criteria of the new waste treatability group. A site-specific variance may be granted administratively and may be considered a non-rulemaking that applies only to a specific waste stream from a specific facility.

A generator or treater can petition for variance from a treatment standard in accordance with 40 CFR 268.44. The following variances have been approved:

MDWTP

- May 23, 2016, Guardian Industries Corporation (MID 048 784 896)
  - Air Pollution Control Dust characteristically hazardous for selenium (D010)
    - The approval only applies to material generated by the glass furnace air emissions control system. The dust contains fine particle matter resulting from the combustion of natural gas and particulate matter generated by the dry scrubber used to control SO_x emissions.
  - LDR Variance Conditions
    - Treated waste must have a maximum TCLP result no greater than 134 mg/l tested in accordance with post treatment sampling and analysis requirements identified in A2.D.3.
    - Treatment residue shall not exhibit the hazardous characteristic of ignitability, corrosivity or reactivity at the time of land disposal.
    - The material shall be land disposed at WDI.

- Guardian air pollution control dust, determined not to be hazardous waste is not subject to the variance.

WDI

- December 15, 2017, Strebor, Inc. (MID 005 342 134)
  - Spent carbon, personal protective equipment (PPE)/debris, and soil containing concentrations of pentachlorophenol (PCP), dioxins, and furans that exceed the treatment standards for hazardous waste code F027.
    - Site is a former industrial facility that mixed and packaged various wood treatment solutions, In September 1988, all facility operations were discontinued, and the facility was closed. Investigation results suggested that surface soils in the drainage ditch bordering the eastern site boundary, subsurface soils, and groundwater were impacted by PCP and various petroleum-based compounds from accidental spills and releases of the wood treating solutions that were formerly mixed and packaged at the Strebor facility. thread-cutting oils, glues, and premanufactured adhesives beginning in the early 1900s.
  - LDR Variance Conditions
    - Waste shall be land disposed in the Wayne Disposal hazardous waste landfill
    - Waste must not contain concentrations of constituents greater than 50 times the applicable universal treatment standards specified in 40 CFR 268.48, except if dioxin and furan standards are not met prior to land disposal, the waste must not contain dioxins or furans with a toxic equivalence greater (TEQ) than 50 parts per billion. The TEQ shall be determined using the 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds, M. Van den Berg, L.S. Birnbaum, M. Denison, M.J. DeVito, W. Farland, M. Feeley, H. Fiedler, H. Hakansson, A. Hanberg, L.C. Haws, M. Rose, S. Safe, D. Schrenk, C. Tohyama, A. Tritscher, J. Tuomisto, M. Tysklind, N. Walker, R.E. Peterson, 2006. Toxicological Sciences 93, (2)223-241.

In accordance with 40 CFR 268.40 wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern. Therefore, if the above waste streams are combined with other waste the lowest treatment standard for the constituent of concern is applicable to the treatment residue.

A2.D.2(h) Dilution and Aggregation of Wastes
[R 299.9627 and 40 CFR §268.3]

Listed wastes and characteristic wastes, if destined for land disposal, will not be impermissibly diluted in order to meet LDRs from the point of generation to the point of land disposal. Part 268 does not prohibit dilution in all cases. Rather, dilution is only prohibited if used "*as a substitute for adequate treatment*" to achieve compliance with or to circumvent the LDR standards. MDWTP may combine several wastes from various generators to facilitate operational efficiency and utilization of available processing capacity. The aggregation is based on the various waste streams similarities in chemical compatibility, hazardous waste codes, and treatment requirements. Aggregation for centralized waste treatment can result in dilution which occurs in conjunction with adequate treatment. Incidental dilution may also occur when reagents are added to the waste to perform treatment. This too is considered dilution inherent to an effective treatment process as long as the reagents are capable of effectively treating the constituents subject to treatment. For example, batches that require both oxidation and stabilization must have reagents that will oxidize and stabilize the constituents subject to treatment.

The facility does not impermissibly dilute or partially treat a waste to change its treatability category (i.e., from non-wastewater to wastewater), in order to comply with different treatment standards. MDWTP may combine different wastes for like treatment (e.g., a D007 waste may be combined with a D008 waste for stabilization). If the wastes are all amenable to the same type of treatment to be performed, the facility may combine wastes to perform the acceptable treatment. When listed waste is combined with characteristically hazardous waste the treatment standards applicable to the listed waste as well as the standards applicable to the characteristic waste (including the UHCs) are all treated to the appropriate standard.

A2.D.3 POST-TREATMENT SAMPLING AND ANALYSIS (MDWTP)

Treatment facilities must test their wastes as provided:

(1) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues, using test method 1311 (the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 as incorporated by reference in § 260.11 of this chapter) to assure that the treatment residues extract meet the applicable treatment standards.

(2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that they meet the applicable treatment standards.

For all non-wastewaters, compliance with concentration-based standards are based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in § 260.11, must be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311, or Method 1310B, the Extraction Procedure Toxicity Test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the director under the procedures set forth in § 268.42(b). A constituent is non-analyzable when 1) the appropriate §268.40 listing specifies a treatment technology, and 2) there is no concentration-based limit in the §268.48 UTS table.

A single random grab sample of treatment residue will be sampled from every treatment tank that requires verification that the waste meets the applicable LDR numeric concentrations prior to land disposal. Each grab sample will be collected from a random vertical and horizontal location using an excavator to reach the selected sampling point and collecting the sample from the excavator bucket with a disposable scoop or cup. The sample is then analyzed for constituents of concern that were subject to treatment. Table D.3 outlines the test methods that will be utilized to verify LDR compliance.

MDWTP performs a robust, well designed mixing procedure on all waste batches, as described in detail in C4 Treatment. This robust mixing procedure ensures that waste and treatment reagents are uniformly distributed throughout each batch. Although the individual waste streams in some batches can start out as variable, the ultimate treatment residue is uniform. In the event a third-party laboratory will be utilized to perform testing, where a test method is specified in subpart C of 40 CFR part 261, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste if knowledge or other supporting information cannot be used.

After initial sampling is completed treatment reagents continue to interact with the waste further stabilizing and oxidizing organics. The additional time is known as the "cure time". Additional cure samples can be collected once the waste has had more time to cure (typically at least 2 hours). Cure samples are immediately placed into testing after collection.

As practicable, sampling techniques used for specific types of waste will correspond to those referenced in 40 CFR 261, Appendix I and USEPA SW-846. The sampling equipment and procedures described represent recommended sampling protocol for general types of waste material. Waste may require different sampling techniques than those outlined. Therefore, deviations from the recommended protocol do not constitute an excursion from acceptable sampling practices or the conditions of this WAP.

For purposes of sampling, each treatment tank is hypothetically divided into 27 sections. A number is randomly selected through an electronic number generator such as random.org (or an equivalent program) or by selecting a number through a non-electronic system such as a deck of cards or pieces of paper numbered 1-27. The number which is drawn informs the sampler of the approximate location and depth at which a sample must be collected based on the corresponding table below. An excavator removes a bucket from the correlating location identified by the table and a trained employee uses a scoop, cup, spoon, or trowel to remove a sample from the bucket.

TABLE D.2 TREATMENT RESIDUE RANDOM SAMPLING GRID

South

1-4 Ft			5-9 Ft			10-15 Ft		
1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27

North

Sampling equipment is constructed of non-reactive materials. Samples are collected from the center mass of the sampling bucket therefore decontamination of the excavator bucket is not required.

In most instances treatment residual sample preservation is not necessary because analysis will be performed following the sample collection. Samples that must be preserved are preserved utilizing preservation requirements identified in Table A.2. Samples will be labeled as follows:

Type of Sample	Label Requirements:
Treatment Tanks	Batch ID # Date Time Sampled

The sample is then taken to the laboratory for analysis. Table D.3 outlines the test methods that will be utilized to verify LDRs. Samples collected for purposes of metals concentration determinations can be divided into multiple TCLP tests in order to obtain checks of the effectiveness of the treatment as it relates to the mobility of the contaminants at various times of the extraction process. These check samples are not utilized for purposes of demonstrating compliance. They provide an early indication (instead of waiting for the full required extraction time period) of whether the additional cure time or retreatment is needed. At least one original and cure TCLP extraction set up is agitated uninterrupted for 18 ± 2 hours and is used to demonstrate compliance with applicable LDRs. The interruptions in the check sample process in order to evaluate the progress of the extraction, eliminates the ability to use the data for compliance purposes. These interruptions also can inappropriately bias the concentration high or low, and as a result cannot be relied upon.

Limits of quantitation are set below treatment standards for the specific compound being analyzed in order to quantify concentrations and demonstrate they are below UTS levels. Treatment residue is held in the waste treatment tanks while testing is completed. Treatment batch residues that exceed the applicable LDRs, are reevaluated. Options include re-testing after additional cure time, retreating on-site until the LDRs are achieved or sending the batch off-site for further treatment to meet the LDRs.

The decision to retest or retreat is determined through experience with the waste and treatment process, the amount of time the waste has cured, and the tank failure concentration. Concentration failures of metals typically result in a retreatment while organics may result in resampling if the failure concentrations were near the applicable LDR concentration and additional cure time continued to destroy the compounds. Testing records, including failures, will be documented in the treatment operating record.

Table D.3 Land Disposal Restriction Verification

- Table reflects concentrations and/or technologies that must be met prior to land disposal in a subtitle C landfill. Subtitle D landfill disposal will require decharacterization.
- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	must be deactivated prior to disposal	**D001 (Oxidizer)**	LDR-nonwastewater	Exhibits a charcteristic of ignitabilily (including oxidizers)	NA	Deactivate for characteristic of ignitability		NA	NA	NA
x	must be deactivated prior to disposal	**D001 (FP >90 and <140F Low TOC)**	LDR-nonwastewater	Exhibits a charcteristic of ignitabilily	NA	Deactivate for characteristic of ignitability		NA	NA	NA
x	must be deactivated prior to disposal	**D001 (FP> 90 and <140F High TOC)**	LDR-nonwastewater	Exhibits a charcteristic of ignitabilily	NA	RORGS; CMBST; or POLYM		NA	NA	NA
x	must be deactivated prior to disposal	**D002**	LDR-nonwastewater	Exhibits a charcteristic of corrosivity	NA	Deactivate for characteristic of corrosivity (NEUTRALIZATION)		NA	NA	NA
x	must be deactivated prior to disposal	**D003 (Reactive Sulfides based upon 261.23(a)(5))**	LDR-nonwastewater	Reactive sulfides	NA	DEACT		NA	NA	NA
x	must be deactivated prior to disposal	**D003 (Water Reactive Subcategory based on 261.23(a)(2), (3), and (4)), nonwastewaters only**	LDR-nonwastewater	Exhibits a characteristic of reactivity	NA	Must be deactivated in order to treat or dispose		NA	NA	NA
x	must be deactivated prior to disposal	**D003 (Reactive Cyanides Subcategory based on 261.23(a)(5)**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	must be deactivated prior to disposal		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D004**	LDR-nonwastewater	TCLP Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 1310B, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D005**	LDR-nonwastewater	TCLP Barium	7440-39-3	Determine if waste or residual meets LDR treatment standard	21 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D006**	LDR-nonwastewater	TCLP Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D007**	LDR-nonwastewater	TCLP Chromium	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D008**	LDR-nonwastewater	TCLP Lead	9439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 1310B, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D009**	LDR-nonwastewater	TCLP Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D010**	LDR-nonwastewater	TCLP Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D011**	LDR-nonwastewater	TCLP Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D012**	LDR-nonwastewater	Endrin Endrin aldehyde	72-20-8 7421-93-4	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D013**	LDR-nonwastewater	Lindane (as alpha-, beta-, delta-, and gamma-BHC)	319-84-6 319-85-7 319-86-8 58-89-9	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D014**	LDR-nonwastewater	Methoxychlor	72-43-5	Determine if waste or residual meets LDR treatment standard	0.18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D015**	LDR-nonwastewater	Toxaphene	8001-35-2	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D016**	LDR-nonwastewater	2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8151	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D017**	LDR-nonwastewater	2,4,5-TP (Silvex)	93-72-1	Determine if waste or residual meets LDR treatment standard	7.9 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8151	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D018**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D019**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D020**	LDR-nonwastewater	Chlordane(alpha and gamma isomers)	57-74-9	Determine if waste or residual meets LDR treatment standard	0.26 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D021**	LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D022**	LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D023**	LDR-nonwastewater	o-Cresol	95-48-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D024**	LDR-nonwastewater	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D025**	LDR-nonwastewater	p-Cresol	106-44-5	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D026**	LDR-nonwastewater	Cresol-mixed isomers (Cresylic acid) (sum of o- m-, and p-cresol concentrations)	1319-77-3	Determine if waste or residual meets LDR treatment standard	11.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D027**	LDR-nonwastewater	p-Dichlorobenzene(1,4-Dichlorobenzene)	106-47-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D028**	LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D029**	LDR-nonwastewater	1,1-Dichloroethylene	75-35-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D030**	LDR-nonwastewater	2,4-Dinitrotoluene	121-14-2	Determine if waste or residual meets LDR treatment standard	140 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D031**	LDR-nonwastewater	Heptachlor Heptachlor Epoxide	76-44-8 1024-57-3	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D032**	LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D033**	LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D034**	LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

Table D.3 Land Disposal Restriction Verification

- Table reflects concentrations and/or technologies that must be met prior to land disposal in a subtitle C landfill. Subtitle D landfill disposal will require decharacterization.
- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**D035**	LDR-nonwastewater	Methyl ethyl ketone	78-93-3	Determine if waste or residual meets LDR treatment standard	36 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D036**	LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D037**	LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D038**	LDR-nonwastewater	Pyridine	110-86-1	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW 846 8015, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D039**	LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D040**	LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D041**	LDR-nonwastewater	2,4,5-Trichlorophenol	95-95-4	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D042**	LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**D043**	LDR-nonwastewater	Vinyl chloride	75-01-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F001, F002, F003, F004, & F005**	LDR-nonwastewater	Aectone	67-64-1	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	n-Butyl alcohol	71-36-3	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbon disulfide	75-15-0	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Cresol	95-48-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Cresol (difficult to distinguish from m-cresol)	106-44-5	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cresol-mixed isomers (Cresylic acid)	1319-77-3	Determine if waste or residual meets LDR treatment standard	11.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyclohexanone	108-94-1	No LDR treatment standard applies	No LDR treatment standard applies	NA	NA	NA
x	x		LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl acetate	141-78-6	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl benzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl ether	60-29-7	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Isobutyl alcohol	78-83-1	Determine if waste or residual meets LDR treatment standard	170 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methanol	67-56-1	No LDR treatment standard applies	No LDR treatment standard applies	NA	NA	NA
x	x		LDR-nonwastewater	Methylene chloride	75-9-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl ethyl ketone	78-93-3	Determine if waste or residual meets LDR treatment standard	36 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl isobutyl ketone	108-10-1	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyridine	110-86-1	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW 846 8015, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichlorofluoromethane	75-69-4	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F003 and/or F005 (containing only 3 solvents)**	LDR-nonwastewater	Carbon disulfide	75-15-0	Determine if waste or residual meets LDR treatment standard	4.8 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyclohexanone	108-94-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 8315	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methanol	67-56-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F005 (containing 1 solvent)**	LDR-nonwastewater	2-Nitropropane	76-46-9	CMBST	CMBST	NA	NA	NA
x	x	**F005 (containing 1 solvent)**	LDR-nonwastewater	2-Ethoxyethanol	110-80-5	CMBST	CMBST	NA	NA	NA
x	x	**F006**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F007**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F008**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F009**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F010**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	NA	NA	NA	NA	NA
x	x	**F011**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F012**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F019**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F020, F021, F022, F023, & F026**	LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Hx CDFs (All Hexachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	TCDDs (All Tetrachlorodibenzo-p-dioxins)	41903-57-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All Tetrachlorodibenzofurans)	55722-27-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	2,4,5-Trichlorophenol	95-95-4	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,3,4,6-Tetrachlorophenol	58-90-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F024**	All F024 wastes	All F024 wastes	NA	CMBST	CMBST	NA	NA	NA
x	x	**F024**	LDR-nonwastewater	2-Chloro-1,3-butadiene	126-99-8	Determine if waste or residual meets LDR treatment standard	0.28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	3-Chloropropylene	107-05-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1-Dichloroethane	75-34-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloropropane	78-87-5	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	cis-1,3-Dichloropropylene	10061-01-5	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	trans-1,3-Dichloropropylene	10061-02-6	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F025 (Light Ends Subcategory)**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1-Dichloroethylene	75-35-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methylene chloride	75-9-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Vinyl chloride	75-01-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F025 (Spent Filters/Aids and Dessicants Subcategory)**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methylene chloride	75-9-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Vinyl chloride	75-01-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F027**	LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxins)	34465-46-8	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	HxCDFs (All Hexachlorodibenzofurans)	55684-94-1	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	36088-22-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	30402-15-4	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	TCDDs (All Tetrachlorodibenzo-p-dioxins)	41903-57-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All Tetrachlorodibenzofurans)	55722-27-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	2,4,5-Trichlorophenol	95-95-4	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,3,4,6-Tetrachlorophenol	58-90-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F028**	LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxins)	34465-46-8	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Hx CDFs (All Hexachlorodibenzofurans)	55684-94-1	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All Tetrachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	2,4,5-Trichlorophenol	95-95-4	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,3,4,6-Tetrachlorophenol	58-90-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	F032	LDR-nonwastewater	Acenaphthene	83-32-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-3	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-10	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dimethyl phenol	105-67-9	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorodibenzo-p-dioxins	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Hexachlorodibenzofurans	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Indeno (1,2,3-c,d) pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorodibenzo-p-dioxins	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Pentachlorodibenzofurans	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachlorodibenzo-p-dioxins	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Tetrachlorodibenzofurans	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	2,3,4,6-Tetrachlorophenol	58-90-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F034**	LDR-nonwastewater	Acenaphthene	83-32-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno (1,2,3-c,d) pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**F035**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F037**	LDR-nonwastewater	Acenaphthene	83-32-9	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-butyl phthalate	84-74-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylbenzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F038**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-butyl phthalate	84-74-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylbenzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**F039**	LDR-nonwastewater	1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	1,1,1,2-Tetrachloroethane	630-20-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2,2-Tetrachloroethane	79-34-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1-Dichloroethane	75-34-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1-Dichloroethylene	75-35-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.005 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.005 mg/kg	NA	NA	NA

