C.2 Tanks

MICHIGAN DISPOSAL WASTE TREATMENT PLANT (MDWTP)
MID 000 724 831
2017 ATTACHMENT REVISIONS

Replaces Previous Attachment C.2 Tanks

FORM EQP 5111 ATTACHMENT TEMPLATE C2
TANK SYSTEMS

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities*. See Form EQP 5111 for details on how to use this attachment.

R 299.9615 and R 299.9627 of 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); R 29.4101 to R 29.4505 promulgated pursuant to the provisions of the Michigan Fire Protection Act, PA 207, as amended (Act 207); and Title 40 of the Code of Federal Regulations (CFR) §§270.14(d), 270.16, 270.24, and 270.27 (Part 264, Subpart J and Part 60, Appendix A) establish requirements for tank systems. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template addresses requirements for tank systems at the *Michigan Disposal Waste Treatment Plant* facility *Belleville,* Michigan. This template includes assessments of new and existing tank systems; installation of new tank systems; secondary containment systems and release detection; variances for secondary containment; controls and practices to prevent spills and overfills; inspections; response to leaks or spills and disposition of leaking or unfit-for-use tank systems; closure and postclosure requirements; requirements for storing or treating ignitable, reactive, or incompatible wastes

(Check as appropriate)

☒ Existing Tank System

☐ New Tank System

TABLE OF CONTENTS

C2.A ASSESSMENT OF EXISTING TANK SYSTEM

[R 299.9615(1) and 40 CFR, Part 264, Subpart J]

A written assessment that attests to the tank system's integrity must be reviewed and certified by an independent, qualified, registered professional engineer. The written assessment must be kept on file at the facility.

Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986, must conduct this assessment within 12 months of the date that the waste becomes a hazardous waste.

This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated to ensure that it will not collapse, rupture, or fail. This assessment must verify that all tank systems were designed, constructed, operated, and maintained in compliance with the requirements of R 29.4101 to R 29.4505 pursuant to the provisions of Act 207. At a minimum, this assessment must consider the following:

C2.A.1 DESIGN STANDARDS

[R 299.9615 (1) and 40 CFR §264.191(b)(1)]

The design standards used for MDWTP tanks was based off of U. L. Standard 142 and good engineering practices. Tank systems are designed to be compatible with the waste to be stored or treated and structurally sound to ensure that they will not collapse, rupture, or fail. Secondary containment is available for all tank systems that hold liquids.

Treatment tanks (Tanks A-H) are rectangular tanks have been designed using good engineering standards, taking into consideration height, weight, width, materials of construction and specific gravity of waste to be placed into the tanks. Tanks are constructed within a concrete vault and lined with steel.

Silos 1 - 6 are designed for storage of granular or dusty materials. Materials placed into the silos may include hazardous waste or dry material used in the stabilization process including, but not limited to, cement kiln flue dust, lime kiln flue dust, powdered silicates and fly ash.

Vertical Tanks 16-19, 21 (formerly 1B), and 25 are designed to store liquid waste. Tanks 16-19 are constructed of steel and lined with a corrosion protection coating. Tanks 21 and 25 are constructed of corrosion resistant fiberglass reinforced plastic.

C2.A.3 Description of Feed Systems, Safety Cutoff, Bypass System, and Pressure Controls

[R 299.9615(1) and 40 CFR §270.16(c)]

C2.A.3(a) Feed Systems

[R 299.9615(1) and 40 CFR §270.16(c)]

Tanks A-H are designed to directly receive waste from bulk or non-bulk containers. MDWTP has historically been permited for a throughput capacity of 576,000 gallons per day or 210,240,000 million gallons per year. Multiple batches may be processed in a tank throughout the course of a day allowing MDWTP to process a maximum daily throughput of 780,124 gallons per day. This was determined by assuming the capacity of the treatment tanks was turned over twice in a day and factors unloading, treatment and unloading operations. The model is based on treatment technologies that do not require extensive LDR verification testing.

Silos 1-6 typically receive waste or other materials from bulk pneumatic tankers that are equipped with blowers to offload through hoses into the silos. Materials are then conveyed from the silos into tanks A-H by way of a screw conveyor system.

Tanks 16-19, 21 and 25 are filled by a pump unloading station along the north retaining wall between the NCSA and the ECSA. The valving, filling, and discharge options available for Tanks 16, 17, 18 19, 21 and 25 are described schematically in engineering drawings provided. In the event that the pumping equipment shown is unavailable, temporary pumps and conveyances may be used provided they are operated in secondary containment.

C2.A.3(b) Safety Cutoff or Bypass Systems

[R 299.9615(1) and 40 CFR §270.16(c)]

Silos and liquid vertical tanks are equipped with level indicators which allow the operator sufficient time to shut down transfer equipment to prevent overfilling into secondary containment. Treatment tanks are manually monitored by facility personnel to prevent overflow.

C2.A.3(c) Pressure Controls

[R 299.9615(1) and 40 CFR §270.16(c)]

Waste treatment tanks A-H are open top tanks controlled by air pollution control devices outlined in the Renewal Operating Permit (ROP). Each of the silos are equipped with a baghouse dust collector for particulate pollution control. The baghouse allows exhaust gases to escape, and trapped particulates to fall back into the silo. Vertical tanks 16-19 are vented to a carbon adsorption canister and are designed with emergency relief vents and pressure vacuum vents. These tanks are restricted to <500ppm of volatile hazardous air pollutants in order to comply with requirements of the facilities Renewable Operating Permit. Tank 21 and 25 do not accept total VOCs at or above 500 ppm and vent to the atmosphere.