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	1,2,3,4,6,7,8- Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3-Trichloropropane	96-18-4	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4-Trichlorobenzene	120-82-1	Determine if waste or residual meets LDR treatment standard	19 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dibromo-3-chloropropane	96-12-8	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloropropane	78-87-5	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Diphenylhydrazine	122-66-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	1,4-Dinitrobenzene	100-25-4	Determine if waste or residual meets LDR treatment standard	2.3 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,4-Dioxane	123-91-1	Determine if waste or residual meets LDR treatment standard	170 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015, 8260, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,3,4,6-Tetrachlorophenol	58-90-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,5-T	93-76-5	Determine if waste or residual meets LDR treatment standard	7.9 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8151	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,5-Trichlorophenol	95-95-4	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8151	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dichlorophenol	120-83-2	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dimethylaniline (2,4-xylidine)	95-68-1	Concentrations must be demonstrated to meet applicable LDR during preapproval	0.66 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	1,3-Phenylenediamine	108-45-2	Concentrations must be demonstrated to meet applicable LDR during preapproval	0.66 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	2,4-Dinitrophenol	51-28-5	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dinitrotoluene	121-14-2	Determine if waste or residual meets LDR treatment standard	140 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,6-Dichlorophenol	87-65-0	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	2,6-Dinitrotoluene	606-20-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dimethyl phenol	105-67-9	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2-Acetylaminofluorene	53-96-3	Determine if waste or residual meets LDR treatment standard	140 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2-Chloro-1,3-butadiene	126-99-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	2-Chloronaphthalene	91-58-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2-Chlorophenol	95-57-8	Determine if waste or residual meets LDR treatment standard	5.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	Determine if waste or residual meets LDR treatment standard	2.5 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2-Naphthylamine	91-59-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	3-Chloropropylene	107-05-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	3-Methylcholanthrene	56-49-5	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	4-Aminobiphenyl	92-67-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	4,4'-Methylene bis(2-chloroaniline)	101-14-4	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	4,6-Dinitro-o-cresol	534-52-1	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	4-Bromophenyl phenyl ether	101-55-3	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	5-Nitro-o-toluidine	99-55-8	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acenaphthene	83-32-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acenaphthylene	208-96-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acetone	67-64-1	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acetonitrile	75-05-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Acetophenone	96-86-2	Determine if waste or residual meets LDR treatment standard	9.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acrolein	107-02-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Acrylonitrile	107-13-1	Determine if waste or residual meets LDR treatment standard	84 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Aldrin	309-00-2	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	alpha-BHC	319-84-6	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Aniline	62-53-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Aramite	140-57-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Barium	7440-39-3	Determine if waste or residual meets LDR treatment standard	21 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(g,h,i)perylene	191-24-2	Determine if waste or residual meets LDR treatment standard	1.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Beryllium	7440-41-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	beta-BHC	319-85-7	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Chloroethoxy)methane	111-91-1	Determine if waste or residual meets LDR treatment standard	7.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Chloroethyl)ether	111-44-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Chloroisopropyl)ether	39638-32-9	Determine if waste or residual meets LDR treatment standard	7.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Bromodichloromethane	75-27-4	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Bromoform (Tribromomethane)	75-25-2	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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x	x		LDR-nonwastewater	Butyl benzyl phthalate	85-68-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbon disulfide	75-15-0	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlordane(alpha and gamma isomers)	57-74-9	Determine if waste or residual meets LDR treatment standard	0.26 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlorobenzilate	510-15-6	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Chlorodibromomethane	124-48-1	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroethane	75-00-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloromethane (Methyl chloride)	74-87-3	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	cis-1,3-Dichloropropylene	10061-01-5	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Cyclohexanone	108-94-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	delta-BHC	319-86-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,e)pyrene	192-65-4	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Dibromomethane	74-95-3	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dichlorodifluoromethane	75-71-8	Determine if waste or residual meets LDR treatment standard	7.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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x	x		LDR-nonwastewater	Dieldrin	60-57-1	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Diethyl phthalate	84-66-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dimethyl phthalate	131-11-3	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-butyl phthalate	84-74-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-octyl phthalate	117-84-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-propylnitrosamine	621-64-7	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Diphenylamine(difficult to distinguish from diphenylnitrosamine)	122-39-4	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Diphenylnitrosamine(difficult to distinguish from diphenylamine)	86-30-6	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Disulfoton	298-04-4	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endosulfan I	939-98-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endosulfan II	33213-6-5	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endosulfan sulfate	1031-07-8	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endrin	72-20-8	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endrin aldehyde	7421-93-4	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl acetate	141-78-6	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl benzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl cyanide (Propanenitrile)	107-12-0	Determine if waste or residual meets LDR treatment standard	360 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl ether	60-29-7	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl methacrylate	97-63-2	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylene Oxide	75-21-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Famphur	52-85-7	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Fluoranthene	206-44-0	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluoride	16964-48-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	gamma-BHC	58-89-9	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Heptachlor	76-44-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Heptachlor epoxide	1024-57-3	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorocyclopentadiene	77-47-4	Determine if waste or residual meets LDR treatment standard	2.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloropropylene	1888-71-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxin	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	HxCDFs (All Hexachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Indeno (1,2,3-c,d) pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Iodomethane	74-88-4	Determine if waste or residual meets LDR treatment standard	65 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Isobutyl alcohol	78-83-1	Determine if waste or residual meets LDR treatment standard	170 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Isodrin	465-73-6	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Isosafrole	120-58-1	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Kepone	143-50-8	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	m-Dichlorobenzene	541-73-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methacylonitrile	126-98-7	Determine if waste or residual meets LDR treatment standard	84 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methanol	67-56-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Methapyrilene	91-80-5	Determine if waste or residual meets LDR treatment standard	1.5 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methoxychlor	72-43-5	Determine if waste or residual meets LDR treatment standard	0.18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl bromide (Bromomethane)	74-83-9	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl ethyl ketone	78-93-3	Determine if waste or residual meets LDR treatment standard	36 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl isobutyl ketone	108-10-1	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl methacrylate	80-62-6	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl methansulfonate	66-27-3	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Methyl parathion	298-00-0	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methylene chloride	75-09-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	n-Butyl alcohol	71-36-3	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	N-Nitrosodiethylamine	55-18-5	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	N-Nitrosodimethylamine	62-75-9	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	N-Nitroso-di-n-butylamine	924-16-3	Determine if waste or residual meets LDR treatment standard	17 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	N-Nitrosomethylethylamine	10595-95-6	Determine if waste or residual meets LDR treatment standard	2.3 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	N-Nitrosomorpholine	59-89-2	Determine if waste or residual meets LDR treatment standard	2.3 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	N-Nitrosopiperidine	100-75-4	Determine if waste or residual meets LDR treatment standard	35 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	N-Nitrosopyrrolidine	930-55-2	Determine if waste or residual meets LDR treatment standard	35 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o,p'-DDD	53-19-0	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o,p'-DDE	3424-82-6	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o,p'-DDT	789-02-6	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Anisidine (2-methoxyaniline)	90-04-0	Determine if waste or residual meets LDR treatment standard	0.66 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Cresol	95-48-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p,p'-DDD	72-54-8	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p,p'-DDE	72-55-9	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p,p'-DDT	50-29-3	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Parathion	56-38-2	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	Concentrations must be demonstrated to meet applicable LDR during preapproval	10 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	p-Chloroaniline	106-47-8	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Chloro-m-cresol	59-50-7	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Cresidine	120-71-8	Determine if waste or residual meets LDR treatment standard	0.66 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Cresol (difficult to distinguish from m-cresol)	106-44-5	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachloronitrobenzene	82-68-8	Determine if waste or residual meets LDR treatment standard	4.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenacetin	62-44-2	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phorate	298-02-2	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phthalic anhydride	85-44-9	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	p-Nitroaniline	100-01-6	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Nitrophenol	100-02-7	Determine if waste or residual meets LDR treatment standard	29 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pronamide	23950-58-5	Determine if waste or residual meets LDR treatment standard	1.5 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyridine	110-86-1	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW 846 8015, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Safrole	94-59-7	Determine if waste or residual meets LDR treatment standard	22 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silvex (2,4,5-TP)	93-72-1	Determine if waste or residual meets LDR treatment standard	7.9 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8151	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Sulfide	8496-25-8	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All Tetrachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Thallium	7440-28-0	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toxaphene	8001-35-2	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	trans-1,2-Dichloroethylene	156-60-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	trans-1,3-Dichloropropylene	10061-02-6	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichlorofluoromethane	75-69-4	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	tris(2,3-Dibromopropyl) phosphate	126-72-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Vanadium	7440-62-2	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Vinyl chloride	75-01-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K001**	LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K002**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K003**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K004**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K005**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**K006 (anhydrous)**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K006 (hydrated)**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x	**K007**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K008**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K009**	LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K010**	LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K011**	LDR-nonwastewater	Acetonitrile	75-05-8	Determine if waste or residual meets LDR treatment standard	38 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acrylonitrile	107-13-1	Determine if waste or residual meets LDR treatment standard	84 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acrylamide	79-06-1	Determine if waste or residual meets LDR treatment standard	23 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8032, 8316	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K013**	LDR-nonwastewater	Acetonitrile	75-05-8	Determine if waste or residual meets LDR treatment standard	38 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acrylonitrile	107-13-1	Determine if waste or residual meets LDR treatment standard	84 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acrylamide	79-06-1	Determine if waste or residual meets LDR treatment standard	23 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8032, 8316	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K014**	LDR-nonwastewater	Acetonitrile	75-05-8	Determine if waste or residual meets LDR treatment standard	38 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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x	x		LDR-nonwastewater	Acrylonitrile	107-13-1	Determine if waste or residual meets LDR treatment standard	84 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acrylamide	79-06-1	Determine if waste or residual meets LDR treatment standard	23 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8032, 8316	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K015**	LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzal chloride	98-87-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8121	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K016**	LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorocyclopentadiene	77-47-4	Determine if waste or residual meets LDR treatment standard	2.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K017**	LDR-nonwastewater	bis(2-Chloroethyl)ether	111-44-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloropropane	78-87-5	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,3-Trichloropropane	96-18-4	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K018**	LDR-nonwastewater	Chloroethane	75-00-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloromethane	74-87-3	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	1,1-Dichloroethane	75-34-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachloroethane	76-01-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K019**	LDR-nonwastewater	bis(2-Chloroethyl)ether	111-44-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4-Trichlorobenzene	120-82-1	Determine if waste or residual meets LDR treatment standard	19 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K020**	LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2,2-Tetrachloroethane	79-34-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K021**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K022**	LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acetophenone	96-86-2	Determine if waste or residual meets LDR treatment standard	9.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Diphenylamine(difficult to distinguish from diphenylnitrosamine)	122-39-4	Determine if waste or residual meets LDR treatment standard	13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Diphenylnitrosamine(difficult to distinguish from diphenylamine)	86-30-6	Determine if waste or residual meets LDR treatment standard	13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K023**	LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**K024**	LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K025**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K026**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K027**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K028**	LDR-nonwastewater	1,1-Dichloroethane	75-34-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	trans-1,2-Dichloroethylene	156-60-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachloroethane	76-01-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1,2-Tetrachloroethane	630-20-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2,2-Tetrachloroethane	79-34-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cadmium	7440-43-9	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K029**	LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1-Dichloroethylene	75-35-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Vinyl chloride	75-01-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K030**	LDR-nonwastewater	o-Dichlorobenzene	95-50-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloropropylene	1888-71-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachloroethane	76-01-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4-Trichlorobenzene	120-82-1	Determine if waste or residual meets LDR treatment standard	19 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K031**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K032**	LDR-nonwastewater	Hexachlorocyclopentadiene	77-47-4	Determine if waste or residual meets LDR treatment standard	2.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlordane(alpha and gamma isomers)	57-74-9	Determine if waste or residual meets LDR treatment standard	0.26 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Heptachlor	76-44-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Heptachlor epoxide	1024-57-3	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K033**	LDR-nonwastewater	Hexachlorocyclopentadiene	77-47-4	Determine if waste or residual meets LDR treatment standard	2.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K034**	LDR-nonwastewater	Hexachlorocyclopentadiene	77-47-4	Determine if waste or residual meets LDR treatment standard	2.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K035**	LDR-nonwastewater	Acenaphthene	83-32-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Cresol	95-48-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Cresol (difficult to distinguish from m-cresol)	106-44-6	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluoranthene	206-44-0	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K036**	LDR-nonwastewater	Disulfoton	298-04-4	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K037**	LDR-nonwastewater	Disulfoton	298-04-4	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K038**	LDR-nonwastewater	Phorate	298-02-2	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K039**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K040**	LDR-nonwastewater	Phorate	298-02-2	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K041**	LDR-nonwastewater	Toxaphene	8001-35-2	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K042**	LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4-Trichlorobenzene	120-82-1	Determine if waste or residual meets LDR treatment standard	19 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K043**	LDR-nonwastewater	2,4-Dichlorophenol	120-83-2	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,6-Dichlorophenol	87-65-0	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,5-Trichlorophenol	95-95-4	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,3,4,6-Tetrachlorophenol	58-90-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	HxCDFs (All Hexachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All Tetrachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x	**K044**	LDR-nonwastewater	NA	NA	DEACT	DEACT	NA	NA	NA
x	x	**K045**	LDR-nonwastewater	NA	NA	DEACT	DEACT	NA	NA	NA
x	x	**K046**	LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K047**	LDR-nonwastewater	NA	NA	DEACT	DEACT	NA	NA	NA
x	x	**K048**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-butyl phthalate	84-74-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylbenzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K049**	LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbon disulfide	75-15-0	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dimethyl phenol	105-67-9	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Ethylbenzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K050**	LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K051**	LDR-nonwastewater	Acenaphthene	83-32-9	NA	NA	NA	NA	NA

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- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-butyl phthalate	84-74-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylbenzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K052**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Cresol	95-48-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Cresol (difficult to distinguish from m-cresol)	106-44-5	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dimethyl phenol	105-67-9	NA	NA	NA	NA	NA

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Ethylbenzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K060**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K061**	LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	
x	x		LDR-nonwastewater	Barium	7440-39-3	Determine if waste or residual meets LDR treatment standard	21 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Beryllium	7440-41-7	Determine if waste or residual meets LDR treatment standard	1.22 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Thallium	7440-28-0	Determine if waste or residual meets LDR treatment standard	0.20 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Zinc	7440-66-6	Determine if waste or residual meets LDR treatment standard	4.3 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K062**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	NA	NA	NA	NA	NA
x	x	**K069 (Low Lead Subcategory)**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K069 (High Lead Subcategory)**	LDR-nonwastewater	NA	NA	RLEAD	RLEAD	NA	NA	NA
x	x	**K071 (nonwastewaters that are residues from RMERC)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.20 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K071 (nonwastewaters that are not residues from RMERC)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K071 (all wastewaters)**	LDR-nonwastewater	Mercury	7439-97-6	NA	NA	NA	NA	NA
x	x	**K073**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K083**	LDR-nonwastewater	Aniline	62-53-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyclohexanone	108-94-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Diphenylamine(difficult to distinguish from diphenylnitrosamine)	122-39-4	Determine if waste or residual meets LDR treatment standard	13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Diphenylnitrosamine(difficult to distinguish from diphenylamine)	86-30-6	Determine if waste or residual meets LDR treatment standard	13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K084**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K085**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	m-Dichlorobenzene	541-73-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	Concentrations must be demonstrated to meet applicable LDR during preapproval	10 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4-Trichlorobenzene	120-82-1	Determine if waste or residual meets LDR treatment standard	19 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K086**	LDR-nonwastewater	Acetone	67-64-1	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acetophenone	96-86-2	Determine if waste or residual meets LDR treatment standard	9.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	n-Butyl alcohol	71-36-3	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Butyl benzyl phthalate	85-68-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyclohexanone	108-94-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Diethyl phthalate	84-66-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dimethyl phthalate	131-11-3	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-butyl phthalate	84-74-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Di-n-octyl phthalate	117-84-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Ethyl acetate	141-78-6	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylbenzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methanol	67-56-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Methyl ethyl ketone	78-93-3	Determine if waste or residual meets LDR treatment standard	36 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl isobutyl ketone	108-10-1	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methylene chloride	75-09-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K087**	LDR-nonwastewater	Acenaphthylene	208-96-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluoranthene	206-44-0	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K088**	LDR-nonwastewater	Acenaphthene	83-32-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Anthracene	120-12-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(g,h,i)perylene	191-24-2	Determine if waste or residual meets LDR treatment standard	1.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluoranthene	206-44-0	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	26.1 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6011	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Barium	7440-39-3	Determine if waste or residual meets LDR treatment standard	21 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Beryllium	7440-41-7	Determine if waste or residual meets LDR treatment standard	1.22 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluoride	16984-48-8	NA	NA	NA	NA	NA
x	x	**K093**	LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K094**	LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K095**	LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachloroethane	76-01-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1,2-Tetrachloroethane	630-20-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2,2-Tetrachloroethane	79-34-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K096**	LDR-nonwastewater	m-Dichlorobenzene	541-73-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachloroethane	76-01-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,1,2-Tetrachloroethane	630-20-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2,2-Tetrachloroethane	79-34-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	1,2,4-Trichlorobenzene	120-82-1	Determine if waste or residual meets LDR treatment standard	19 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K097**	LDR-nonwastewater	Chlordane(alpha and gamma isomers)	57-74-9	Determine if waste or residual meets LDR treatment standard	0.26 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Heptachlor	76-44-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Heptachlor epoxide	1024-57-3	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorocyclopentadiene	77-47-4	Determine if waste or residual meets LDR treatment standard	2.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K098**	LDR-nonwastewater	Toxaphene	8001-35-2	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K099**	LDR-nonwastewater	2,4-Dichlorophenoxyacetic acid	94-75-7	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8151	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	HxCDFs (All Hexachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All Tetrachlorodibenzofurans)	NA	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg	NA	NA	NA
x	x	**K100**	LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K101**	LDR-nonwastewater	o-Nitroaniline	88-74-4	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cadmium	7440-43-9	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Mercury	7439-97-6	NA	NA	NA	NA	NA
x	x	**K102**	LDR-nonwastewater	o-Nitrophenol	88-75-5	Determine if waste or residual meets LDR treatment standard	13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Cadmium	7440-43-9	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Lead	7439-92-1	NA	NA	NA	NA	NA
x	x		LDR-nonwastewater	Mercury	7439-97-6	NA	NA	NA	NA	NA
x	x	**K103**	LDR-nonwastewater	Aniline	62-53-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dinitrophenol	51-28-5	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K104**	LDR-nonwastewater	Aniline	62-53-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dinitrophenol	51-28-5	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K105**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2-Chlorophenol	95-57-8	Determine if waste or residual meets LDR treatment standard	5.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,5-Trichlorophenol	95-95-4	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4,6-Trichlorophenol	88-06-2	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury)**	LDR-nonwastewater	Mercury	7439-97-6	RMERC	RMERC	NA	NA	NA

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x	x	**K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain less than 260 mg/kg total mercury that are residues from RMERC**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.20 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K106 (other nonwastewaters than contain less than 260 mg/kg total mercury and are not residues from RMERC)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K106 (all other wastewaters)**	LDR-nonwastewater	Mercury	7439-97-6	NA	NA	NA	NA	NA
x	x	**K107**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K108**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K109**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K110**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K111**	LDR-nonwastewater	2,4-Dinitrotoluene	121-14-2	Determine if waste or residual meets LDR treatment standard	140 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,6-Dinitrotoluene	606-20-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K112**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K113**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K114**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K115**	LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K116**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K117**	LDR-nonwastewater	Methyl bromide (Bromomethane)	74-83-9	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K118**	LDR-nonwastewater	Methyl bromide (Bromomethane)	74-83-9	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K123**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K124**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K125**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K126**	LDR-nonwastewater	NA	NA	CMBST	CMBST	NA	NA	NA
x	x	**K131**	LDR-nonwastewater	Methyl bromide (Bromomethane)	74-83-9	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K132**	LDR-nonwastewater	Methyl bromide (Bromomethane)	74-83-9	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K136**	LDR-nonwastewater	Methyl bromide (Bromomethane)	74-83-9	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K141**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-2-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K142**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-2-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K143**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-2-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K144**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-2-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K145**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-2-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K147**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-2-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K148**	LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(a)pyrene	50-2-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(b)fluoranthene	205-99-2	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(k)fluoranthene	207-08-9	Determine if waste or residual meets LDR treatment standard	6.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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x	x	**K149**	LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloromethane	74-87-3	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K150**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloromethane	74-87-3	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Dichlorobenzene	106-46-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,1,2,2-Tetrachloroethane	79-34-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4-Trichlorobenzene	120-82-1	Determine if waste or residual meets LDR treatment standard	19 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K151**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	K156	LDR-nonwastewater	Acetonitrile	75-05-8	Determine if waste or residual meets LDR treatment standard	1.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Acetophenone	96-86-2	Determine if waste or residual meets LDR treatment standard	9.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Aniline	62-53-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benomyl	17804-35-2	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbaryl	63-25-2	Determine if waste or residual meets LDR treatment standard	0.14 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbendazim	10605-21-7	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Carbofuran	1563-66-2	Determine if waste or residual meets LDR treatment standard	0.14 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbosulfan	55285-14-8	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methomyl	16752-77-5	CMBST	0.14 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Methylene chloride	75-09-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl ethyl ketone	78-93-3	Determine if waste or residual meets LDR treatment standard	36 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyridine	110-86-1	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW 846 8015, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Triethylamine	121-44-8	Determine if waste or residual meets LDR treatment standard	1.5 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K157**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	
x	x		LDR-nonwastewater	Chloromethane	74-87-3	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methomyl	16752-77-5	CMBST	0.14 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Methylene Chloride	75-09-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methyl ethyl ketone	78-93-3	Determine if waste or residual meets LDR treatment standard	36 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyridine	110-86-1	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW 846 8015, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Triethylamine	121-44-8	Determine if waste or residual meets LDR treatment standard	1.5 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K158**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbendazim	10605-21-7	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Carbofuran	1563-66-2	Determine if waste or residual meets LDR treatment standard	0.14 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbosulfan	55285-14-8	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Methylene chloride	75-09-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K159**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Butylate	2008-41-5	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	No onsite method, waste must meet treatment standards or requires third party analysis	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	EPTC (Eptam)	759-94-4	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	No onsite method, waste must meet treatment standards or requires third party analysis	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Molinate	2212-67-1	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	No onsite method, waste must meet treatment standards or requires third party analysis	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pebulate	1114-71-2	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	No onsite method, waste must meet treatment standards or requires third party analysis	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Vernolate	1929-77-7	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	No onsite method, waste must meet treatment standards or requires third party analysis	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K161**	LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Carbon disulfide	75-15-0	Determine if waste or residual meets LDR treatment standard	4.8 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dithiocarbamates (total)	NA	CMBST	28 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K169**	LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(g,h,i)perylene	191-24-2	Determine if waste or residual meets LDR treatment standard	1.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl benzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene (Methyl Benzene)	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylene(s) (Total)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K170**	LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzo(g,h,i)perylene	191-24-2	Determine if waste or residual meets LDR treatment standard	1.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

Table D.3 Land Disposal Restriction Verification

- Table reflects concentrations and/or technologies that must be met prior to land disposal in a subtitle C landfill. Subtitle D landfill disposal will require decharacterization.
- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl benzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Fluorene	86-73-7	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene (Methyl Benzene)	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylene(s) (Total)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K171**	LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	
x	x		LDR-nonwastewater	Ethyl benzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene (Methyl Benzene)	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylene(s) (Total)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Vanadium	7440-62-2	Determine if waste or residual meets LDR treatment standard	1.6 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Reactive sulfides	NA	DEACT	DEACT	NA	NA	NA

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- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**K172**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Ethyl benzene	100-41-4	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene (Methyl Benzene)	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylene(s) (Total)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Vanadium	7440-62-2	Determine if waste or residual meets LDR treatment standard	1.6 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Reactive sulfides	NA	DEACT	DEACT	NA	NA	NA
x	x	**K174**	LDR-nonwastewater	1,2,3,4,6,7,8- Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg. or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxins)	34465-46-8	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	HxCDFs (All Hexachlorodibenzofurans)	55684-94-1	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.005 mg/kg. or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.005 mg/kg. or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	36088-22-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	30402-15-4	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	TCDDs (All Tetachlorodibenzo-p-dioxins)	41903-57-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All tetrachlorodibenzofurans)	55722-27-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K175(Wastewater treatment sludge from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	pH	NA	pH less than or equal to 6.0	pH less than or equal to 6.0	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9045	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K175(All K175 wastewaters**	LDR-nonwastewater	Mercury	7438-97-6	NA	NA	NA	NA	NA

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**K176**	LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cadmium	7440-43-9	Determine if waste or residual meets LDR treatment standard	0.11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K177**	LDR-nonwastewater	Antimony	7440-36-0	Determine if waste or residual meets LDR treatment standard	1.15 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K178**	LDR-nonwastewater	1,2,3,4,6,7,8- Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-39-4	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg. or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.0025 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	HxCDDs (All Hexachlorodibenzo-p-dioxins)	34465-46-8	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	HxCDFs (All Hexachlorodibenzofurans)	55684-94-1	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,6,7,8,9- Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.005 mg/kg. or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,2,3,4,6,7,8,9- Octachlorodibenzofuran (OCDF)	39001-02-0	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.005 mg/kg. or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	PeCDDs (All Pentachlorodibenzo-p-dioxins)	36088-22-9	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	PeCDFs (All Pentachlorodibenzofurans)	30402-15-4	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	TCDDs (All tetrachlorodibenzo-p-dioxins)	41903-57-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	TCDFs (All tetrachlorodibenzofurans)	55722-27-5	Concentrations must be demonstrated to meet applicable LDR during preapproval. Will only treat if concentration based standard is met prior to treatment.	0.001 mg/kg or CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Thallium	7440-28-0	Determine if waste or residual meets LDR treatment standard	0.20 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**K181**	LDR-nonwastewater	Aniline	62-53-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o-Anisidine (2-methoxyaniline)	90-04-0	Determine if waste or residual meets LDR treatment standard	0.66 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	4-Chloroaniline	106-47-8	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Cresidine	120-71-8	Determine if waste or residual meets LDR treatment standard	0.66 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-Dimethylaniline (2,4-xylidine)	95-68-1	Concentrations must be demonstrated to meet applicable LDR during preapproval	0.66 mg/kg	NA	NA	NA
x	x		LDR-nonwastewater	1,2-Phenylenediamine	95-54-5	CMBST or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	NA	NA	NA
x	x		LDR-nonwastewater	1,3-Phenylenediamine	108-45-2	Concentrations must be demonstrated to meet applicable LDR during preapproval	0.66 mg/kg	NA	NA	NA
x	x	**P001**	LDR-nonwastewater	Warfarin	81-81-2	CMBST	CMBST	NA	NA	NA
x	x	**P002**	LDR-nonwastewater	1-Acetyl-2-thiourea	591-08-2	CMBST	CMBST	NA	NA	NA
x	x	**P003**	LDR-nonwastewater	Acrolein	107-02-8	CMBST	CMBST	NA	NA	NA
x	x	**P004**	LDR-nonwastewater	Aldrin	309-00-2	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P005**	LDR-nonwastewater	Allyl alcohol	107-18-6	CMBST	CMBST	NA	NA	NA
x	x	**P006**	LDR-nonwastewater	Aluminum phosphide	20859-73-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P007**	LDR-nonwastewater	5-Aminomethyl 3-isoxazolol	2763-96-4	CMBST	CMBST	NA	NA	NA
x	x	**P008**	LDR-nonwastewater	4-Aminopyridine	504-24-5	CMBST	CMBST	NA	NA	NA
x	x	**P009**	LDR-nonwastewater	Ammonium picrate	131-74-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P010**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P011**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P012**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P013**	LDR-nonwastewater	Barium	7440-39-3	Determine if waste or residual meets LDR treatment standard	21 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P014**	LDR-nonwastewater	Thiophenol (Benzene thiol)	108-98-5	CMBST	CMBST	NA	NA	NA
x	x	**P015**	LDR-nonwastewater	Beryllium	7440-41-7	RMETL; or RTHRM	RMETL; or RTHRM	NA	NA	NA
x	x	**P016**	LDR-nonwastewater	Dichloromethyl ether	542-88-1	CMBST	CMBST	NA	NA	NA
x	x	**P017**	LDR-nonwastewater	Bromoacetone	598-31-2	CMBST	CMBST	NA	NA	NA
x	x	**P018**	LDR-nonwastewater	Brucine	357-57-3	CMBST	CMBST	NA	NA	NA
x	x	**P020**	LDR-nonwastewater	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	Determine if waste or residual meets LDR treatment standard	2.5 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P021**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P022**	LDR-nonwastewater	Carbon disulfide	75-15-0	CMBST	CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Carbon disulfide; alternate standard for nonwastewaters only	75-15-0	Determine if waste or residual meets LDR treatment standard	4.8 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P023**	LDR-nonwastewater	Chloroacetaldehyde	107-20-0	CMBST	CMBST	NA	NA	NA
x	x	**P024**	LDR-nonwastewater	p-Chloroaniline	106-47-8	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P026**	LDR-nonwastewater	1-(o-Chlorophenyl)thiourea	5344-82-1	CMBST	CMBST	NA	NA	NA
x	x	**P027**	LDR-nonwastewater	3-Chloropropionitrile	542-76-7	CMBST	CMBST	NA	NA	NA
x	x	**P028**	LDR-nonwastewater	Benzyl chloride	100-44-7	CMBST	CMBST	NA	NA	NA
x	x	**P029**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P030**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P031**	LDR-nonwastewater	Cyanogen	460-19-5	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST	NA	NA	NA

Table D.3 Land Disposal Restriction Verification

- Table reflects concentrations and/or technologies that must be met prior to land disposal in a subtitle C landfill. Subtitle D landfill disposal will require decharacterization.
- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**P033**	LDR-nonwastewater	Cyanogen chloride	506-77-4	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST	NA	NA	NA
x	x	**P034**	LDR-nonwastewater	2-Cyclohexyl-4,6-dinitrophenol	131-89-5	CMBST	CMBST	NA	NA	NA
x	x	**P036**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P037**	LDR-nonwastewater	Dieldrin	60-57-1	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P038**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P039**	LDR-nonwastewater	Disulfoton	298-04-4	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P040**	LDR-nonwastewater	0,0-Diethyl O-pyrazinyl phosphorothioate	297-97-2	CMBST	CMBST	NA	NA	NA
x	x	**P041**	LDR-nonwastewater	Diethyl-p-nitrophenyl phosphate	311-45-5	CMBST	CMBST	NA	NA	NA
x	x	**P042**	LDR-nonwastewater	Epinephrine	51-43-4	CMBST	CMBST	NA	NA	NA
x	x	**P043**	LDR-nonwastewater	Diisopropylfluorophosphate (DFP)	55-91-4	CMBST	CMBST	NA	NA	NA
x	x	**P044**	LDR-nonwastewater	Dimethoate	60-51-5	CMBST	CMBST	NA	NA	NA
x	x	**P045**	LDR-nonwastewater	Thiofanox	39196-18-4	CMBST	CMBST	NA	NA	NA
x	x	**P046**	LDR-nonwastewater	alpha, alpha-Dimethylphenethylamine	122-09-8	CMBST	CMBST	NA	NA	NA
x	x	**P047**	LDR-nonwastewater	4,6-Dinitro-o-cresol	534-52-1	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	4,6-Dinitro-o-cresol salts	NA	CMBST	CMBST	NA	NA	NA
x	x	**P048**	LDR-nonwastewater	2,4-Dinitrophenol	51-28-5	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P049**	LDR-nonwastewater	Dithiobiuret	541-53-7	CMBST	CMBST	NA	NA	NA
x	x	**P050**	LDR-nonwastewater	Endosulfan I	939-98-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endosulfan II	33213-6-5	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endosulfan sulfate	1031-07-8	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P051**	LDR-nonwastewater	Endrin Endrin aldehyde	72-20-8 7421-93-4	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Endrin aldehyde	7421-93-4	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P054**	LDR-nonwastewater	Aziridine	151-56-4	CMBST	CMBST	NA	NA	NA
x	x	**P056**	LDR-nonwastewater	Fluoride (measured in wastewaters only)	16984-48-8	ADGAS fb NEUTR	ADGAS fb NEUTR	NA	NA	NA
x	x	**P057**	LDR-nonwastewater	Fluoroacetamide	640-19-7	CMBST	CMBST	NA	NA	NA
x	x	**P058**	LDR-nonwastewater	Fluoroacetic acid, sodium salt	62-74-8	CMBST	CMBST	NA	NA	NA
x	x	**P059**	LDR-nonwastewater	Heptachlor	76-44-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Heptachlor epoxide	1024-57-3	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P060**	LDR-nonwastewater	Isodrin	465-73-6	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P062**	LDR-nonwastewater	Hexaethyl tetraphosphate	757-58-4	CMBST	CMBST	NA	NA	NA
x	x	**P063**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P064**	LDR-nonwastewater	Isocyanic acid, ethyl ester	624-83-9	CMBST	CMBST	NA	NA	NA
x	x	**P065(Mercury fulminate nonwastewaters, regardless of their total mercury content, that are not incinerator residues from RMERC)**	LDR-nonwastewater	Mercury	7439-97-6	IMERC	IMERC	NA	NA	NA
x	x	**P065(Mercury fulminate nonwastewaters, that are either incinerator residues or are residues from RMERC; and contain greater than or equal to 260**	LDR-nonwastewater	Mercury	7439-97-6	RMERC	RMERC	NA	NA	NA
x	x	**P065(Mercury fulminate nonwastewaters, that are residues from RMERC and contain less than 260 mg/kg total mercury)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.20 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P065(Mercury fulminate nonwastewaters, that are incinerator residues and contain less than 260 mg/kg total mercury)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P065(All mercury fulminate wastewaters)**	LDR-nonwastewater	Mercury	7439-97-6	NA	NA	NA	NA	NA
x	x	**P066**	LDR-nonwastewater	Methomyl	16752-77-5	CMBST	CMBST	NA	NA	NA
x	x	**P067**	LDR-nonwastewater	2-Methyl-aziridine	75-55-8	CMBST	CMBST	NA	NA	NA
x	x	**P068**	LDR-nonwastewater	Methyl hydrazine	60-34-4	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P069**	LDR-nonwastewater	2-Methyllactonitrile	75-86-5	CMBST	CMBST	NA	NA	NA

Table D.3 Land Disposal Restriction Verification

- Table reflects concentrations and/or technologies that must be met prior to land disposal in a subtitle C landfill. Subtitle D landfill disposal will require decharacterization.
- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**P070**	LDR-nonwastewater	Aldicarb	116-06-3	CMBST	CMBST	NA	NA	NA
x	x	**P071**	LDR-nonwastewater	Methyl parathion	298-00-0	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P072**	LDR-nonwastewater	1-Naphthyl-2-thiourea	86-88-4	CMBST	CMBST	NA	NA	NA
x	x	**P073**	LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P074**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Nickel	7440-02-0	Determine if waste or residual meets LDR treatment standard	11 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P075**	LDR-nonwastewater	Nicotine and salts	54-11-5	CMBST	CMBST	NA	NA	NA
x	x	**P076**	LDR-nonwastewater	Nitric oxide	10102-43-9	ADGAS	ADGAS	NA	NA	NA
x	x	**P077**	LDR-nonwastewater	p-Nitroaniline	100-01-6	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P078**	LDR-nonwastewater	Nitrogen dioxide	10102-44-0	ADGAS	ADGAS	NA	NA	NA
x	x	**P081**	LDR-nonwastewater	Nitroglycerin	55-63-0	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P082**	LDR-nonwastewater	N-Nitrosodimethylamine	62-75-9	Determine if waste or residual meets LDR treatment standard	2.3 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P084**	LDR-nonwastewater	N-Nitrosomethylvinylamine	4549-40-0	CMBST	CMBST	NA	NA	NA
x	x	**P085**	LDR-nonwastewater	Octamethylpyrophosphoramide	152-16-9	CMBST	CMBST	NA	NA	NA
x	x	**P087**	LDR-nonwastewater	Osmium tetroxide	20816-12-0	RMETL; or RTHRM	RMETL; or RTHRM	NA	NA	NA
x	x	**P088**	LDR-nonwastewater	Endothall	145-73-3	CMBST	CMBST	NA	NA	NA
x	x	**P089**	LDR-nonwastewater	Parathion	56-38-2	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P092(Phenyl mercuric acetate nonwastewaters, regardless of their total mercury content, that are not incinerator residues from RMERC)**	LDR-nonwastewater	Mercury	7439-97-6	IMERC; or RMERC	IMERC; or RMERC	NA	NA	NA
x	x	**P092(Phenyl mercuric acetate nonwastewaters, that are either incinerator residues or are residues from RMERC; and still contain greater than or equal to 260 mg/kg total mercury)**	LDR-nonwastewater	Mercury	7439-97-6	RMERC	RMERC	NA	NA	NA
x	x	**P092(Phenyl mercuric acetate nonwastewaters, that are residues from RMERC and contain less than 260 mg/kg total mercury)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.20 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P092(Phenyl mercuric acetate nonwastewaters, that are incinerator residues and contain less than 260 mg/kg total mercury)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P092(All phenyl mercuric acetate wastewaters)**	LDR-nonwastewater	Mercury	7439-97-6	NA	NA	NA	NA	NA
x	x	**P093**	LDR-nonwastewater	Phenylthiourea	103-85-5	CMBST	CMBST	NA	NA	NA
x	x	**P094**	LDR-nonwastewater	Phorate	298-02-2	Determine if waste or residual meets LDR treatment standard	4.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P095**	LDR-nonwastewater	Phosgene	75-44-5	CMBST	CMBST	NA	NA	NA
x	x	**P096**	LDR-nonwastewater	Phosphine	7803-51-2	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P097**	LDR-nonwastewater	Famphur	52-85-7	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P098**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P099**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P101**	LDR-nonwastewater	Ethyl cyanide (Propanenitrile)	107-12-0	Determine if waste or residual meets LDR treatment standard	360 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P102**	LDR-nonwastewater	Propargyl alcohol	107-19-7	CMBST	CMBST	NA	NA	NA
x	x	**P103**	LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P104**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Silver	7440-22-4	Determine if waste or residual meets LDR treatment standard	0.14 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P105**	LDR-nonwastewater	Sodium azide	26628-22-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P106**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P108**	LDR-nonwastewater	Strychnine and salts	57-24-9	CMBST	CMBST	NA	NA	NA
x	x	**P109**	LDR-nonwastewater	Tetraethyldithiopyrophosphate	3689-24-5	CMBST	CMBST	NA	NA	NA
x	x	**P110**	LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P111**	LDR-nonwastewater	Tetraethylpyrophosphate	107-49-3	CMBST	CMBST	NA	NA	NA
x	x	**P112**	LDR-nonwastewater	Tetranitromethane	509-14-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P113**	LDR-nonwastewater	Thallium (measured in wastewaters only)	7440-28-0	RTHRM; or STABL	RTHRM; or STABL	NA	NA	NA
x	x	**P114**	LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P115**	LDR-nonwastewater	Thallium (measured in wastewaters only)	7440-28-0	RTHRM; or STABL	RTHRM; or STABL	NA	NA	NA
x	x	**P116**	LDR-nonwastewater	Thiosemicarbazide	79-19-6	CMBST	CMBST	NA	NA	NA
x	x	**P118**	LDR-nonwastewater	Trichloromethanethiol	75-70-7	CMBST	CMBST	NA	NA	NA
x	x	**P119**	LDR-nonwastewater	Vanadium (measured in wastewaters only)	7440-62-2	STABL	STABL	NA	NA	NA
x	x	**P120**	LDR-nonwastewater	Vanadium (measured in wastewaters only)	7440-62-2	STABL	STABL	NA	NA	NA
x	x	**P121**	LDR-nonwastewater	Cyanides (Total)	57-12-5	Determine if waste or residual meets LDR treatment standard	590 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cyanides (Amenable)	57-12-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 9010, 9014	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P122**	LDR-nonwastewater	Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**P123**	LDR-nonwastewater	Toxaphene	8001-35-2	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P127**	LDR-nonwastewater	Carbofuran	1563-66-2	Determine if waste or residual meets LDR treatment standard	0.14 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P128**	LDR-nonwastewater	Mexacarbate	315-18-4	CMBST	0.14 mg/kg or CMBST.	NA	NA	NA
x	x	**P185**	LDR-nonwastewater	Tirpate	26419-73-8	CMBST	0.28 mg/kg or CMBST.	NA	NA	NA
x	x	**P188**	LDR-nonwastewater	Physostigmine salicylate	57-64-7	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P189**	LDR-nonwastewater	Carbosulfan	55285-14-8	Determine if waste or residual meets LDR treatment standard	1.4 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**P190**	LDR-nonwastewater	Metolcarb	1129-41-5	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P191**	LDR-nonwastewater	Dimetilan	644-64-4	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P192**	LDR-nonwastewater	Isolan	119-38-0	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P194**	LDR-nonwastewater	Oxamyl	23135-22-0	CMBST	0.28 mg/kg or CMBST.	NA	NA	NA
x	x	**P196**	LDR-nonwastewater	Dithiocarbamates (total)	NA	CMBST	28 mg/kg or CMBST.	NA	NA	NA
x	x	**P197**	LDR-nonwastewater	Formparante	17702-57-7	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**P198**	LDR-nonwastewater	Formetanate hydrochloride	23422-53-9	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P199**	LDR-nonwastewater	Methiocarb	2032-65-7	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P201**	LDR-nonwastewater	Promecarb	2631-37-0	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P202**	LDR-nonwastewater	m-Cumenyl methylcarbamate	64-00-6	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P203**	LDR-nonwastewater	Aldicarb sulfone	1646-88-4	CMBST	0.28 mg/kg or CMBST.	NA	NA	NA
x	x	**P204**	LDR-nonwastewater	Physostigmine	57-47-6	CMBST	1.4 mg/kg or CMBST.	NA	NA	NA
x	x	**P205**	LDR-nonwastewater	Dithiocarbamates (total)	NA	CMBST	28 mg/kg or CMBST.	NA	NA	NA
x	x	**U001**	LDR-nonwastewater	Acetaldehyde	75-07-0	CMBST	CMBST	NA	NA	NA
x	x	**U002**	LDR-nonwastewater	Acetone	67-64-1	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U003**	LDR-nonwastewater	Acetonitrile	75-05-8	CMBST	CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Acetonitrile; alternate standard for nonwastewaters only	75-05-8	Determine if waste or residual meets LDR treatment standard	38 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U004**	LDR-nonwastewater	Acetophenone	96-86-2	Determine if waste or residual meets LDR treatment standard	9.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U005**	LDR-nonwastewater	2-Acetylaminofluorene	53-96-3	Determine if waste or residual meets LDR treatment standard	140 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U006**	LDR-nonwastewater	Acetyl Chloride	75-36-5	CMBST	CMBST	NA	NA	NA
x	x	**U007**	LDR-nonwastewater	Acrylamide	79-06-1	CMBST	CMBST	NA	NA	NA
x	x	**U008**	LDR-nonwastewater	Acrylic acid	79-10-7	CMBST	CMBST	NA	NA	NA
x	x	**U009**	LDR-nonwastewater	Acrylonitrile	107-13-1	Determine if waste or residual meets LDR treatment standard	84 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U010**	LDR-nonwastewater	Mitomycin C	50-07-7	CMBST	CMBST	NA	NA	NA
x	x	**U011**	LDR-nonwastewater	Amitrole	61-82-5	CMBST	CMBST	NA	NA	NA
x	x	**U012**	LDR-nonwastewater	Aniline	62-53-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U014**	LDR-nonwastewater	Auramine	492-80-8	CMBST	CMBST	NA	NA	NA
x	x	**U015**	LDR-nonwastewater	Azaserine	115-02-6	CMBST	CMBST	NA	NA	NA
x	x	**U016**	LDR-nonwastewater	Benz(c)acridine	225-51-4	CMBST	CMBST	NA	NA	NA
x	x	**U017**	LDR-nonwastewater	Benzal chloride	98-87-3	CMBST	CMBST	NA	NA	NA
x	x	**U018**	LDR-nonwastewater	Benz(a)anthracene	56-55-3	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U019**	LDR-nonwastewater	Benzene	71-43-2	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U020**	LDR-nonwastewater	Benzenesulfonyl chloride	98-09-9	CMBST	CMBST	NA	NA	NA
x	x	**U021**	LDR-nonwastewater	Benzidine	92-87-5	CMBST	CMBST	NA	NA	NA
x	x	**U022**	LDR-nonwastewater	Benzo(a)pyrene	50-32-8	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U023**	LDR-nonwastewater	Benzotrichloride	98-07-7	CHOCS; CHRED; or CMBST	CHOCS; CHRED; or CMBST	NA	NA	NA
x	x	**U024**	LDR-nonwastewater	bis(2)Chloroethoxy)methane	111-91-1	Determine if waste or residual meets LDR treatment standard	7.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U025**	LDR-nonwastewater	bis(2-Chloroethyl)ether	111-44-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U026**	LDR-nonwastewater	Chlornaphazine	494-03-1	CMBST	CMBST	NA	NA	NA
x	x	**U027**	LDR-nonwastewater	bis(2-Chloroisopropyl)ether	39638-32-9	Determine if waste or residual meets LDR treatment standard	7.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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x	x	**U028**	LDR-nonwastewater	bis(2-Ethylhexyl)phthalate	117-81-7	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U029**	LDR-nonwastewater	Methyl bromide (Bromomethane)	74-83-9	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U030**	LDR-nonwastewater	4-Bromophenyl phenyl ether	101-55-3	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U031**	LDR-nonwastewater	n-Butyl alcohol	71-36-3	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U032**	LDR-nonwastewater	Chromium (Total)	7440-47-3	Determine if waste or residual meets LDR treatment standard	0.60 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U033**	LDR-nonwastewater	Carbon oxyfluoride	353-50-4	CMBST	CMBST	NA	NA	NA
x	x	**U034**	LDR-nonwastewater	Trichloroacetaldehyde (Chloral)	75-87-6	CMBST	CMBST	NA	NA	NA
x	x	**U035**	LDR-nonwastewater	Chlorambucil	305-03-3	CMBST	CMBST	NA	NA	NA
x	x	**U036**	LDR-nonwastewater	Chlordane(alpha and gamma isomers)	57-74-9	Determine if waste or residual meets LDR treatment standard	0.26 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U037**	LDR-nonwastewater	Chlorobenzene	108-90-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U038**	LDR-nonwastewater	Chlorobenzilate	510-15-6	CMBST	CMBST	NA	NA	NA
x	x	**U039**	LDR-nonwastewater	p-Chloro-m-cresol	59-50-7	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U041**	LDR-nonwastewater	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106-89-8	CMBST	CMBST	NA	NA	NA
x	x	**U042**	LDR-nonwastewater	2-Chloroethyl vinyl ether	110-75-8	CMBST	CMBST	NA	NA	NA
x	x	**U043**	LDR-nonwastewater	Vinyl chloride	75-01-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U044**	LDR-nonwastewater	Chloroform	67-66-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U045**	LDR-nonwastewater	Chloromethane (Methyl chloride)	74-87-3	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U046**	LDR-nonwastewater	Chloromethyl methyl ether	107-30-2	CMBST	CMBST	NA	NA	NA
x	x	**U047**	LDR-nonwastewater	2-Chloronaphthalene	91-58-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U048**	LDR-nonwastewater	2-Chlorophenol	95-57-8	Determine if waste or residual meets LDR treatment standard	5.7 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U049**	LDR-nonwastewater	4-Chloro-o-toluidine hydrochloride	3165-93-3	CMBST	CMBST	NA	NA	NA
x	x	**U050**	LDR-nonwastewater	Chrysene	218-01-9	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U051**	LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pentachlorophenol	87-86-5	Determine if waste or residual meets LDR treatment standard	7.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8151, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phenanthrene	85-01-8	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Pyrene	129-00-0	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x		LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U052**	LDR-nonwastewater	o-Cresol	95-48-7	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p-Cresol (difficult to distinguish from m-cresol)	106-44-5	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Cresol-mixed isomers (Cresylic acid) (sum of o- m-, and p-cresol concentrations)	1319-77-3	Determine if waste or residual meets LDR treatment standard	11.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U053**	LDR-nonwastewater	Crotonaldehyde	4170-30-3	CMBST	CMBST	NA	NA	NA
x	x	**U055**	LDR-nonwastewater	Cumene	98-82-8	CMBST	CMBST	NA	NA	NA
x	x	**U056**	LDR-nonwastewater	Cyclohexane	110-82-7	CMBST	CMBST	NA	NA	NA
x	x	**U057**	LDR-nonwastewater	Cyclohexanone	108-94-1	CMBST	CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Cyclohexanone; alternate standard for nonwastewaters only	108-94-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 8315	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U058**	LDR-nonwastewater	Cyclophosphamide	50-18-0	CMBST	CMBST	NA	NA	NA
x	x	**U059**	LDR-nonwastewater	Daunomycin	20830-81-3	CMBST	CMBST	NA	NA	NA
x	x	**U060**	LDR-nonwastewater	o,p′-DDD	53-19-0	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p,p′-DDD	72-54-8	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U061**	LDR-nonwastewater	o,p′-DDT	789-02-6	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p,p′-DDT	50-29-3	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o,p′-DDD	53-19-0	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p,p′-DDD	72-54-8	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	o,p′-DDE	3424-82-6	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	p,p′-DDE	72-55-9	Determine if waste or residual meets LDR treatment standard	0.087 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U062**	LDR-nonwastewater	Diallate	2303-16-4	CMBST	CMBST	NA	NA	NA
x	x	**U063**	LDR-nonwastewater	Dibenz(a,h)anthracene	53-70-3	Determine if waste or residual meets LDR treatment standard	8.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U064**	LDR-nonwastewater	Dibenz(a,i)pyrene	189-55-9	CMBST	CMBST	NA	NA	NA
x	x	**U066**	LDR-nonwastewater	1,2-Dibromo-3-chloropropane	96-12-8	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U067**	LDR-nonwastewater	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U068**	LDR-nonwastewater	Dibromomethane	74-95-3	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U069**	LDR-nonwastewater	Di-n-butyl phthalate	84-74-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U070**	LDR-nonwastewater	o-Dichlorobenzene	95-50-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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x	x	**U071**	LDR-nonwastewater	m-Dichlorobenzene	541-73-1	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U072**	LDR-nonwastewater	p-Dichlorobenzene	106-46-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U073**	LDR-nonwastewater	3,3'-Dichlorobenzidine	91-94-1	CMBST	CMBST	NA	NA	NA
x	x	**U074**	LDR-nonwastewater	cis,1,4-Dichloro-2-butene	1476-11-5	CMBST	CMBST	NA	NA	NA
x	x		LDR-nonwastewater	trans-1,4-Dichloro-2-butene	764-41-0	CMBST	CMBST	NA	NA	NA
x	x	**U075**	LDR-nonwastewater	Dichlorodifluoromethane	75-71-8	Determine if waste or residual meets LDR treatment standard	7.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U076**	LDR-nonwastewater	1,1-Dichloroethane	75-34-3	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U077**	LDR-nonwastewater	1,2-Dichloroethane	107-06-2	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U078**	LDR-nonwastewater	1,1-Dichloroethylene	75-35-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U079**	LDR-nonwastewater	trans-1,2-Dichloroethylene	156-60-5	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U080**	LDR-nonwastewater	Methylene chloride	75-09-2	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U081**	LDR-nonwastewater	2,4-Dichlorophenol	120-83-2	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U082**	LDR-nonwastewater	2,6-Dichlorophenol	87-65-0	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U083**	LDR-nonwastewater	1,2-Dichloropropane	78-87-5	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U084**	LDR-nonwastewater	cis-1,3-Dichloropropylene	10061-01-5	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	trans-1,3-Dichloropropylene	10061-02-6	Determine if waste or residual meets LDR treatment standard	18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U085**	LDR-nonwastewater	1,2,3,4-Diepoxybutane	1464-53-5	CMBST	CMBST	NA	NA	NA
x	x	**U086**	LDR-nonwastewater	N,N'-Diethylhydrazine	1615-80-1	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U087**	LDR-nonwastewater	O,O-Diethyl S-methyldithiophosphate	3288-58-2	CMBST	CMBST	NA	NA	NA
x	x	**U088**	LDR-nonwastewater	Diethyl phthalate	84-66-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U089**	LDR-nonwastewater	Diethyl stilbestrol	56-53-1	CMBST	CMBST	NA	NA	NA
x	x	**U090**	LDR-nonwastewater	Dihydrosafrole	94-58-6	CMBST	CMBST	NA	NA	NA
x	x	**U091**	LDR-nonwastewater	3,3'-Dimethoxybenzidine	119-90-4	CMBST	CMBST	NA	NA	NA
x	x	**U092**	LDR-nonwastewater	Dimethylamine	124-40-3	CMBST	CMBST	NA	NA	NA
x	x	**U093**	LDR-nonwastewater	p-Dimethylaminoazobenzene	60-11-7	CMBST	CMBST	NA	NA	NA
x	x	**U094**	LDR-nonwastewater	7,12-Dimethylbenz(a)anthracene	57-97-6	CMBST	CMBST	NA	NA	NA
x	x	**U095**	LDR-nonwastewater	3,3'-Dimethylbenzidine	119-93-7	CMBST	CMBST	NA	NA	NA
x	x	**U096**	LDR-nonwastewater	alpha, alpha-Dimethyl benzyl hydroperoxide	80-15-9	CHOXD, CHRED; or CMBST	CHOXD, CHRED; or CMBST	NA	NA	NA
x	x	**U097**	LDR-nonwastewater	Dimethylcarbamoyl chloride	79-44-7	CMBST	CMBST	NA	NA	NA
x	x	**U098**	LDR-nonwastewater	1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U099**	LDR-nonwastewater	1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U101**	LDR-nonwastewater	2,4-Dimethyl phenol	105-67-9	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U102**	LDR-nonwastewater	Dimethyl phthalate	131-11-3	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U103**	LDR-nonwastewater	Dimethyl sulfate	77-78-1	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U105**	LDR-nonwastewater	2,4-Dinitrotoluene	121-14-2	Determine if waste or residual meets LDR treatment standard	140 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**U106**	LDR-nonwastewater	2,6-Dinitrotoluene	606-20-2	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U107**	LDR-nonwastewater	Di-n-octyl phthalate	117-84-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U108**	LDR-nonwastewater	1,4-Dioxane	123-91-1	CMBST	CMBST	NA	NA	NA
x	x		LDR-nonwastewater	1,4-Dioxane, alternate	123-91-1	Determine if waste or residual meets LDR treatment standard	170 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015, 8260, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U109**	LDR-nonwastewater	1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U110**	LDR-nonwastewater	Dipropylamine	142-84-7	CMBST	CMBST	NA	NA	NA
x	x	**U111**	LDR-nonwastewater	Di-n-propylnitrosamine	621-64-7	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U112**	LDR-nonwastewater	Ethyl acetate	141-78-6	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U113**	LDR-nonwastewater	Ethyl acrylate	140-88-5	CMBST	CMBST	NA	NA	NA
x	x	**U114**	LDR-nonwastewater	Ethylenebisdithiocarbamic acid	111-54-6	CMBST	CMBST	NA	NA	NA
x	x	**U115**	LDR-nonwastewater	Ethylene oxide	75-21-8	CHOXD; or CMBST	CHOXD; or CMBST	NA	NA	NA
x	x	**U116**	LDR-nonwastewater	Ethylene thiourea	96-45-7	CMBST	CMBST	NA	NA	NA
x	x	**U117**	LDR-nonwastewater	Ethyl ether	60-29-7	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U118**	LDR-nonwastewater	Ethyl methacrylate	97-63-2	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U119**	LDR-nonwastewater	Ethyl methane sulfonate	62-50-0	CMBST	CMBST	NA	NA	NA
x	x	**U120**	LDR-nonwastewater	Fluoranthene	206-44-0	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U121**	LDR-nonwastewater	Trichlorofluoromethane	75-69-4	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U122**	LDR-nonwastewater	Formaldehyde	50-00-0	CMBST	CMBST	NA	NA	NA
x	x	**U123**	LDR-nonwastewater	Formic acid	64-18-6	CMBST	CMBST	NA	NA	NA
x	x	**U124**	LDR-nonwastewater	Furan	110-00-9	CMBST	CMBST	NA	NA	NA
x	x	**U125**	LDR-nonwastewater	Furfural	98-01-1	CMBST	CMBST	NA	NA	NA
x	x	**U126**	LDR-nonwastewater	Glycidylaldehyde	765-34-4	CMBST	CMBST	NA	NA	NA
x	x	**U127**	LDR-nonwastewater	Hexachlorobenzene	118-74-1	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U128**	LDR-nonwastewater	Hexachlorobutadiene	87-68-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U129**	LDR-nonwastewater	alpha-BHC	319-84-6	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	beta-BHC	319-85-7	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	delta-BHC	319-86-8	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	gamma-BHC (Lindane)	58-89-9	Determine if waste or residual meets LDR treatment standard	0.066 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U130**	LDR-nonwastewater	Hexachlorocyclopentadiene	77-47-4	Determine if waste or residual meets LDR treatment standard	2.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U131**	LDR-nonwastewater	Hexachloroethane	67-72-1	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U132**	LDR-nonwastewater	Hexachlorophene	70-30-4	CMBST	CMBST	NA	NA	NA
x	x	**U133**	LDR-nonwastewater	Hydrazine	302-01-2	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U134**	LDR-nonwastewater	Hydrogen Fluoride	7664-39-3	ADGAS fb NEUTR; or NEUTR	ADGAS fb NEUTR; or NEUTR	NA	NA	NA
x	x	**U135**	LDR-nonwastewater	Hydrogen Sulfide	7783-06-4	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**U136**	LDR-nonwastewater	Arsenic	7440-38-2	Determine if waste or residual meets LDR treatment standard	5.0 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U137**	LDR-nonwastewater	Indeno(1,2,3-c,d)pyrene	193-39-5	Determine if waste or residual meets LDR treatment standard	3.4 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U138**	LDR-nonwastewater	Iodomethane	74-88-4	Determine if waste or residual meets LDR treatment standard	65 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U140**	LDR-nonwastewater	Isobutyl alcohol	78-83-1	Determine if waste or residual meets LDR treatment standard	170 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U141**	LDR-nonwastewater	Isosafrole	120-58-1	Determine if waste or residual meets LDR treatment standard	2.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U142**	LDR-nonwastewater	Kepone	143-50-8	Determine if waste or residual meets LDR treatment standard	0.13 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U143**	LDR-nonwastewater	Lasiocarpine	303-34-4	CMBST	CMBST	NA	NA	NA
x	x	**U144**	LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U145**	LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U146**	LDR-nonwastewater	Lead	7439-92-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U147**	LDR-nonwastewater	Maleic anhydride	108-31-6	CMBST	CMBST	NA	NA	NA
x	x	**U148**	LDR-nonwastewater	Maleic hydrazide	123-33-1	CMBST	CMBST	NA	NA	NA
x	x	**U149**	LDR-nonwastewater	Malononitrile	109-77-3	CMBST	CMBST	NA	NA	NA
x	x	**U150**	LDR-nonwastewater	Malphalan	148-82-3	CMBST	CMBST	NA	NA	NA
x	x	**U151(mercury nonwastewaters that container greater than or equal to 260 mg/kg total mercury)**	LDR-nonwastewater	Mercury	7439-97-6	RMERC	RMERC	NA	NA	NA
x	x	**U151(mercury nonwastewaters that container less than 260 mg/kg total mercury and that are residues from RMERC only)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.20 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U151(mercury nonwastewaters that container less than 260 mg/kg total mercury and that are not residues from RMERC)**	LDR-nonwastewater	Mercury	7439-97-6	Determine if waste or residual meets LDR treatment standard	0.025 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 7470, 7473	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U151(all U151 mercury wastewaters)**	LDR-nonwastewater	Mercury	7439-97-6	NA	NA	NA	NA	NA
x	x	**U151(Elemental mercury contaminated with radioactive materials)**	LDR-nonwastewater	Mercury	7439-97-6	AMLGM	AMLGM	NA	NA	NA
x	x	**U152**	LDR-nonwastewater	Methacrylonitrile	126-98-7	Determine if waste or residual meets LDR treatment standard	84 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U153**	LDR-nonwastewater	Methanethiol	74-93-1	CMBST	CMBST	NA	NA	NA
x	x	**U154**	LDR-nonwastewater	Methanol	67-56-1	CMBST	CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Methanol; alternate set of standards for both wastewaters and nonwastewaters	67-56-1	Determine if waste or residual meets LDR treatment standard	0.75 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U155**	LDR-nonwastewater	Methapyrilene	91-80-5	Determine if waste or residual meets LDR treatment standard	1.5 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U156**	LDR-nonwastewater	Methyl chlorocarbonate	79-22-1	CMBST	CMBST	NA	NA	NA
x	x	**U157**	LDR-nonwastewater	3-Methylcholanthrene	56-49-5	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U158**	LDR-nonwastewater	4,4'-Methylene bis(2-chloroaniline)	101-14-4	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U159**	LDR-nonwastewater	Methyl ethyl ketone	78-93-3	Determine if waste or residual meets LDR treatment standard	36 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U160**	LDR-nonwastewater	Methyl ethyl ketone peroxide	1338-23-4	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U161**	LDR-nonwastewater	Methyl isobutyl ketone	108-10-1	Determine if waste or residual meets LDR treatment standard	33 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U162**	LDR-nonwastewater	Methyl methacrylate	80-62-6	Determine if waste or residual meets LDR treatment standard	160 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment

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MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**U163**	LDR-nonwastewater	N-Methyl N′-nitro N-nitrosoguanidine	70-25-7	CMBST	CMBST	NA	NA	NA
x	x	**U164**	LDR-nonwastewater	N-Methyl N′-nitro N-nitrosoguanidine	70-25-7	CMBST	CMBST	NA	NA	NA
x	x	**U165**	LDR-nonwastewater	Naphthalene	91-20-3	Determine if waste or residual meets LDR treatment standard	5.6 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U166**	LDR-nonwastewater	1,4-Naphthoquinone	130-15-4	CMBST	CMBST	NA	NA	NA
x	x	**U167**	LDR-nonwastewater	1-Naphthylamine	134-32-7	CMBST	CMBST	NA	NA	NA
x	x	**U168**	LDR-nonwastewater	2-Naphthylamine	91-59-8	CMBST	CMBST	NA	NA	NA
x	x	**U169**	LDR-nonwastewater	Nitrobenzene	98-95-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U170**	LDR-nonwastewater	p-Nitrophenol	100-02-7	Determine if waste or residual meets LDR treatment standard	29 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U171**	LDR-nonwastewater	2-Nitropropane	79-46-9	CMBST	CMBST	NA	NA	NA
x	x	**U172**	LDR-nonwastewater	N-Nitrosodi-n-butylamine	924-16-3	Determine if waste or residual meets LDR treatment standard	17 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U173**	LDR-nonwastewater	N-Nitrosodiethanolamine	1116-54-7	CMBST	CMBST	NA	NA	NA
x	x	**U174**	LDR-nonwastewater	N-Nitrosodiethylamine	55-18-5	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U176**	LDR-nonwastewater	N-Nitroso-N-ethylurea	759-73-9	CMBST	CMBST	NA	NA	NA
x	x	**U177**	LDR-nonwastewater	N-Nitroso-N-methylurea	684-93-5	CMBST	CMBST	NA	NA	NA
x	x	**U178**	LDR-nonwastewater	N-Nitroso-N-methylurethane	615-53-2	CMBST	CMBST	NA	NA	NA
x	x	**U179**	LDR-nonwastewater	N-Nitrosopiperidine	100-75-4	Determine if waste or residual meets LDR treatment standard	35 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U180**	LDR-nonwastewater	N-Nitrosopyrrolidine	930-55-2	Determine if waste or residual meets LDR treatment standard	35 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U181**	LDR-nonwastewater	5-Nitro-o-toluidine	99-55-8	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U182**	LDR-nonwastewater	Paraldehyde	123-63-7	CMBST	CMBST	NA	NA	NA
x	x	**U183**	LDR-nonwastewater	Pentachlorobenzene	608-93-5	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U184**	LDR-nonwastewater	Pentachloroethane	76-01-7	CMBST	CMBST	NA	NA	NA
x	x		LDR-nonwastewater	Pentachloroethane; alternate standards for both wastewaters and nonwastewaters	76-01-7	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U185**	LDR-nonwastewater	Pentachloronitrobenzene	82-68-8	Determine if waste or residual meets LDR treatment standard	4.8 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U186**	LDR-nonwastewater	1,3-Pentadiene	504-60-9	CMBST	CMBST	NA	NA	NA
x	x	**U187**	LDR-nonwastewater	Phenacetin	62-44-2	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U188**	LDR-nonwastewater	Phenol	108-95-2	Determine if waste or residual meets LDR treatment standard	6.2 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270, 8041	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U189**	LDR-nonwastewater	Phosphorus sulfide	1314-80-3	CHOXd; CHRED; or CMBST	CHOXd; CHRED; or CMBST	NA	NA	NA
x	x	**U190**	LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	Determine if waste or residual meets LDR treatment standard	28 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U191**	LDR-nonwastewater	2-Picoline	109-06-8	CMBST	CMBST	NA	NA	NA
x	x	**U192**	LDR-nonwastewater	Pronamide	23950-58-5	Determine if waste or residual meets LDR treatment standard	1.5 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U193**	LDR-nonwastewater	1,3-Propane sultone	1120-71-4	CMBST	CMBST	NA	NA	NA
x	x	**U194**	LDR-nonwastewater	n-Propylamine	107-10-8	CMBST	CMBST	NA	NA	NA
x	x	**U196**	LDR-nonwastewater	Pyridine	110-86-1	Determine if waste or residual meets LDR treatment standard	16 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW 846 8015, 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U197**	LDR-nonwastewater	p-Benzoquinone	106-51-4	CMBST	CMBST	NA	NA	NA
x	x	**U200**	LDR-nonwastewater	Reserpine	50-55-5	CMBST	CMBST	NA	NA	NA
x	x	**U201**	LDR-nonwastewater	Resorcinol	108-46-3	CMBST	CMBST	NA	NA	NA

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x	x	**U203**	LDR-nonwastewater	Safrole	94-59-7	Determine if waste or residual meets LDR treatment standard	22 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U204**	LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U205**	LDR-nonwastewater	Selenium	7782-49-2	Determine if waste or residual meets LDR treatment standard	5.7 mg/L TCLP	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 1311, 3015, 6010	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U206**	LDR-nonwastewater	Streptozotocin	18883-66-4	CMBST	CMBST	NA	NA	NA
x	x	**U207**	LDR-nonwastewater	1,2,4,5-Tetrachlorobenzene	95-94-3	Determine if waste or residual meets LDR treatment standard	14 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U208**	LDR-nonwastewater	1,1,1,2-Tetrachloroethane	630-20-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U209**	LDR-nonwastewater	1,1,2,2-Tetrachloroethane	79-34-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U210**	LDR-nonwastewater	Tetrachloroethylene	127-18-4	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U211**	LDR-nonwastewater	Carbon tetrachloride	56-23-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U213**	LDR-nonwastewater	Tetrahydrofuran	109-99-9	CMBST	CMBST	NA	NA	NA
x	x	**U214**	LDR-nonwastewater	Thallium (measured in wastewaters only)	7440-28-0	RTHRM; or STABL	RTHRM; or STABL	NA	NA	NA
x	x	**U215**	LDR-nonwastewater	Thallium (measured in wastewaters only)	7440-28-0	RTHRM; or STABL	RTHRM; or STABL	NA	NA	NA
x	x	**U216**	LDR-nonwastewater	Thallium (measured in wastewaters only)	7440-28-0	RTHRM; or STABL	RTHRM; or STABL	NA	NA	NA
x	x	**U217**	LDR-nonwastewater	Thallium (measured in wastewaters only)	7440-28-0	RTHRM; or STABL	RTHRM; or STABL	NA	NA	NA
x	x	**U218**	LDR-nonwastewater	Thioacetamide	62-55-5	CMBST	CMBST	NA	NA	NA
x	x	**U219**	LDR-nonwastewater	Thiourea	62-56-6	CMBST	CMBST	NA	NA	NA
x	x	**U220**	LDR-nonwastewater	Toluene	108-88-3	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U221**	LDR-nonwastewater	Toluenediamine	25376-45-8	CMBST	CMBST	NA	NA	NA
x	x	**U222**	LDR-nonwastewater	o-Toluidine hydrochloride	636-21-5	CMBST	CMBST	NA	NA	NA
x	x	**U223**	LDR-nonwastewater	Toluene diisocyanate	26471-62-5	CMBST	CMBST	NA	NA	NA
x	x	**U225**	LDR-nonwastewater	Bromoform (Tribromomethane)	75-25-2	Determine if waste or residual meets LDR treatment standard	15 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U226**	LDR-nonwastewater	1,1,1-Trichloroethane	71-55-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U227**	LDR-nonwastewater	1,1,2-Trichloroethane	79-00-5	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U228**	LDR-nonwastewater	Trichloroethylene	79-01-6	Determine if waste or residual meets LDR treatment standard	6.0 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U234**	LDR-nonwastewater	1,3,5-Trinitrobenzene	99-35-4	CMBST	CMBST	NA	NA	NA
x	x	**U235**	LDR-nonwastewater	tris-(2,3-Dibromopropyl)-phosphate	126-72-7	Determine if waste or residual meets LDR treatment standard	0.1 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U236**	LDR-nonwastewater	Trypan Blue	72-57-1	CMBST	CMBST	NA	NA	NA
x	x	**U237**	LDR-nonwastewater	Uracil mustard	66-75-1	CMBST	CMBST	NA	NA	NA
x	x	**U238**	LDR-nonwastewater	Urethane (Ethyl carbamate)	51-79-6	CMBST	CMBST	NA	NA	NA
x	x	**U239**	LDR-nonwastewater	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 5035,5030, 8260	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U240**	LDR-nonwastewater	2,4-D(2,4-Dichlorophenoxyacetic acid)	94-75-7	Determine if waste or residual meets LDR treatment standard	10 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8151	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x		LDR-nonwastewater	2,4-D (2,4-Dichlorophenoxyacetic acid) salts and esters	NA	CMBST	CMBST	NA	NA	NA
x	x	**U243**	LDR-nonwastewater	Hexachloropropylene	1888-71-7	Determine if waste or residual meets LDR treatment standard	30 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550,8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U244**	LDR-nonwastewater	Thiram	137-26-8	CMBST	CMBST	NA	NA	NA
x	x	**U246**	LDR-nonwastewater	Cyanogen bromide	506-68-3	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST	NA	NA	NA

Table D.3 Land Disposal Restriction Verification

- Table reflects concentrations and/or technologies that must be met prior to land disposal in a subtitle C landfill. Subtitle D landfill disposal will require decharacterization.
- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**U247**	LDR-nonwastewater	Methoxychlor	72-43-5	Determine if waste or residual meets LDR treatment standard	0.18 mg/kg	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8081	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U248**	LDR-nonwastewater	Warfarin	81-81-2	CMBST	CMBST	NA	NA	NA
x	x	**U249**	LDR-nonwastewater	Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST	NA	NA	NA
x	x	**U271**	LDR-nonwastewater	Benomyl	17804-35-2	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U278**	LDR-nonwastewater	Bendiocarb	22781-23-3	CMBST	0.14 mg/kg or CMBST	NA	NA	NA
x	x	**U279**	LDR-nonwastewater	Carbaryl	63-25-2	Determine if waste or residual meets LDR treatment standard	0.14 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 3550, 8270	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U280**	LDR-nonwastewater	Barban	101-27-9	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U328**	LDR-nonwastewater	o-Toluidine	95-53-4	CMBST	CMBST	NA	NA	NA
x	x	**U353**	LDR-nonwastewater	p-Toluidine	106-49-0	CMBST	CMBST	NA	NA	NA
x	x	**U359**	LDR-nonwastewater	2-Ethoxyethanol	110-80-5	CMBST	CMBST	NA	NA	NA
x	x	**U364**	LDR-nonwastewater	Bendiocarb phenol	22961-82-6	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U367**	LDR-nonwastewater	Carbofuran phenol	1563-38-8	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U372**	LDR-nonwastewater	Carbendazim	10605-21-7	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U373**	LDR-nonwastewater	Propham	122-42-9	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U387**	LDR-nonwastewater	Prosulfocarb	52888-80-9	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U389**	LDR-nonwastewater	Triallate	2303-17-5	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U394**	LDR-nonwastewater	A2213	30558-43-1	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U395**	LDR-nonwastewater	Diethylene glycol, dicarbamate	5952-26-1	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U404**	LDR-nonwastewater	Triethylamine	121-44-8	Determine if waste or residual meets LDR treatment standard	1.5 mg/kg or CMBST	Treatment Tanks –scoop, trowel, or trier. Single random grab per tank	SW-846 8015	Every tank when waste code has been identified as applicable and property/constituent is subject to treatment
x	x	**U409**	LDR-nonwastewater	Thiophanate-methyl	23564-05-8	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U410**	LDR-nonwastewater	Thiodicarb	59669-26-0	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**U411**	LDR-nonwastewater	Propoxur	114-26-1	CMBST	1.4 mg/kg or CMBST	NA	NA	NA
x	x	**001U**	NA	Actinomycin D	50-76-0	NA	NA	NA	NA	NA
x	x	**002U**	NA	Allyl Chloride	107-05-1	NA	NA	NA	NA	NA
x	x	**003U**	NA	2-aminoanthraquinone	117-79-3	NA	NA	NA	NA	NA
x	x	**004U**	NA	Aminoazobenzene	60-09-3	NA	NA	NA	NA	NA
x	x	**005U**	NA	O-aminoazotoluene	97-56-3	NA	NA	NA	NA	NA
x	x	**007U**	NA	3-amino-9-ethyl carbazole	132-32-1	NA	NA	NA	NA	NA
x	x	**011U**	NA	o-Anisidine (2-methoxyaniline)	90-04-0	NA	NA	NA	NA	NA
x	x	**012U**	NA	o-Anisidine hydrochloride	134-29-2	NA	NA	NA	NA	NA
x	x	**014U**	NA	Antimycin A	1397-94-0	NA	NA	NA	NA	NA
x	x	**020U**	NA	Bromoxynil	1689-84-5	NA	NA	NA	NA	NA
x	x	**023U**	NA	Captan	133-06-2	NA	NA	NA	NA	NA
x	x	**027U**	NA	Carbophenothion	786-19-6	NA	NA	NA	NA	NA
x	x	**029U**	NA	Chloropyrifos	2921-88-2	NA	NA	NA	NA	NA
x	x	**032U**	NA	Chlorine gas	7782-50-5	NA	NA	NA	NA	NA
x	x	**033U**	NA	2-Chloroethanol	107-07-3	NA	NA	NA	NA	NA
x	x	**036U**	NA	4-chloro-m-phenylenediamine	5131-60-2	NA	NA	NA	NA	NA
x	x	**038U**	NA	Chloroprene	126-99-8	NA	NA	NA	NA	NA
x	x	**040U**	NA	Clonitralid	1420-04-8	NA	NA	NA	NA	NA
x	x	**042U**	NA	Coumaphos	56-72-4	NA	NA	NA	NA	NA

Table D.3 Land Disposal Restriction Verification

- Table reflects concentrations and/or technologies that must be met prior to land disposal in a subtitle C landfill. Subtitle D landfill disposal will require decharacterization.
- Alternative treatment standards may change rationale requirements, see narrative in A2.D2(f) for details on the Alternative LDR treatment standards for contaminated soil.
- Alternative methods may be required on a case by case basis in order to properly analyze the waste .
- Constituents identified in 40CFR268.40 are tested as specified in the table when they are identified as a underlying hazardous constituent.
- Performance-based standards require execution of the technology as specified. Where sampling indicates NA execution of the technology is determined during pre-approval and no additional testing is required.

MDI	WDI	Waste Code (prior to treatment)	Waste form as generated (LDR nonwastewater)	Parameter	CAS#	Rationale	Treatment Standard	Sampling Method	Analytical Method	Frequency
x	x	**046U**	NA	Cycloheximide	66-81-9	NA	NA	NA	NA	NA
x	x	**051U**	NA	Diazinon	333-41-5	NA	NA	NA	NA	NA
x	x	**052U**	NA	Dichlone	117-80-6	NA	NA	NA	NA	NA
x	x	**054U**	NA	Dichlorvos	62-73-7	NA	NA	NA	NA	NA
x	x	**056U**	NA	Diethyl sulfate	64-67-5	NA	NA	NA	NA	NA
x	x	**057U**	NA	Dinocap	39300-45-3	NA	NA	NA	NA	NA
x	x	**061U**	NA	Ethion	563-12-2	NA	NA	NA	NA	NA
x	x	**068U**	NA	Hexamethyl phosphoramide	680-31-9	NA	NA	NA	NA	NA
x	x	**070U**	NA	Hydroquinone	123-31-9	NA	NA	NA	NA	NA
x	x	**073U**	NA	Isonicotinic acid hydrazide	54-85-3	NA	NA	NA	NA	NA
x	x	**074U**	NA	Ketene	463-51-4	NA	NA	NA	NA	NA
x	x	**075U**	NA	Lactonitril	78-97-7	NA	NA	NA	NA	NA
x	x	**076U**	NA	Leptophos	21609-90-5	NA	NA	NA	NA	NA
x	x	**078U**	NA	Malachite green	569-64-2	NA	NA	NA	NA	NA
x	x	**079U**	NA	Malathion	121-75-5	NA	NA	NA	NA	NA
x	x	**086U**	NA	1-Methylnaphthalene	90-12-0	NA	NA	NA	NA	NA
x	x	**094U**	NA	Naled	300-76-5	NA	NA	NA	NA	NA
x	x	**097U**	NA	Niridazole	61-57-4	NA	NA	NA	NA	NA
x	x	**098U**	NA	Nithiazide	139-94-6	NA	NA	NA	NA	NA
x	x	**100U**	NA	Nitro-o-anisidine	99-59-2	NA	NA	NA	NA	NA
x	x	**104U**	NA	Nitrogen mustard	51-75-2	NA	NA	NA	NA	NA
x	x	**106U**	NA	p-Nitrosodiphenylamine	156-10-5	NA	NA	NA	NA	NA
x	x	**108U**	NA	N-nitroso-N-phenylhydroxylamine, ammonium salt	135-20-6	NA	NA	NA	NA	NA
x	x	**110U**	NA	Oxydemeton-methyl	301-12-2	NA	NA	NA	NA	NA
x	x	**111U**	NA	Paraquat dichloride	1910-42-5	NA	NA	NA	NA	NA
x	x	**112U**	NA	Peroxyacetic acid	79-21-0	NA	NA	NA	NA	NA
x	x	**113U**	NA	Phenazopyridine hydrochloride	136-40-3	NA	NA	NA	NA	NA
x	x	**115U**	NA	Phenobarbitol	50-06-6	NA	NA	NA	NA	NA
x	x	**116U**	NA	Phenytoin	57-41-0	NA	NA	NA	NA	NA
x	x	**117U**	NA	Phenytoin sodium	630-93-3	NA	NA	NA	NA	NA
x	x	**118U**	NA	Phosazetim	4014-14-7	NA	NA	NA	NA	NA
x	x	**119U**	NA	Phosmet	732-11-6	NA	NA	NA	NA	NA
x	x	**124U**	NA	Propiolactone	57-57-8	NA	NA	NA	NA	NA
x	x	**127U**	NA	Propylthiouracil	51-52-5	NA	NA	NA	NA	NA
x	x	**128U**	NA	Rotenone	83-749-4	NA	NA	NA	NA	NA
x	x	**129U**	NA	Semicarbazide	57-56-7	NA	NA	NA	NA	NA
x	x	**131U**	NA	Styrene	100-42-5	NA	NA	NA	NA	NA
x	x	**136U**	NA	Terbufos	13071-79-9	NA	NA	NA	NA	NA
x	x	**138U**	NA	4,4'-Thiodianiline	139-65-1	NA	NA	NA	NA	NA
x	x	**142U**	NA	Trifluralin	1582-09-8	NA	NA	NA	NA	NA
x	x	**143U**	NA	2,4,5-Trimethylaniline	137-17-7	NA	NA	NA	NA	NA
x	x	**150U**	NA	p-chlorophenol	106-48-9	NA	NA	NA	NA	NA

A2.E LANDFILLED WASTES (WDI)

[R 99.9504(1)(c) and 40 CFR §§264.13(c)(3) and 264.314]

This section outlines additional requirements specific to landfilled waste.

A2.E.1 CONTAINERIZED OR BULK WASTES

Prior to landfilling, waste is inspected for the presence of free liquids. For waste to be approved into the landfill, the generator has certified that the waste does not contain free liquids. This certification may be relied upon unless there is visual evidence that contradicts this certification. If there is visual evidence of free liquids, a sample of the waste that appears to contain free liquids may be analyzed by the Paint Filter Liquids Test, Method 9095 in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA Publication No. SW-846 in which case the waste may only be landfilled as-is if the sample passes the test. Alternatively, in lieu of a test, it may be conservatively assumed to fail a Paint Filter Liquids Test in which case the waste may not be landfilled as-is.

A2.E.2 PROCEDURES TO DETERMINE ADDITION OF BIODEGRADABLE SORBENT

The presence of biodegradable sorbents is identified during the pre-approval process. Generators that have identified the presence of biodegradable sorbent in their waste are not permitted to be directly disposed of in the landfill until the waste is stabilized with non-biodegradable sorbent. MDWTP/WDI do not add biodegradable sorbents to any on-site generated waste.

A2.E.3 WASTE SHIPPED TO SUBTITLE C FACILITIES

[R 299.9627 and 40 CFR §§268.7(a) and 268.7(b)(6)]

For prohibited waste or waste treatment residues that will be further managed at a Subtitle C (hazardous waste management) facility, the facility will submit notifications and certifications in compliance with the requirements applicable to generators under R 299.9627 and 40 CFR §268.7(a) and (b)(6).

A2.E.4 WASTE SHIPPED TO SUBTITLE D FACILITIES

[R 299.9627 and 40 CFR §§268.7(d) and 268.9(d)]

The facility may ship treated RCRA hazardous waste to a permitted non-hazardous waste landfill if it is decharacterized and meets all applicable LDR treatment standards (including UHCs). Listed hazardous wastes that meet the criteria established in 40 CFR 261.3(g) may also be sent to a non-hazardous waste landfill. Hazardous debris that has been treated using the destruction or extraction method of treatment, described in 40 CFR 268.45 may be disposed in a non-hazardous waste landfill.

The facility will submit a one-time notification and certification for characteristic wastes, or listed wastes that are listed only because they exhibit a characteristic, that have been treated to remove the hazardous characteristic and are no longer considered hazardous. The certification and all treatment records will be placed in the facility's file. The notification and certification will be updated if the process or operation generating the waste changes and/or if the Subtitle D facility receiving the waste changes.

A2.E.5 RECYCLABLE MATERIALS

[R 299.9627 and 40 CFR §268.7(b)(7)]

For wastes that are recyclable materials used in a manner constituting disposal, in accordance with R 299.9206 and 40 CFR §266.20(b), the facility will submit a notice and certification to the Director, or delegated representative, with each shipment of waste describing the waste and applicable treatment

standards and identifying the facility receiving the waste. Recyclable materials may be stored and transshipped from MDWTP.

Materials from offsite sources that are beneficially reused by MDWTP for waste treatment (e.g., kiln dust, ferrous sulfate) alter the physical and/or chemical properties of the original materials such that the originally received material no longer exists and therefore does not qualify as land application. Thus, such beneficially reused materials qualify as recycling and are not subject to RCRA waste management requirements.

A2.F NOTIFICATION, CERTIFICATION AND RECORDKEEPING REQUIREMENTS

[R 299.9627 and R 299.9609 and 40 CFR §§264.73, 268.7, and 268.9(d)]

This section is intended to document the notification and recordkeeping requirements associated with land disposal restrictions and the operating record as it relates to the WAP.

A2.F.1 RETENTION OF GENERATOR NOTICES AND CERTIFICATIONS

[R 299.9627 and 40 CFR §268.7(a)(7)]

MDWTP/WDI will retain a copy of all notices, certifications, demonstrations, data, and other documentation associated with LDR compliance as described in A2.F.6.

The following notices and certifications submitted by the initial generator of the waste will be reviewed and maintained:

- Notices of prohibited wastes not meeting treatment standards or exceeding levels specified in RCRA §3004(d), including the information listed in R 299.9627 and 40 CFR §268.7(a)(1). Notices of prohibited wastes meeting applicable treatment standards and prohibition levels, including the information in R 299.9627 and 40 CFR §268.7(a)(2).

A2.F.2 NOTIFICATION AND CERTIFICATION REQUIREMENTS FOR TREATMENT FACILITIES

[R 299.9627, 299.9608 and 40 CFR §268.7(b), 40 CFR 264.71]

The treatment facility will submit a notice and certification to the land disposal facility with each shipment of prohibited waste or treatment residue of a prohibited waste. The notice will include the information specified in R 299.9627 and 40 CFR §§268.7(b)(4) and 268.7(b)(5).

If the waste or treatment residue will be further managed at a different treatment or storage facility, the facility will comply with the notice and certification requirements applicable to generators as specified in R 299.9627 and 40 CFR §268.7(b)(6).

A2.F.3 RECORD KEEPING

[R 299.9608(4), R 299.9609, R 299.9610(3), and R 299.9627 and 40 CFR §§264.72, 264.73, 268.7(a)(5), 268.7(a)(6), 268(a)(7), and 268.7(d)]

MDWTP/WDI maintain a facility operating log in accordance with R 299.9609 and 40 CFR §264.73. Copies of all necessary notifications and certifications, as well as relevant inspection forms and monitoring data, are also maintained on file in hard copy form or electronically at the facility. The operating log is maintained as follows:

Maintained in the operating log in hard copy or electronic format for three years unless specified otherwise:

- Off-site manifest or shipping paper, as well as the original foreign movement document
- Records and results of waste analyses and waste determinations performed for waste characterization and LDR compliance.
- Summary reports and details of all incidents that require implementing the contingency plan.
- For off-site facilities, notices to generators.
- Records and results of inspections required by Attachment A5 Inspection Schedule.
- Waste minimization certification.

- LDR generator notices and TSDF certifications and demonstration (which will also document treatment failures that have occurred), including notices of exclusion from the definition of hazardous waste, solid waste, or Subtitle C regulation required by 40 CFR 268.7.
- On-site generated waste LDR notice and certification and demonstration.
- Monitoring, testing or analytical data, and corrective action required as a result of a release.
- Foreign source notice
- Manifest discrepancy notifications

Items kept in hard copy or electronic format until the closure of the facility include:

- A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal.
- For each day that waste is placed into the WDI landfill, a record showing the coordinates within which waste was placed.
- Ground water cleanup, monitoring, testing or analytical data, and corrective action required as a result of a release.
- Closure cost/postclosure cost estimate.
- Certifications of major changes to a tank system.

A2.F.4 REQUIRED NOTICE

[R 299.9605(1) and 40 CFR §264.12(a) and (b))]

When the facility is to receive hazardous waste from an off-site source, the facility will inform the generator in writing that the facility has the appropriate license for and will accept the waste the generator is shipping. The facility will keep a copy of this written notice in the operating record as described in A2.C.6.

Hazardous waste from a foreign source Subject to 40 CFR 262, Subpart H must submit the following notices:

- A copy of the movement document bearing all required signatures within 3 working days of receipt of the shipment to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit shipment of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system
- Waste imported from a foreign source where the competent authority of the country of export does not require the foreign exporter to submit to it a notification proposing export and obtain consent from EPA and the competent authorities for the countries of transit, such owner or operator of the facility, if acting as the importer, must provide notification of the proposed transboundary movement in English to EPA at least 60 days before the first shipment departs the country of export. The notification may cover up to one year of shipments of wastes having similar physical and chemical characteristics, the same United Nations classification, the same RCRA waste codes and OECD waste codes, and being sent from the same foreign exporter.

APPENDIX A ACCEPTABLE HAZARDOUS WASTE CODES

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
1	D001
2	D002
3	D003
4	D004
5	D005
6	D006
7	D007
8	D008
9	D009
10	D010
11	D011
12	D012
13	D013
14	D014
15	D015
16	D016
17	D017
18	D018
19	D019
20	D020
21	D021
22	D022
23	D023
24	D024
25	D025
26	D026
27	D027
28	D028
29	D029
30	D030
31	D031
32	D032
33	D033
34	D034
35	D035
36	D036
37	D037
38	D038
39	D039
40	D040
41	D041
42	D042
43	D043
44	F001
45	F002
46	F003
47	F004

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
48	F005
49	F006
50	F007
51	F008
52	F009
53	F010
54	F011
55	F012
56	F019
57	F020
58	F021
59	F022
60	F023
61	F024
62	F025
63	F026
64	F027
65	F028
66	F032
67	F034
68	F035
69	F037
70	F038
71	F039
72	K001
73	K002
74	K003
75	K004
76	K005
77	K006
78	K007
79	K008
80	K009
81	K010
82	K011
83	K013
84	K014
85	K015
86	K016
87	K017
88	K018
89	K019
90	K020
91	K021
92	K022
93	K023
94	K024

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
95	K025
96	K026
97	K027
98	K028
99	K029
100	K030
101	K031
102	K032
103	K033
104	K034
105	K035
106	K036
107	K037
108	K038
109	K039
110	K040
111	K041
112	K042
113	K043
114	K044
115	K045
116	K046
117	K047
118	K048
119	K049
120	K050
121	K051
122	K052
123	K060
124	K061
125	K062
126	K064
127	K065
128	K066
129	K069
130	K071
131	K073
132	K083
133	K084
134	K085
135	K086
136	K087
137	K088
140	K093
141	K094
142	K095
143	K096

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
144	K097
145	K098
146	K100
147	K101
148	K102
149	K103
150	K104
151	K105
152	K106
153	K107
154	K108
155	K109
156	K110
157	K111
158	K112
159	K113
160	K114
161	K115
162	K116
163	K117
164	K118
165	K123
166	K124
167	K125
168	K126
169	K131
170	K132
171	K136
172	K141
173	K142
174	K143
175	K144
176	K145
177	K147
178	K148
179	K149
180	K150
181	K151
182	K156
183	K157
184	K158
185	K159
186	K160
187	K161
188	K169
189	K170
190	K171

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
191	K172
192	K174
193	K175
194	K176
195	K177
196	K178
197	K181
198	P001
199	P002
200	P003
201	P004
202	P005
203	P006
204	P007
205	P008
206	P009
207	P010
208	P011
209	P012
210	P013
211	P014
212	P015
213	P016
214	P017
215	P018
216	P020
217	P021
218	P022
219	P023
220	P024
221	P026
222	P027
223	P028
224	P029
225	P030
226	P031
227	P033
228	P034
229	P036
230	P037
231	P038
232	P039
233	P040
234	P041
235	P042
236	P043
237	P044

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
238	P045
239	P046
240	P047
241	P048
242	P049
243	P050
244	P051
245	P054
246	P056
247	P057
248	P058
249	P059
250	P060
251	P062
252	P063
253	P064
254	P065
255	P066
256	P067
257	P068
258	P069
259	P070
260	P071
261	P072
262	P073
263	P074
264	P075
265	P076
266	P077
267	P078
268	P081
269	P082
270	P084
271	P085
272	P087
273	P088
274	P089
275	P092
276	P093
277	P094
278	P095
279	P096
280	P097
281	P098
282	P099
283	P101
284	P102

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
285	P103
286	P104
287	P105
288	P106
289	P108
290	P109
291	P110
292	P111
293	P112
294	P113
295	P114
296	P115
297	P116
298	P118
299	P119
300	P120
301	P121
302	P122
303	P123
304	P127
305	P128
306	P185
307	P188
308	P189
309	P190
310	P191
311	P192
312	P194
313	P196
314	P197
315	P198
316	P199
317	P201
318	P202
319	P203
320	P204
321	P205
322	U001
323	U002
324	U003
325	U004
326	U005
327	U006
328	U007
329	U008
330	U009
331	U010

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
332	U011
333	U012
334	U014
335	U015
336	U016
337	U017
338	U018
339	U019
340	U020
341	U021
342	U022
343	U023
344	U024
345	U025
346	U026
347	U027
348	U028
349	U029
350	U030
351	U031
352	U032
353	U033
354	U034
355	U035
356	U036
357	U037
358	U038
359	U039
360	U041
361	U042
362	U043
363	U044
364	U045
365	U046
366	U047
367	U048
368	U049
369	U050
370	U051
371	U052
372	U053
373	U055
374	U056
375	U057
376	U058
377	U059
378	U060

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
379	U061
380	U062
381	U063
382	U064
383	U066
384	U067
385	U068
386	U069
387	U070
388	U071
389	U072
390	U073
391	U074
392	U075
393	U076
394	U077
395	U078
396	U079
397	U080
398	U081
399	U082
400	U083
401	U084
402	U085
403	U086
404	U087
405	U088
406	U089
407	U090
408	U091
409	U092
410	U093
411	U094
412	U095
413	U096
414	U097
415	U098
416	U099
417	U101
418	U102
419	U103
420	U105
421	U106
422	U107
423	U108
424	U109
425	U110

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
426	U111
427	U112
428	U113
429	U114
430	U115
431	U116
432	U117
433	U118
434	U119
435	U120
436	U121
437	U122
438	U123
439	U124
440	U125
441	U126
442	U127
443	U128
444	U129
445	U130
446	U131
447	U132
448	U133
449	U134
450	U135
451	U136
452	U137
453	U138
454	U140
455	U141
456	U142
457	U143
458	U144
459	U145
460	U146
461	U147
462	U148
463	U149
464	U150
465	U151
466	U152
467	U153
468	U154
469	U155
470	U156
471	U157
472	U158

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
473	U159
474	U160
475	U161
476	U162
477	U163
478	U164
479	U165
480	U166
481	U167
482	U168
483	U169
484	U170
485	U171
486	U172
487	U173
488	U174
489	U176
490	U177
491	U178
492	U179
493	U180
494	U181
495	U182
496	U183
497	U184
498	U185
499	U186
500	U187
501	U188
502	U189
503	U190
504	U191
505	U192
506	U193
507	U194
508	U196
509	U197
510	U200
511	U201
513	U203
514	U204
515	U205
516	U206
517	U207
518	U208
519	U209
520	U210

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
521	U211
522	U213
523	U214
524	U215
525	U216
526	U217
527	U218
528	U219
529	U220
530	U221
531	U222
532	U223
533	U225
534	U226
535	U227
536	U228
537	U234
538	U235
539	U236
540	U237
541	U238
542	U239
543	U240
544	U243
545	U244
546	U246
547	U247
548	U248
549	U249
550	U271
552	U278
553	U279
554	U280
555	U328
556	U353
557	U359
558	U364
561	U367
562	U372
563	U373
575	U387
576	U389
581	U394
582	U395
588	U404
590	U409
591	U410

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
592	U411
593	001S
594	002S
595	003S
596	004S
597	005S
598	006S
599	007S
602	001U
603	002U
604	003U
605	004U
606	005U
608	007U
611	011U
612	012U
614	014U
618	020U
621	023U
624	027U
626	029U
629	032U
630	033U
632	036U
634	038U
635	040U
637	042U
640	046U
645	051U
646	052U
647	054U
649	056U
650	057U
653	061U
657	068U
658	070U
661	073U
662	074U
663	075U
664	076U
666	078U
667	079U
671	086U
677	094U
680	097U
681	098U
683	100U

DESCRIPTION OF HAZARDOUS WASTES
MICHIGAN DISPOSAL WASTE TREATMENT PLANT
MID 000724831

LINE NO.	EPA HAZARDOUS WASTECODE
687	104U
688	106U
689	108U
690	110U
691	111U
692	112U
693	113U
695	115U
696	116U
697	117U
698	118U
699	119U
703	124U
704	127U
705	128U
706	129U
707	131U
711	136U
713	138U
717	142U
718	143U
723	150U
724	151U
727	154U
732	160U
737	165U
	169U
	170U
	171U
	175U

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
1	D001[R]
2	D002
3	D003[R]
4	D004
5	D005
6	D006
7	D007
8	D008
9	D009
10	D010
11	D011
12	D012
13	D013
14	D014
15	D015
16	D016
17	D017
18	D018
19	D019
20	D020
21	D021
22	D022
23	D023
24	D024
25	D025
26	D026
27	D027
28	D028
29	D029
30	D030
31	D031
32	D032
33	D033
34	D034
35	D035
36	D036
37	D037
38	D038
39	D039
40	D040
41	D041
42	D042
43	D043
44	F001
45	F002
46	F003
47	F004

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
48	F005
49	F006
50	F007
51	F008
52	F009
53	F010
54	F011
55	F012
56	F019
57	F020
58	F021
59	F022
60	F023
61	F024
62	F025
63	F026
64	F027
65	F028
66	F032
67	F034
68	F035
69	F037
70	F038
71	F039
72	K001
73	K002
74	K003
75	K004
76	K005
77	K006
78	K007
79	K008
80	K009
81	K010
82	K011
83	K013
84	K014
85	K015
86	K016
87	K017
88	K018
89	K019
90	K020
91	K021
92	K022
93	K023
94	K024

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
95	K025
96	K026
97	K027[R]
98	K028
99	K029
100	K030
101	K031
102	K032
103	K033
104	K034
105	K035
106	K036
107	K037
108	K038
109	K039
110	K040
111	K041
112	K042
113	K043
114	K044[R]
115	K045[R]
116	K046
117	K047[R]
118	K048
119	K049
120	K050
121	K051
122	K052
123	K060
124	K061
125	K062
126	K069
127	K071
128	K073
129	K083
130	K084
131	K085
132	K086
133	K087
134	K088
137	K093
138	K094
139	K095
140	K096
141	K097
142	K098

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
143	K099
144	K100
145	K101
146	K102
147	K103
148	K104
149	K105
150	K106
151	K107
152	K108
153	K109
154	K110
155	K111
156	K112
157	K113
158	K114
159	K115
160	K116
161	K117
162	K118
163	K123
164	K124
165	K125
166	K126
167	K131
168	K132
169	K136
170	K141
171	K142
172	K143
173	K144
174	K145
175	K147
176	K148
177	K149
178	K150
179	K151
180	K156
181	K157
182	K158
183	K159
184	K161
185	K169
186	K170
187	K171
188	K172
189	K174

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
190	K175
191	K176
192	K177
193	K178
194	K181
195	P001
196	P002
197	P003
198	P004
199	P005
200	P006
201	P007
202	P008
203	P009
204	P010
205	P011
206	P012
207	P013
208	P014
209	P015
210	P016
211	P017
212	P018
213	P020
214	P021
215	P022
216	P023
217	P024
218	P026
219	P027
220	P028
221	P029
222	P030
223	P031
224	P033
225	P034
226	P036
227	P037
228	P038
229	P039
230	P040
231	P041
232	P042
233	P043
234	P044
235	P045
236	P046

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
237	P047
238	P048
239	P049
240	P050
241	P051
242	P054
243	P056
244	P057
245	P058
246	P059
247	P060
248	P062
249	P063
250	P064
251	P065
252	P066
253	P067
254	P068
255	P069
256	P070
257	P071
258	P072
259	P073
260	P074
261	P075
262	P076
263	P077
264	P078
265	P081
266	P082
267	P084
268	P085
269	P087
270	P088
271	P089
272	P092
273	P093
274	P094
275	P095
276	P096
277	P097
278	P098
279	P099
280	P101
281	P102
282	P103
283	P104

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
284	P105
285	P106
286	P108
287	P109
288	P110
289	P111
290	P112
291	P113
292	P114
293	P115
294	P116
295	P118
296	P119
297	P120
298	P121
299	P122
300	P123
301	P127
302	P128
303	P185
304	P188
305	P189
306	P190
307	P191
308	P192
309	P194
310	P196
311	P197
312	P198
313	P199
314	P201
315	P202
316	P203
317	P204
318	P205
319	U001
320	U002
321	U003
322	U004
323	U005
324	U006
325	U007
326	U008
327	U009
328	U010
329	U011
330	U012

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
331	U014
332	U015
333	U016
334	U017
335	U018
336	U019
337	U020
338	U021
339	U022
340	U023
341	U024
342	U025
343	U026
344	U027
345	U028
346	U029
347	U030
348	U031
349	U032
350	U033
351	U034
352	U035
353	U036
354	U037
355	U038
356	U039
357	U041
358	U042
359	U043
360	U044
361	U045
362	U046
363	U047
364	U048
365	U049
366	U050
367	U051
368	U052
369	U053
370	U055
371	U056
372	U057
373	U058
374	U059
375	U060
376	U061
377	U062

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
378	U063
379	U064
380	U066
381	U067
382	U068
383	U069
384	U070
385	U071
386	U072
387	U073
388	U074
389	U075
390	U076
391	U077
392	U078
393	U079
394	U080
395	U081
396	U082
397	U083
398	U084
399	U085
400	U086
401	U087
402	U088
403	U089
404	U090
405	U091
406	U092
407	U093
408	U094
409	U095
410	U096
411	U097
412	U098
413	U099
414	U101
415	U102
416	U103
417	U105
418	U106
419	U107
420	U108
421	U109
422	U110
423	U111
424	U112

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
425	U113
426	U114
427	U115
428	U116
429	U117
430	U118
431	U119
432	U120
433	U121
434	U122
435	U123
436	U124
437	U125
438	U126
439	U127
440	U128
441	U129
442	U130
443	U131
444	U132
445	U133
446	U134
447	U135
448	U136
449	U137
450	U138
451	U140
452	U141
453	U142
454	U143
455	U144
456	U145
457	U146
458	U147
459	U148
460	U149
461	U150
462	U151
463	U152
464	U153
465	U154
466	U155
467	U156
468	U157
469	U158
470	U159
471	U160

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
472	U161
473	U162
474	U163
475	U164
476	U165
477	U166
478	U167
479	U168
480	U169
481	U170
482	U171
483	U172
484	U173
485	U174
486	U176
487	U177
488	U178
489	U179
490	U180
491	U181
492	U182
493	U183
494	U184
495	U185
496	U186
497	U187
498	U188
499	U189
500	U190
501	U191
502	U192
503	U193
504	U194
505	U196
506	U197
507	U200
508	U201
510	U203
511	U204
512	U205
513	U206
514	U207
515	U208
516	U209
517	U210
518	U211
519	U213

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
520	U214
521	U215
522	U216
523	U217
524	U218
525	U219
526	U220
527	U221
528	U222
529	U223
530	U225
531	U226
532	U227
533	U228
534	U234
535	U235
536	U236
537	U237
538	U238
539	U239
540	U240
541	U243
542	U244
543	U246
544	U247
545	U248
546	U249
547	U271
548	U278
549	U279
550	U280
551	U328
552	U353
553	U359
554	U364
555	U367
556	U372
557	U373
558	U387
559	U389
560	U394
561	U395
562	U404
563	U409
564	U410
565	U411
566	001S

[R]Reacted

Description of Hazardous Wastes
Wayne Disposal, Inc., Site # 2
MID 048 090 633

LINE NO.	A. EPA Hazardous Waste Code
567	002S
568	003S
569	004S
570	005S
571	006S
572	007S
575	001U
576	002U
577	003U
578	004U
579	005U
581	007U
584	011U
585	012U
587	014U
591	020U
594	023U
597	027U
599	029U
602	032U
603	033U
605	036U
607	038U
608	040U
610	042U
613	046U
618	051U
619	052U
620	054U
622	056U
623	057U
626	061U
630	068U
631	070U
634	073U
635	074U
636	075U
637	076U
639	078U
640	079U
644	086U
650	094U
653	097U
654	098U
656	100U
660	104U
661	106U

[R]Reacted

LINE NO.	A. EPA Hazardous Waste Code
662	108U
663	110U
664	111U
665	112U
666	113U
668	115U
669	116U
670	117U
671	118U
672	119U
676	124U
677	127U
678	128U
679	129U
680	131U
684	136U
686	138U
690	142U
691	143U
696	150U
697	151U
700	154U
705	160U
710	165U
714	169U
715	170U
716	171U
720	175U
721	PCBs

[R]Reacted

APPENDIX B WAYNE DISPOSAL INC. AND MICHIGAN DISPOSAL WASTE TREATMENT PLANT RADIOLOGICAL WASTE ACCEPTANCE CRITERIA

Wayne Disposal, Inc. (WDI), the Michigan Disposal Waste Treatment Plant (MDWTP), and radioactive material received, processed, and disposed at these sites are regulated under Part 135, Radiation Control, of the Public Health Code, 1978 PA 368, as amended (MCL 333.13501 to 333.13537) and the associated "Ionizing Radiation Rules for Radioactive Material" (IRR).

Radiological waste will be approved and accepted consistent with procedures outlined for all waste in the Waste Analysis Plan.

Michigan Disposal Waste Treatment Plant

MDWTP is authorized to receive material containing radium-226, radium-228, lead-210, and their progeny at any concentration for waste treatment and/or aggregation. MDWTP is also authorized to receive and treat waste meeting at least one of the IRR exemptions below including source material that meets the uranium and thorium criteria in Table 1. MDWTP may not process any exempt devices for treatment.

Wayne Disposal, Inc.

Before placement in the WDI landfill, radiological waste will either meet the limits specified in the following Table 1 or meet an applicable exemption from the IRR.

Table 1 – Michigan Concentration-Specific Landfill Limits

Nuclide	Concentration
Ra-226	50 pCi/g
Pb-210	260 pCi/g
Total combined uranium and thorium*	Less than 500 mg/kg

* Consistent with R 325.5052, "Source material as low percentage of weight" and 10 CFR 40.13, "Unimportant Quantities of Source Material."

Applicable Exemptions from the "Ionizing Radiation Rules"

In instances where the current regulations in Part 10 of the Code of Federal Regulations differ from the IRR, the material must meet both exemption specifications. Administrative modifications of the exemptions provided below may be made without prior approval from the Director if the change is made to reflect a change in the IRR.

R 325.5052 Source material as low percentage of weight.
Rule 52. A person is exempt from this part to the extent that he or she receives, possesses, uses, or transfers source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than 1/20 of 1% (0.05%) of the mixture, compound, solution, or alloy.

R 325.5053 Unprocessed ore containing source material.
Rule 53. A person is exempt from this part to the extent that he or she receives, possesses, uses, or transfers unrefined and unprocessed ore containing source material. However, the person shall not refine or process such ore except as authorized in a specific license.

R 325.5054 Thorium used in certain articles.
Rule 54. A person is exempt from this part to the extent that he or she receives, possesses, uses, or transfers any quantity of thorium contained in the following:
(a) Incandescent gas mantles.
(b) Vacuum tubes.
(c) Welding rods.
(d) Electric lamps for illuminating purposes if each lamp does not contain more than 50 milligrams of thorium.
(e) Germicidal lamps, sunlamps, and lamps for outdoor or industrial lighting if each lamp does not contain more than 2 grams of thorium.
(f) Rare earth metals and compounds, mixtures, and products containing not more than 0.25% by weight thorium, uranium, or any combination of these.

R 325.5055 Source material contained in ceramic and other articles.
Rule 55. A person is exempt from this part to the extent that he or she receives, possesses, uses, or transfers the following:
(a) Source material contained in the following products:
    (i) Glazed ceramic tableware if the glaze contains not more than 20% by weight source material.
    (ii) Glassware, glass enamel, and glass enamel frit containing not more than 10% by weight source material; but not including commercially manufactured glass brick, pane glass, ceramic tile, or other glass, glass enamel, or ceramic used in construction.
    (iii) Piezoelectric ceramic containing not more than 2% by weight source material.
(b) Photographic film, negatives, and prints containing uranium or thorium.
(c) A finished product or part fabricated of, or containing, tungsten-thorium or magnesium/thorium alloys, if the thorium content of the alloy does not exceed 4% by weight. The exemption contained in this paragraph does not authorize the chemical, physical, or metallurgical treatment or processing of any such product or part.

R 325.5058 Thorium contained in lenses.
Rule 58. A person is exempt from this part to the extent that he or she receives, possesses, uses, or transfers thorium contained in finished optical lenses, if each lens does not contain more than 30% by weight of thorium. The exemption in this rule does not authorize either of the following:
(a) The shaping, grinding, or polishing of such lens or manufacturing processes other than the assembly of such lens into optical systems and devices without any alteration of the lens.
(b) The receipt, possession, use, or transfer of thorium contained in contact lenses, in spectacles or in eyepieces in binoculars or other optical instruments.

R 325.5059 Uranium contained in fire detection units.
Rule 59. A person is exempt from this part to the extent that he or she receives, possesses, uses, or transfers uranium contained in detector heads for use in fire detection units, if each detector head contains not more than 5 nanocuries of uranium.

R 325.5060 Thorium contained in aircraft engine parts.
Rule 60. A person is exempt from this part to the extent that he or she receives, possesses, uses, or transfers thorium contained in any finished aircraft engine part containing nickel-thoria alloy, if both of the following conditions are met:
(a) The thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide).
(b) The thorium content in the nickel-thoria alloy does not exceed 4% by weight.

R 325.5065 Exempt concentrations.

Rule 65. Except as provided in Rule 66, a person is exempt from this part to the extent that he or she owns, receives, acquires, possesses, uses, or transfers products or materials containing radioactive material in concentrations not in excess of those listed in Rule 146.

R 325.5067 Items containing tritium, promethium-147, or radium.

Rule 67. Except for persons who apply tritium, promethium-147, or radium to, or persons who incorporate tritium, promethium-147, or radium into, the following products, a person is exempt from these rules to the extent that he or she owns, receives, acquires, possesses, uses, or transfers the following products:

(a) Timepieces or timepiece hands or dials containing not more than the following specified quantities of radioactive material and not exceeding the following specified levels of radiation:
  (i) 25 millicuries of tritium per timepiece.
  (ii) 5 millicuries of tritium per hand.
  (iii) 15 millicuries of tritium per dial; bezels when used shall be considered as part of the dial.
  (iv) 100 microcuries of promethium-147 per watch or 200 microcuries of promethium-147 per any other timepiece.
  (v) 20 microcuries of promethium-147 per watch hand or 40 microcuries of promethium-147 per other timepiece hand.
  (vi) 60 microcuries of promethium-147 per watch dial or 120 microcuries of promethium-147 per other timepiece dial; bezels when used shall be considered as part of the dial.
  (vii) The levels of radiation from hands and dials containing promethium-147 will not exceed, when measured through 50 milligrams per square centimeter of absorber, the following:
    (aa) For wrist watches, 0.1 millirad per hour at 10 centimeters from any surface.
    (bb) For pocket watches, 0.1 millirad per hour at 1 centimeter from any surface.
    (cc) For any other timepiece, 0.2 millirad per hour at 10 centimeters from any surface.

(b) Timepieces or timepiece hands or dials containing not more than the following specified quantities of radium and meeting the following expressed conditions:
  (i) 0.15 microcuries of radium per watch.
  (ii) 0.03 microcuries of radium per watch hand.
  (iii) 0.09 microcuries of radium per watch dial.
  (iv) 0.20 microcuries of radium per clock.
  (v) 0.04 microcuries of radium per clock hand.
  (vi) 0.12 microcuries of radium per clock dial.
  (vii) The timepiece is not a pocket watch.
  (viii) Timepieces or timepiece hands or dials containing radium that were manufactured before the effective date of these rules.
  (ix) The timepiece is marked or coded to identify the date of manufacture and that it contains radium.
  (x) The timepiece emits sufficient luminosity, omitting photoactivation, that its dial can be read in the dark during its entire design lifetime.

(c) Lock illuminators containing not more than 15 millicuries of tritium or not more than 2 millicuries of promethium-147 installed in automobile locks. The levels of radiation from each lock illuminator containing promethium-147 will not exceed 1 millirad per hour at 1 centimeter from any surface when measured through 50 milligrams per square centimeter of absorber.

(d) Precision balances containing not more than 1 millicurie of tritium per balance or not more than 0.5 millicurie of tritium per balance part.

(e) Automobile shift quadrants containing not more than 25 millicuries of tritium.

(f) Marine compasses containing not more than 750 millicuries of tritium gas and other marine navigational instruments containing not more than 250 millicuries of tritium gas.

(g) Thermostat dials and pointers containing not more than 25 millicuries of tritium per thermostat.

(h) Electron tubes, including spark gap tubes, power tubes, gas tubes including glow lamps, receiving tubes, microwave tubes, indicator tubes, pick-up tubes, radiation detection tubes and any other

completely sealed tube that is designed to conduct or control electrical currents, if the level of radiation due to radioactive material contained in each electron tube does not exceed 1 millirad per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber and if each tube does not contain more than 1 of the following specified quantities of radioactive materials:

(i) 150 millicuries of tritium per microwave receiver protector tube or 10 millicuries of tritium per any other electron tube.
(ii) 1 microcurie of cobalt-60.
(iii) 5 microcuries of nickel-63.
(iv) 30 microcuries of krypton-85.
(v) 5 microcuries of cesium-137.
(vi) 30 microcuries of promethium-147.

(i) Ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, a source of radioactive material not exceeding the applicable quantity set forth in Rule 147.

R 325.5071 Resins containing scandium-46 for sand consolidation in oil wells.

Rule 71. A person is exempt from these rules to the extent that he or she owns, receives, acquires, possesses, uses, or transfers synthetic plastic resins containing scandium-46 which are designed for sand consolidation in oil wells if the resins were manufactured or imported in accordance with a specific license issued by the NRC, or were manufactured in accordance with the specifications contained in a specific license issued by the department or an agreement state to the manufacturer of such resins pursuant to licensing requirements equivalent to those in sections 32.16 and 32.17 of 10 CFR Part 32 of the regulations of the NRC. This exemption does not authorize the manufacturer of resins containing scandium-46.

R 325.5072 Gas and aerosol detectors.

Rule 72. Except for persons who manufacture, process, or produce gas and aerosol detectors, a person is exempt from these rules to the extent that he or she owns, receives, acquires, possesses, uses, or transfers the following:

(a) Byproduct material in gas and aerosol detectors designed to protect life or property from fires and airborne hazards, if the detectors containing byproduct material were manufactured, imported, or transferred in accordance with a specific license issued by the NRC pursuant to section 32.26 of 10 CFR Part 32, which license authorizes the transfer of the detectors to persons who are exempt from regulatory requirements.
(b) Naturally occurring material in gas and aerosol detectors designed to protect life or property from fires and airborne hazards, if the detectors containing naturally occurring material were manufactured, imported, or transferred in accordance with a specific license issued by the department or an agreement state pursuant to equivalent conditions as in section 32.26 of 10 CFR Part 32, which license authorizes the transfer of the detectors to persons who are exempt from regulatory requirements.

R 325.5073 Self-luminous products containing tritium, krypton-85, promethium-147, or radium-226.

Rule 73.

(1) Except for a person who manufactures, processes, or produces self-luminous products, a person is exempt from these regulations to the extent that he or she owns, receives, acquires, possesses, uses, or transfers the following:
    (a) Tritium, krypton-85, or promethium-147 in self-luminous products manufactured, processed, imported, or transferred in accordance with a specific license issued by the NRC pursuant to

section 32.22 of 10 CFR Part 32, which license authorizes the transfer of the product to persons who are exempt from regulatory requirements.

(b) Naturally occurring material in self-luminous products manufactured, processed, imported, or transferred in accordance with a specific license issued by the department or an agreement state pursuant to equivalent conditions as in section 32.22 of 10 CFR Part 32.

(2) The exemptions in subrule (1) of this rule do not apply to tritium, krypton-85, promethium-147, or naturally occurring material used in products for frivolous purposes or in toys or adornments.

R 325.5074 Exempt quantities.

Rule 74.

(1) Except as provided in subrules (3) and (4) of this rule, a person is exempt from these rules to the extent that he or she owns, receives, acquires, possesses, uses, or transfers a byproduct, naturally occurring, or accelerator material in individual quantities each of which does not exceed the applicable quantity set forth in Rule 147.

Other Determinations

An item with surface contamination including source material, radium-226, radium-228, and progeny may be disposed if the maximum near-contact gamma exposure rate is less than 40 microroentgens per hour above background. The documentation for each item shall include, at a minimum, the following:

a. Description of the item;
b. The manufacturer, model, and serial number of the meter and probe used;
c. The meter calibration date;
d. The background radiation measurement;
e. All gamma exposure measurements taken on the item;
f. The survey date and location; and
g. The surveyor's name and company.

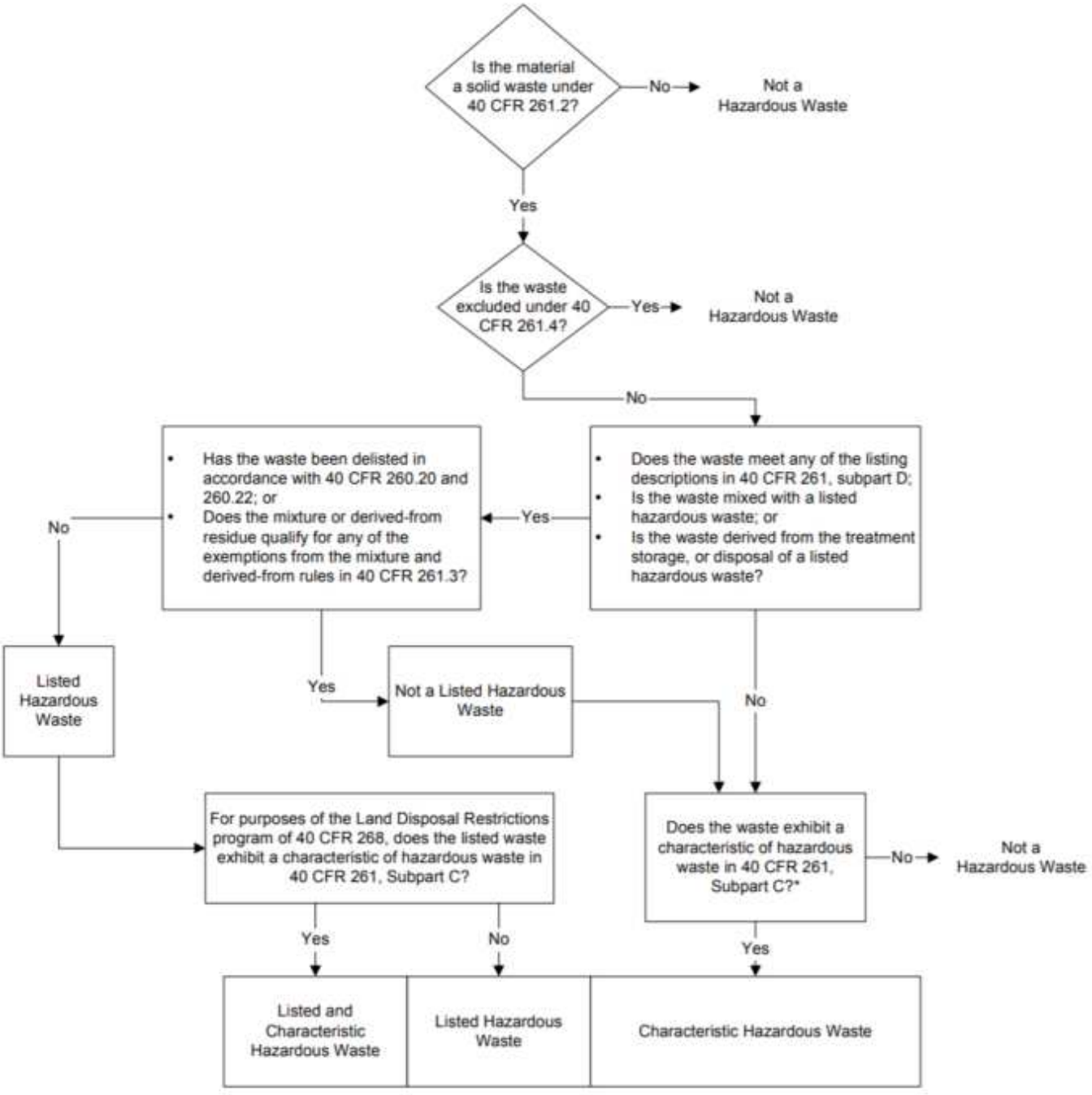
WDI staff shall comply with the requirements of subrule 2 of R 325.5238, "Disposal of Radioactive Material," for disposal of any material not listed above. The subrule reads, in part,

> "A person may apply to the department for approval of proposed procedures to dispose of radioactive material in a manner not otherwise authorized in this part. The application shall include a description of the radioactive material, including the quantities and kinds of radioactive material and the levels of radioactivity involved, and the proposed manner and conditions of disposal."

APPENDIX C HAZARDOUS WASTES IDENTIFICATION

(Tables taken from *Land Disposal Restrictions: Summary of Requirements*, Issued Aug. 2001. EPA-530-R-01-007)

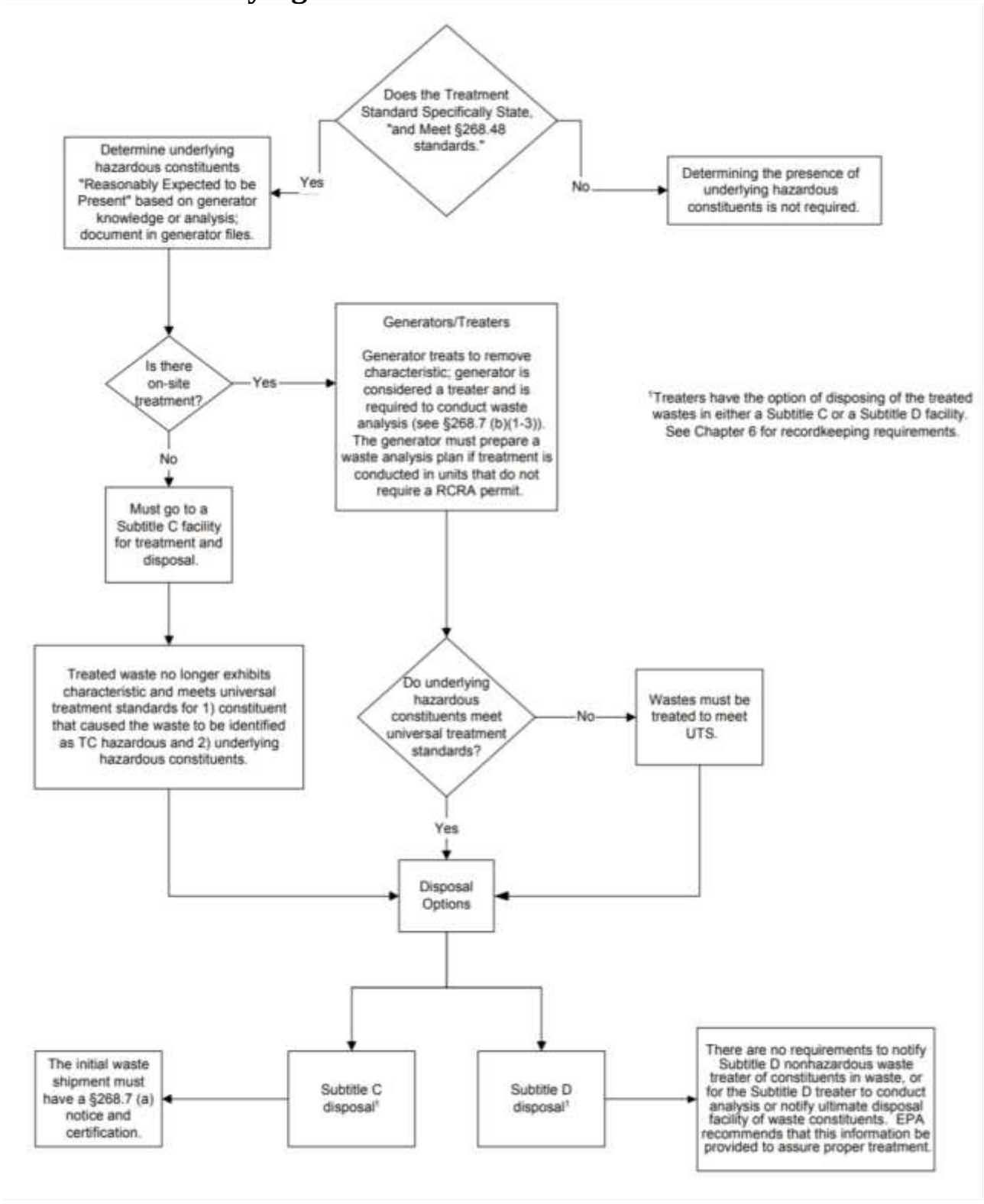
Waste Characterization Determination Flow Chart



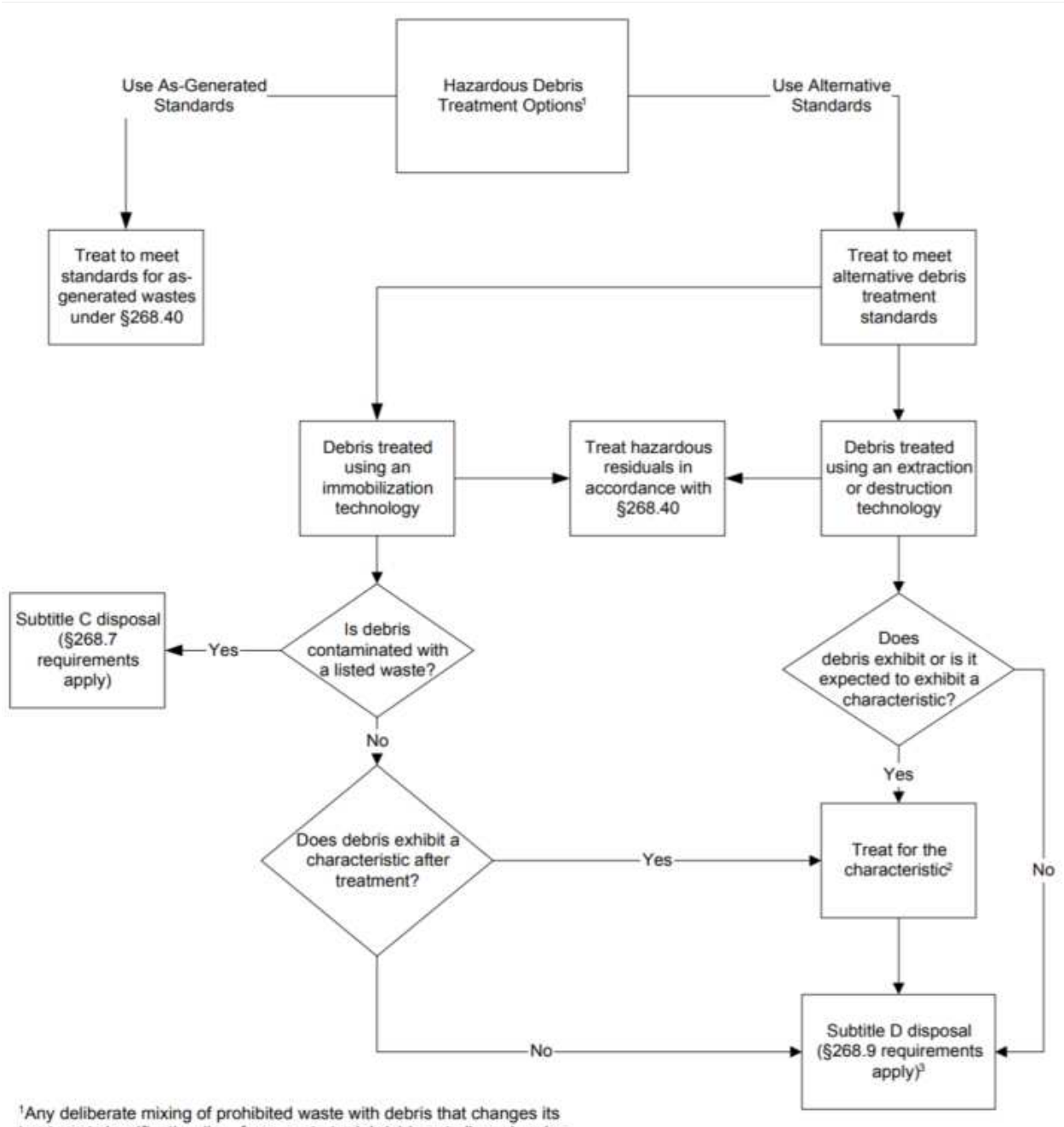
These wastes have passed Step 1 and are subject to the LDR program

*Note exception for mixtures of characteristic wastes and mining/mineral processing wastes in 40 CFR §261.3(a)(2)(i).

Underlying Hazardous Constituent Flow Chart



Alternative Treatment Standards for Debris Flow Chart

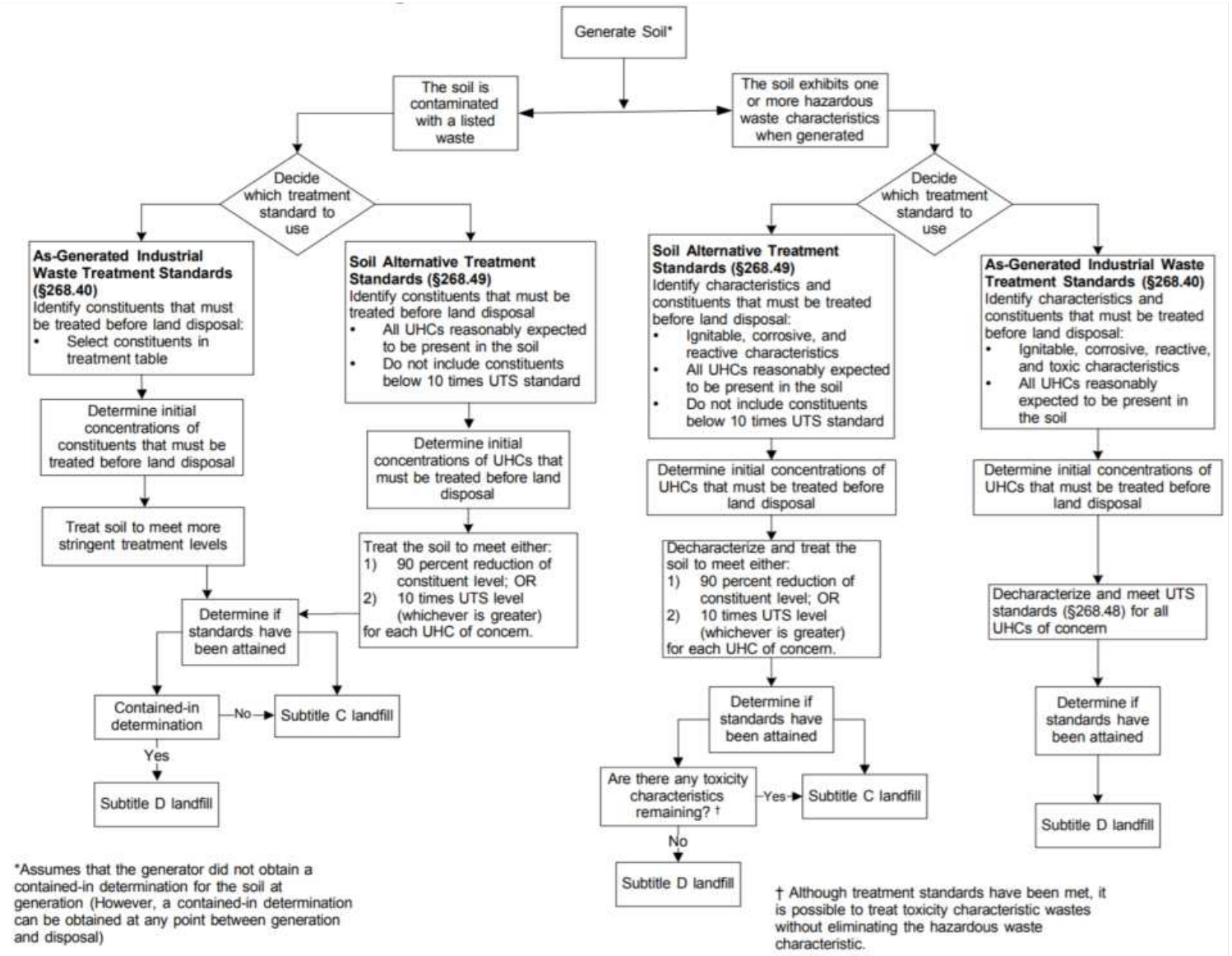


[1]Any deliberate mixing of prohibited waste with debris that changes its treatment classification (i.e., from waste to debris) is not allowed under the dilution prohibition in 40 CFR 268.3.

[2]Treaters have the choice of meeting the treatment standards for as-generated wastes or the alternative treatment standards for debris.

[3]Treaters have the option of disposing of their treated wastes in either a subtitle C or a Subtitle D facility.

Alternative Soil Treatment Standards Flow Chart



APPENDIX D QA/QC PLAN

Michigan Disposal Waste Treatment Plant and Wayne Disposal Inc.
Analytical Laboratory
Quality Assurance Management Plan

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this Quality Assurance Management Plan (QAMP) is to provide a description of US Ecology's Quality Assurance (QA) Program with respect to policies, organization, objectives, functional responsibilities, and procedures designed to ensure that environmental measurement efforts result in valid, defensible data of known quality.

1.2 REFERENCES

US Ecology has modeled its plan along EPA guidelines as presented in Guidelines and Specifications for Preparing Quality Assurance Program Plans, QAMS-004/80, EPA-600/8-83-024, and Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans, QAMS-005/80, EPA-600/4-83-004. These documents have been published by EPA's Office of Monitoring Systems and Quality Assurance, Office of Research and Development. Additional quality control (QC) elements from Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, Compendium and the NELAC Institute (TNI) Standard -2009 have also been incorporated into the plan.

1.3 SCOPE

The QAMP applies to all US Ecology Michigan laboratory employees, and supervisors of laboratory employees, in instances where regulatory defensible quantitative data is required.

2.0 MANAGEMENT REQUIREMENTS

2.1 ROLES AND RESPONSIBILITIES

Director of Operations (or otherwise named): The Director of Operations is responsible for all management issues with the laboratory.

Director of Laboratories-US Ecology: The Director of Laboratories for US Ecology is responsible for regularly auditing laboratories- both internal and external- to ensure compliance with technical procedures, this QAMP, and other best practices.

Technical Services Manager: The Technical Services Manager, in conjunction with the Laboratory Supervisor, is responsible for the implementation of this program. The Laboratory Supervisor will discuss laboratory needs and requirements, and significant corrective actions or changes to operational procedures with the Technical Services Manager.

Laboratory Supervisor: The Laboratory Supervisor oversees daily operations of the laboratory. In addition to supervision of laboratory employees, the lab supervisor ensures reporting of any required metrics and completion of any required audits.

Laboratory Employees: Laboratory employees are responsible for understanding and following this protocol.

3.0 QUALITY SYSTEMS

3.1 QUALITY ASSURANCE POLICY

The objective of US Ecology's Laboratory Quality Management System is to support the management teams' commitment to consistently provide operations with defensible data of known and documented quality that meets all regulatory requirements. Our policy is to always use good professional practices, to maintain quality, to uphold the highest quality standards, and to comply with the relevant aspects of both ISO/IEC 17025:2005(E) and TNI NELAC Standard EL-V1-2009-ISO. US Ecology ensures that all laboratory personnel are free from all commercial, financial, and other undue pressures, which might adversely affect the quality of data. This policy is implemented and enforced through the unequivocal commitment of management, at all levels, to the Quality Assurance (QA) principles and practices outlined in this manual. However, the primary responsibility for quality rests with each individual within the laboratory organization. Every laboratory employee must ensure that the generation and reporting of quality analytical data is their fundamental priority. Every laboratory employee is required to familiarize themselves with the quality documentation and to implement the policies and procedures in their work. All employees are trained annually on ethical principles and procedures surrounding the data that is generated. It is US Ecology's responsibility to its employees to provide all resources and training necessary to support the implementation of the Quality Assurance plan.

3.2 IMPLEMENTATION OF QUALITY ASSURANCE POLICY

- Disseminating the policy throughout the Laboratory
- Establishing a procedure to identify and comply with both the spirit and letter of federal, state, and local environmental laws and regulations which are applicable to the analytical methods performed by US Ecology
- Assigning specific responsibilities and providing assistance to all persons involved in the generation and reporting of analytical data, and
- Establishing a QA program based on clearly defined objectives, well-documented procedures, a comprehensive audit system, and management support

4.0 DOCUMENT CONTROL

4.1 DOCUMENT TYPE

- Standard Operating Procedures (SOP)
- Work Instructions
- Forms
- Communications

4.2 DOCUMENT CONTROL PROCEDURE

Controlled Documents are assigned a unique document control number. The copy available electronically is considered to be the most up to date and complete. Employees must confirm that any printed document has an identical revision date to the electronic version.

4.3 DOCUMENT REVISION

Changes to documents occur periodically to reflect a change in the operational or analytical processes described therein. Entire documents or applicable revisions to documents are trained on at the time the document is controlled. Previous revisions are archived.

5.0 SUBCONTRACTING

When the laboratory subcontracts work, whether because of unforeseen reasons (e.g., workload, need for further expertise or temporary incapacity) or on a continuing basis, this work shall be placed with a laboratory competent of analyzing the parameters of interest. A third-party accreditation agency such as NELAP, A2L2, ISO, etc., is used to substantiate the competency of the subcontracted laboratory. Alternatively, another US Ecology facility operating under the same QA/QC requirements.

6.0 SERVICES, SUPPLIES, AND STANDARDS

When the laboratory procures outside services and supplies in support of tests, they use only those outside support services and supplies that are of adequate quality to sustain confidence in the laboratory's tests. In addition to quality, other factors such as availability of products, speed of delivery, pricing, availability of certificates of analysis, and overall user experience are considered.

Solvents, glassware, reagents, and other supplies are stored onsite in sufficient quantities. Acid and solvent blanks are analyzed as part of the method in which they are used. This confirms that they are free of interferences and are appropriate for the methods.

A critical element in the generation of quality data is the purity/quality and traceability of the standard solutions and reagents used in the analytical operations.

To ensure the highest purity possible, all primary reference standards and standard solutions used by US Ecology are obtained from reliable commercial sources. All standards and standard solutions are recorded in a standard solution log that identifies the vendor, lot number, purity/concentration, preparation date, preparer's name, method of preparation, expiration date, and any other relevant information.

Standard solutions are validated prior to their initial use to verify their acceptability for use as a calibration or QC standard. Validation procedures can range from a check for chromatographic purity to verification of the concentration of the standard, using separate standards prepared at a different time or obtained from a different source. Stock and working standards are checked regularly for signs of deterioration such as discoloration, formation of precipitates, volume changes, or changes in concentration. Care is exercised in the proper storage and handling of standard solutions, and all containers must be labeled so as to maintain traceability to parameter, concentration, solvent, expiration date, and preparation data, including the initials of the preparer and date of preparation.

7.0 RECORDKEEPING

Laboratory reports are stored for retrieval on site either in the active or archival files. Supporting raw data is also stored on site either on respective bench sheets or in electronic files. Records are kept for the duration of site operation plus 3 years following closure in accordance with operating recordkeeping requirements outlined in 40 CFR 264.73.

8.0 AUDITS

8.1 ANNUAL QUALITY SYSTEM AUDIT

The quality system audit provides an evaluation of the adequacy of the overall measurement system to provide data of known quality, which is sufficient to meet the objectives of the QA program.

The systems audit consists of observations and documentation of all aspects of the data generation and reporting process. In addition to evaluating analytical procedures and techniques, the systems audit will emphasize review of all recordkeeping and data handling systems. Calibration documentation, completeness of forms, data review, sample handling, quality control documentation, completion of previous corrective or preventative actions, and training are some of the specifics that may be included.

8.2 DOCUMENT REVIEW/ METHOD COMPLIANCE

At least biennially the laboratory supervisor, or a qualified designee, will review technical procedures to ensure compliance with the referenced methodologies provided in the Chemical and Physical Waste Analysis Plan (WAP). The supervisor or designee will further audit the procedure by checking through records and documentation to ensure the procedure is being carried out as written.

8.3 PERFORMANCE AUDIT

The performance audit represents a quantitative assessment of the measurement data quality. It provides a direct, point-in-time evaluation of the accuracy of the various measurement systems and procedures. This will be accomplished by challenging each system with an accepted reference standard for the parameter of interest.

Blind Performance Evaluation (PE) samples are ordered from a certified PE provider and submitted to each laboratory. Each regulatory parameter is evaluated at least twice per year.

The data generated during the Performance Evaluation is reported to the appropriate certified PE provider. The certified PE provider evaluates the data and submits a Pass/Fail digital report to the Laboratory Supervisor.

The results of the evaluation are subsequently reviewed with the participating areas of the laboratory, the Director of Laboratories-US Ecology, and other management as required. The Corrective Action Process is initiated for failing analytes.

9.0 CORRECTIVE OR PREVENTATIVE ACTION

The QA program provides systematic procedures to implement corrective actions and improve analytical systems. Circumstances that may require a corrective action plan are deficiencies being detected through a system or performance audit, QC data (i.e., blanks, spikes, LCS) being outside the acceptable limits for precision and accuracy, or external inquiries.

9.1 ACTIONS RESULTING FROM SYSTEM OR PERFORMACE AUDIT

The US Ecology Corrective Preventative Action Program will be followed. Generally, the program requires the following: a root cause analysis, a planned corrective action, a timeline for completion, documentation of completion, and verification.

Actions that can be immediately completed and verified by the auditor are not required to be managed in accordance with the US Ecology Corrective and Preventative Action Program.

9.2 BENCH LEVEL CORRECTIVE ACTIONS

Upon data validation, it may be discovered that QC data is outside of laboratory tolerances. Examples may include elevated blanks, poor LCS recovery, poor duplicate precision. In instances where poor analytical accuracy or precision will have regulatory consequences (such as incorrect characterization or verification of treatment below UTS), the data is rejected, and a corrective action is performed. Upon completion of a corrective action, the sample will be reanalyzed.

Corrective action procedures are often handled at the bench level by the analyst who reviews the preparation or extraction procedure for possible errors and checks the instrument calibration, spike and calibration mixes, etc. If the problem persists or cannot be identified, the matter is referred to the Laboratory Supervisor.

9.3 MANAGEMENT OF CHANGE

A management of change procedure will be initiated for new types of instrumentations and whenever a base method is changed, to verify that we are remaining compliant with our permits. Example: Switching from 6010D (metals by ICP) to 7010 (Graphite furnace atomic absorption spectrophotometry).

10.0 PERSONNEL

Refer to part 111 permit for personnel qualifications

10.1 DEMONSTRATIONS OF CAPABILITY

Prior to conducting analysis and reporting results, each chemist is required to perform an Initial Demonstration of Capability for each method that they will be performing. Additionally, anytime there is a significant change to a procedure or a method, a demonstration will be recorded. An annual continuing Demonstration of Capability is required for each chemist performing a method.

Demonstrations of Capabilities can be performed in a number of ways: results of 4 successive Laboratory Control Samples with precision and accuracy meeting or exceeding the method criteria, successful analysis of a blind PT sample or monitoring of QC trends.

10.2 ETHICS POLICY

At US Ecology, we believe in a culture of honesty, trust, and integrity in all business practices. No employee shall knowingly manipulate or falsify data. No employee shall knowingly deviate from the Quality Assurance requirements established for the laboratory. All employees shall make every effort to minimize the generation of waste during sample preparation and analysis and will properly dispose of all

waste following established laboratory practices. US Ecology will make all necessary information available to the employee to perform job responsibilities according to ethical and established practices.

11.0 TEST METHODS

Refer to Table A2.A.2 Pre-Approval/Waste Characterization Analysis Procedures in the Site WAP.

11.1 STANDARD OPERATING PROCEDURES

SOPs are controlled documents (Refer to section 4 above) that are reviewed and audited regularly. Technical procedures describe a specific testing methodology that will result in measurable analytical data. Procedures are updated regularly as they often contain specific information found outside of the test method. Examples may include instrument specific voltages or gas flows not defined by the methods, consumable part numbers, laboratory specific safety procedures, acceptable QC ranges (if more conservative than the test method), and other helpful information that can be of use to the analyst. Nontechnical procedures and work instructions often describe qualitative analytical procedures (such as reactivity testing) or other business functions of the laboratory, such as how to use software.

12.0 EQUIPMENT AND CALIBRATION

12.1 EQUIPMENT OPERATION

The laboratory maintains instrumentation capable of performing analysis within the required QC specifications of the test method. Documentation of instrument usage and maintenance is found in the electronic logbooks.

12.2 MAINTENANCE

A schedule is established for all routine maintenance activities. Other maintenance activities may also be identified as requiring attention on an as-needed basis. Manufacturer's recommendations provide the primary basis for the established maintenance schedules and manufacturer's service contracts provide primary maintenance for major instruments. Maintenance activities are documented in a log, which indicates the required frequency for each procedure and provides for dated entries.

12.3 SPARE PARTS

Along with a schedule for maintenance activities, an adequate inventory of spare parts is maintained to minimize equipment downtime. This inventory emphasizes those parts and supplies which:

a) Are subject to frequent failure

b) Have limited useful lifetimes

c) Cannot be obtained in a timely manner should failure occur

For major pieces of capital equipment, service contracts may be maintained in lieu of a spare parts inventory.

12.4 CALIBRATION

Calibration of an analytical system involves quantification of the system response to an accepted reference standard for the analyte of interest. The calibration procedures and standards used directly influence the validity of the resulting measurement data. Most standard analytical methods specify calibration procedures and requirements. Detailed calibration procedures are described in standard operating procedures that are maintained at the facility.

12.5 GLASSWARE CLEANING

In the analysis of samples containing components in the parts per million or billion ranges, the preparation of scrupulously clean glassware is necessary. Failure to do so can lead to a myriad of problems in the interpretation of the final data due to the presence of extraneous contamination. The basic cleaning steps may include a combination of the following: removal of surface residuals immediately after use with water, alcohol, or solvent; hot tap water soak or rinse to loosen and float most particulate material; hot tap water rinse to flush away floated particulate soak with an oxidizing agent/detergent to destroy traces of organic compounds; dilute acid rinse to remove detergent for inorganic glassware; DI water rinse to remove metallic deposits from the tap water; alcohol rinse or oven dry to eliminate any final traces of contaminants if the glassware is for organic analysis; flush the item immediately before use with some of the same solvent that will be used if the glassware is for organic analysis.

Alternative cleaning procedures can be used if analyses of blanks reflect the removal of contamination.

13.0 MEASUREMENT TRACEABILITY

13.1 GENERAL

Traceability shall be assured using documentation, calibration, and analysis of reference standards. Laboratory equipment should be checked regularly for accuracy or should have a certificate of accuracy or traceability. Balances, thermometers, DI water systems, timers, and volumetric dispensers are all included (Exceptions are class A glassware and glass microliter syringes with a certificate of accuracy). Whenever possible, standards or equipment are traceable to a NIST source.

13.2 REFERENCE STANDARDS AND REAGENTS

Refer to section 6.0.

14.0 HANDLING OF SAMPLES

Samples must be collected in such a manner that no foreign material is introduced into the sample and no parameters of interest are lost from the sample prior to analysis. To ensure sample integrity, items such as appropriateness of containers, cleanliness of containers, any required preservation to minimize loss of target parameters, and adequate sample volume should all be considered.

Samples must be properly labeled, sealed, and accompanied by the appropriate chain-of-custody documentation when necessary.

Chains of custody will contain unique sample identifiers, sampling dates, sampling times, sampler's unique initialing or signature, and the laboratory sample custodian's unique initialing or signature to effectively document the collection, transport, and receipt of samples by the laboratory.

14.1 SAMPLE CONTAINERS

Sample containers and storage procedures must be consistent with the chemical and physical properties of the parameters to be analyzed. It must be demonstrated that these do not alter the composition of the sample in a way that would affect the concentration of the target analyte being determined. Special storage and transportation requirements such as refrigeration and protection from light must be specified. Glass jars with PTFE lined lids are used for organic parameters and polyethylene containers are used for inorganic parameters.

14.2 HOLDING TIMES

The U.S. Environmental Protection Agency (EPA) has established holding time requirements for certain determinations. These holding time requirements differ depending on the specific regulatory program. US Ecology follows the holding times specified in SW-846 Compendium.

1. Per method 1311: Inorganic/Metals must be extracted within 180 days of the sampling date and analyzed within 360 days, except mercury which must be extracted in 28 days and analyzed within 56 days.
2. Per method 9014: Cyanide analyses must be completed within fourteen days of the sampling date.
3. Per Chapter 4: Volatile organic analyses must be completed within fourteen days of the sampling date.
4. Per chapter 4: Semi-volatile organic extractions must be completed within fourteen days of the sampling date. Analysis of the extracts must be completed within forty days.

On occasion, a sample must be reanalyzed to comply with the requirements of this QA Program Plan. If this situation is necessitated by a laboratory problem, such as a sample lost through spillage or the improper execution of an analytical procedure, the re-preparation and/or analysis of the sample must occur within the prescribed holding time.

14.3 RECEIPT OF SAMPLES

All samples are received by designated sample custodians. At the time of sample receipt, the custodian's general responsibilities may include the following: ensuring proper storage of the samples until analysis is initiated, inspecting and documenting the physical condition of the sample, reviewing the sample label information for completeness and agreement with the Batch Log or Chain-of Custody forms, and/or labeling the sample with tracking number information if needed

14.4 SAMPLE MANAGEMENT

Personnel are responsible for the internal custody procedures associated with the transfer of the samples to the appropriate analytical groups for preparation and/or analysis and their subsequent return to the Sample Control refrigerator. Samples are expected to be returned to the Sample Control Refrigerator as soon as possible following sample preparation. A batch ticket and unique identification number is used to ensure the proper handling, storage, and preservation of all treatment samples received by the laboratory. The laboratory personnel are also responsible for the final disposition of the samples after completion of the analyses.

As an additional custody measure, access to US Ecology's laboratory is restricted to prevent any unauthorized contact with samples, extracts, or documentation.

14.5 SAMPLE DISPOSAL

Laboratory samples are disposed in accordance with all pertinent Federal, State, and Local regulations. Routinely, samples are disposed of by transferring them to the plant processing storage areas where the samples are then processed through waste treatment operations.

APPENDIX E FACILITY DEVELOPED PROCEDURES

WAP SAMPLING PROCEDURES

Sampling of Containers

Coliwasas, drum thieves, scoops, augers, and triers are examples of the devices used to sample containers. The horizontal location in which the waste is sampled is at the discretion of the sampler based on visual observations. The vertical depth of the sample is limited by the sampling equipment utilized and the physical properties of the waste. Samplers visually observe the contents of the container and reasonably assess homogeneity and heterogeneity of the physical properties of the waste. Samplers will obtain a random grab sample from visually homogeneous waste. For visually heterogeneous waste, to the extent possible, samples are collected of differing materials. If the materials cannot be reasonably sampled or if safety concerns impeded the sampler's ability to obtain a sample, the sampler will use reasonable judgement to selectively collect samples of materials expected to exhibit worst case properties of the waste. The contents of the sampling device are then transferred to a polyethylene or glass bottle that is labeled with waste identification information.

Coliwasas, thieves, or dippers are used to collect liquids (or liquids with precipitated solids). A corer, trier, auger, or scooping device is used to sample containers that are solid in nature. The sample collector removes a sample that uniformly represents the waste composition of the container (i.e., all layers and phases are represented in the sample)

Sampling of Bulk Material

Bulk sampling requires samplers to be on a safe and stable platform that allows them to maneuver sampling equipment without risk of falls. The bulk solids are large containers such as roll-off boxes, vacuum boxes, or dump trailers. Container openings are dependent on the container type. Samplers visually observe the contents of the container and reasonably assess homogeneity and heterogeneity of the physical properties of the waste. Samplers will obtain a random grab sample form visually homogeneous waste. For visually heterogeneous waste, to the extent possible samples are collected of differing materials. If the materials cannot be reasonably sampled or if safety concerns impede the sampler's ability to obtain a sample, the sampler will use reasonable judgement to selectively collect samples of materials expected to exhibit worst case properties of the waste.

The elevation in which bulk samples are taken creates challenges in accessing waste in bulk containers. Bulk liquids are sampled using a Coliwasa or similar device that can sample vertical anomalies. When possible, augers and triers are used with solids to draw a sample from as deep as safe access allows. When access is impeded, scoops are collected.

Debris

Debris is sampled as much as possible; however, not all wastes are amenable to sampling. If sizing of the sampled debris is possible, sampler utilizes non-sparking, cutting hand tools capable of cutting through the waste to collect a sample. A container of debris often contains a wide variety of materials. For example, it may contain spill absorbent, Tyvek suits, rubber booties, gloves, and paper towels. Sampler judgement would target the spill absorbent material as it is expected to exhibit the worst-case properties of the waste.

In virtually all situations, debris that cannot be reasonably sampled has one thing in common: non-hazardous materials are contaminated with very small to trace amounts of hazardous constituents present on the waste surface or absorbed into the waste.

Sampling Equipment Use

Coliwasa (Composite liquid Waste Sampler): The sampling device is inserted into the container from the top and is pushed down slowly as far into the container as possible. The device is sealed to retain the contents. Usually consists of two sections. The outer section is a sleeve that may be tapered at the end. The inner section is a rod with some type of stopper on the end. When the inner section is fitted inside the outer section, a seal is formed, and the unit is locked. There are variations in the mechanisms of opening and closing coliwasas. They can be used to obtain samples of liquids from specific depths. To use the coliwasa, first place it in the open position. Next, lower it slowly into the liquid, keeping it vertical at all times and making sure that the levels of the liquid inside and outside the sampler tube remain about the same. The coliwassa is placed as far into the waste as can safely be done considering the surface and elevation in which sampling is being performed. When the unit touches the bottom of the container or the reached the desired depth, close the coliwasa. Remove the sampler from the liquid with one hand, while wiping the outer tube with a disposable cloth or rag with the other hand. Open the coliwasa over the sample container and place the liquid inside.

Auger: An auger samples hard or packed solid materials or soil. It consists of sharpened spiral blades attached to a hard metal central shaft. The sample is collected by rotating the handle of the auger in a clockwise direction while applying slight downward pressure. Continue turning until the desired depth has been reached. Pull the auger straight up out of the material, then remove the material that has been withdrawn in the screw head of the auger and place it in the sample container.

***Thief*:** This device consists of an open-ended tube. To extract a sample, slowly lower the thief into the liquid, keeping it vertical at all times, as far into the waste as can safely be done considering the surface and elevation in which sampling is being performed. Place your thumb, or a stopper, over the top to create a vacuum. This will hold the sample in the tube while it is removed from the container. Use caution, as this form of vacuum does not always hold the sample in place. Place the thief over the appropriate container and release the vacuum by removing your thumb or the stopper. A thief should be used for liquids, slurries, and sludges.

***Auger*:** An auger samples hard or packed solid materials. It consists of sharpened spiral blades attached to a hard metal central shaft. The sample is collected by rotating the handle of the auger in a clockwise direction while applying slight downward pressure. Continue turning until the desired depth has been reached. Pull the auger straight up out of the material, then remove the material that has been withdrawn in the screw head of the auger and place it in the sample container.

***Trier*:** A trier is used to sample waste physical consistency like a soil or similar fine-grained cohesive material. It consists of a handle and a tube cut in half lengthwise, with a sharpened tip that allows the sampler to cut into sticky materials and loosen solids. To extract a sample, hold the trier either horizontally or with the handle end tilted slightly downward. Insert the trier into the material to be sampled and cut a core of the material by rotating the trier once or twice. Stop the rotation with the open face pointing upward. Finally, slowly remove the trier and empty the contents into the sampling container.

***Dipper/Cup*:** A dipper samples single-phased liquids or sludges. It consists of a glass, metal, or plastic beaker clamped to the end of a two- or three-piece telescoping aluminum or fiberglass pole that serves as a handle. Samples are taken at, or just below, the surface. To extract a sample, submerge the dipper into the material slowly, to cause a minimum surface disturbance. Allow the beaker to fill and slowly bring it to the surface. Finally, slowly pour the contents into the sample container.

***Scoop*:** Primarily used for collecting samples in areas near or at the surface of the waste. The scoop will have an extension to assist the sampler in collecting a sample. The sample cup is placed into a metal ring which will hold it into place. Scoops are used specifically for the collection of surfaces and near surface samples and should only be utilized when other sampling options are not feasible.

INTERNAL ANALYTICAL PROCEDURES

pH screen: The pH of the material will be measured using wide range pH paper (mentioned in SW846 9041) on a single aliquot of waste Sample. Only a droplet of waste is required for this test procedure. On a daily basis, the wide range pH paper being used will be verified by ensuring the appropriate color change when subjecting the paper to acidic, neutral, or caustic liquids. Liquids will be in the form of known aqueous acids or caustics (such as hydrochloric acid or sodium hydroxide solutions) or in the form of pH calibration buffers.

Ignitability Screen: An approximate volume of 5 mL of waste will be exposed to direct contact with a flame for 5 seconds. For discrepant waste or unknown material, a smaller sample should first be attempted. Test should be performed behind a fume hood sash.

Radiation screen: Gamma scintillation counter or handheld dose rate meter will be used to detect radioactivity in waste. Instruments will be checked daily by using sealed radiological sources and confirmed to be in working condition. The daily background will be documented. Upon receipt of bulk load or waste sample, waste will be surveyed and compared to daily recorded background. A measurement >3x the background established will be considered a waste discrepancy if the waste is not already profiled as containing radioactivity.

Cyanide Screen: All measurements are approximate. All reagents are as prepared in SW846 9014.
A color check standard will be performed daily using a 10 ppm standard. Slurry 1 gram or 1mL of waste with DI water up to 5mL. Add 2 mL of 1.0M Sodium Phosphate Monobasic buffer solution. Add 0.5mL of 0.44% chloramine- T solution. Wait one minute and add 1mL of Pyridine- Barbituric acid solution. If the solution changes color to violet within 5 minutes, the test is considered a positive.

Sulfide Screen: Add approximately 5mL of waste to a to a polyethylene container. Dilute to approximately 20mL with deionized water and mix by gentle agitation of the cup. Moisten lead acetate paper with water and stick paper to the bottom side of the lid. A few drops of sulfuric acid will be added such that the pH of the contents in the cup are <2. The lid will be placed over the cup and sealed for 1 minute. Results are compared to a control lead acetate paper from testing a10ppm standard of sulfide.

Reactivity with Water: Approximately ten milliliters (mls) or equal volume of waste (dry waste is wetted with a small amount of deionized water)) is mixed rapidly with approximately ten mL DI water. Samples are monitored for reactions for a minimum of 5 minutes.

Reactivity with Stabilization or solidification reagent: Approximately ten milliliters (mls) or equal volume of waste (dry waste is wetted with a small amount of deionized water) is mixed rapidly with approximately ten CC dry stabilization or solidification reagent. Samples are monitored for reactions for a minimum of 5 minutes.

Reactivity with bleach: Approximately ten milliliters (mls) or equal volume of waste (dry waste is wetted with a small amount of deionized water)) is mixed rapidly with approximately 10mL bleach. Samples are monitored for reactions for a minimum of 5 minutes.

Reactivity with caustic: Approximately ten milliliters (mls) or equal volume of waste (dry waste is wetted with a small amount of deionized water)) is mixed rapidly with approximately 10mL of 20% NaOH solution. Samples are monitored for reactions for a minimum of 5 minutes.

Reactivity with acid: Approximately ten milliliters (mls) or equal volume of waste (dry waste is wetted with a small amount of deionized water)) is mixed rapidly with approximately ten mL 20% hydrochloric acid. Samples are monitored for reactions for a minimum of 5 minutes.

PCB Screening: PCB screening test is a semi-qualitative screening method. This screening procedure is to confirm PCBs are not present in the incidental liquids at a concentration greater than 500 ppm. The screening method utilizes a gas chromatograph with appropriate column and ECD detector. Prior to analysis, a 1ppm aroclor standard is analyzed to confirm the instrument is in working condition (gasses are flowing, column is functional, injection port is clean). This standard may rotate between several common aroclors 1260, 1254, 1242, etc. If there are considerable amounts of solids/particulate in the liquid portion, the sample is centrifuged. The centrifuged sample will be evaluated for phase separation in the liquid layer. If multiple layers are present each individual layer will be analyzed separately. The aqueous sample or supernatant from the centrifuged sample (5 mL) is then placed into a vial and surrogates (SW846 8082 method recommended surrogates (decachlorobipheynyl and tetrachloro-m-xylene) are used is added. The sample with surrogate is then extracted in a 1:1 ratio with hexane. If surrogate shows adequate recoveries, the area counts of the sample are compared to those of the 1ppm aroclor standard. If the sample area counts are less than the 1ppm aroclor standard, the sample is reported out as <10ppm PCB. If the sample area counts are above the 1ppm aroclor standard, the full 8082 PCB method is performed in order to quantify the PCB concentration.

Sample preparation is completed as follows:

1. Centrifuge the sample until to observe the phase separation. Because the screening method is quantifying the presence of PCBs in liquid it is important to extract the liquid phase of the sample from suspended solids that may be present. Separate the liquid fraction before any solvent comes in contact with the waste. Add 5.0 ml of the supernatant liquid to a VOA vial. If 5mL is not available, a lesser amount may be used, but will need to be accounted for in final reporting levels.
2. Add 100 ul of the 50 PPM surrogate (SW 846 8082 recommended surrogates are decachlorobipheynyl and tetrachloro-m-xylene). The surrogate should be in acetone.
3. Add 5.0 ml of Hexane using a glass Class A graduated cylinder or glass syringe. Do not use plastic pipettes for organic solvents.
4. Agitate the VOA vial for two minutes to mix.
5. Allow 15 minutes for the layers to fully separate, and/or centrifuge the VOA. Both layers should be transparent, with a well-defined boundary.

Quality control requirements include:

- A CCB (hexane) is to be run prior to analysis.
- A CCV is also run: Take an approximately 0.5 mL aliquot of a current 1.0 ppm PCB standard. This standard may rotate between common aroclors such as 1260, 1254, 1242, etc.
- An LCS is prepared similarly to the sample, using clean water as the matrix. Spike with surrogate and with a known concentration of PCB (100 uL of a 50 ppm standard, for example).

Quality control evaluation

- The blank should be free of significant interferences.
- The CCV should recover at the correct concentration (+/- 20%).
- Surrogates should pass in the LCS and tank sample according to in-house control limits. The PCB in the LCS should recover according to in-house control limits. If QC passes, the analytical sample may be evaluated.

Data Evaluation

Templates for each aroclor using the same method and columns a 1ppm, are kept for aroclor identification. Compare the sample's chromatogram to these patterns to determine whether one or more PCB is present. The following outcomes are used to evaluate the data:

- No PCB patterns are present in the sample: report total PCBs as less than 10 ppm.
- There are peaks that match the aroclor in the CCV, but with lower abundance: Report PCBs as <10 ppm.
- There is a PCB pattern, but a different one than you used for your CCV: Compare the peak sizes to a 1.0 ppm pattern template of the same aroclor. If the response is less in the sample, report PCBs as <10 ppm. If the responses are close, prepare a new 1.0 ppm CCV that is of the same aroclor and see scenario "B".
- There is a PCB pattern, and it seems like it may have bigger peaks than in your CCV: In this case we can't rule out a failure based on this screening method SW846 8082 method
- It looks like there may be more than one PCB present in the sample, or there are many peaks that may or may not be part of a PCB: Add the areas of all the peaks from every PCB possibly present. If that area is significantly less than the area of your 1.0 ppm standard, report total PCBs as less than 10 ppm.
- The chromatogram is unreadable due to interferences: SW846 fluorosil column or sulfuric acid cleanup techniques
- In any other situation, or if QC fails, consult the lab supervisor for possible bench scale corrective action.