C2.A.4 Diagram of Piping, Instrumentation, and Process Flow

[R 299.9615(1) and 40 CFR §270.16(c)]

Diagrams of the tank systems are provided in the engineering drawings.

C2.A.5 Characteristics of Waste

[R 299.9615(1) and 40 CFR §264.191(b)(2)]

C2.A.2 Dimensions and Capacity of Each Tank
[R 299.9615(1) and 40 CFR §270.16(b)]

Tank Designation	Shape	Materials of Construction	Inside Diameter (ft.)	Width	Length (ft.)	Depth	Maximum Storage Capacity (yards)	Wall Thickness (in.)	Venting
Tank A	Rectangular Tank	Steel	N/A	14' 3"	33' 11"	12' 8"	267	3/4" steel	Enclosed i building ventil an air pollu control dev
Tank B	Rectangular Tank	Steel	N/A	14' 0"	33' 11"	13' 3"	267	3/4" steel	Enclosed i building ventil an air pollu control dev
Tank C	Rectangular Tank	Steel	N/A	11' 5"	33' 11"	13' 4"	216	3/4" steel	Enclosed i building ventil an air pollu control dev
Tank D	Rectangular Tank	Steel	N/A	11' 4"	33' 11"	12' 10"	216	3/4" steel	Enclosed i building ventil an air pollu control dev
Tank E	Rectangular Tank	Steel	N/A	11' 10"	33' 11"	14' 5"	216	3/4" steel	Enclosed i building ventil an air pollu control dev
Tank F	Rectangular Tank	Steel	N/A	11' 5"	33' 11"	14' 10"	216	3/4" steel	Enclosed i building ventil an air pollu control dev
Tank G	Rectangular Tank	Steel	N/A	13' 9"	33' 11"	14' 10"	267	3/4" steel	Enclosed i building ventil an air pollu control dev
Tank H	Rectangular Tank	Steel	N/A	14'-5"	33' 11"	14' 3"	266	3/4" steel	Enclosed i building ventil an air pollu control dev

C2.A.2 Dimensions and Capacity of Each Tank (cont'd)
[R 299.9615(1) and 40 CFR §270.16(b)]

Tank Designation	Shape	Materials of Construction	Inside Diameter (ft.)	Width	Length (ft.)	Depth	Maximum Storage Capacity (gal.)	Wall Thickness (in.)	Venting	
Silo 1-6	Cylindrical Vertical Tank with Cone Bottom	Steel	10	N/A	33	N/A	15,148	1/4" Steel	Dust Collector	None. a
Tank 16-19	Cylindrical Vertical Tank with Cone Bottom	Steel	10	N/A	20'	N/A	20000 gallons	1/4" steel	Emergency relief vent, pressure-vacuum vent attached to carbon canister	Plasite Coatin S Nov
Tank 21 (formerly 1B)	Cylindrical Vertical Tank with Cone Bottom	Fiberglass Reinforced Plastic	10	N/A	36'	N/A	18000 gallons	Fiber Glass	Atmospheric vent	Const
Tank 25 and 27	Cylindrical Vertical Tank with Cone Bottom	Fiberglass Reinforced Plastic	12'	N/A	24'5"	N/A	20000 gallons	Fiber Glass	Atmospheric vent	Const

Tank compatibility and the processing of incompatibles is outlined in Attachment A2 Chemical and Physical Properties.

C2.A.6 EXISTING CORROSION PROTECTION MEASURES
[R 299.9615(1) and 40 CFR §264.191(b)(3)]

External corrosion protection required:

☐ External shell of metal tank will be in contact with soil or water.

☐ Any external metal components of the tank system will be in contact with soil or water.

Metal tanks and metal components of the tank systems do not come in contact with soil or water. As a result no external corrosion protection is necessary.

C2.A.7 DOCUMENTED AGE OF TANK SYSTEM
[R 299.9615(1) and 40 CFR §264.191(b)(4)

Waste treatment tanks (A-H), silos (1-6) and liquid vertical tanks (16-19) were installed when the waste treatment facility was first constructed. Tank 21 and 25 were installed in 1998.

C2.A.8 LEAK TESTS, INSPECTIONS, AND OTHER EXAMINATIONS
[R 299.9615(1) and 40 CFR §264.191(b)(5)]

Tank testing data is stored at the facility. Attachment A5 Inspection Schedule outlines inspection requirements.

C2.A.8(a) Internal Inspections
[R 299.9615(1) and 40 CFR §264.191(b)(5)(ii)]

The inspections of the tanks are conducted as outlined in Attachment A5 Inspection Schedule.

C2.A.9 ANCILLARY EQUIPMENT ASSESSMENT
[R 299.9615(1) and 40 CFR §264.191(b)(5)(ii)]

Ancillary equipment testing data is stored at the facility. Attachment A5 Inspection Schedule outlines inspection requirements.

C2.A.10 LEAKING OR UNFIT-FOR-USE TANK SYSTEMS
[R 299.9615(1) and 40 CFR §264.191(b)(5)(ii)]

Upon detection of a tank system leak or other determination that a tank system is unfit for use, the leaking or otherwise unfit portion, up to and including the tank itself if necessary, will be removed from service including, as needed, the removal of waste from the leaking or otherwise unfit portion. Any spilled or leaked material will be removed from the secondary containment. The spilled material will be characterized and managed appropriately according RCRA requirements. The requirements outlined in C2.H of this attachment will be followed.

C2.A.11 TANK LABELS
[R 299.9615 (5)]

Tanks are labeled in accordance with the provisions of NFPA 704.

C2.D SECONDARY CONTAINMENT SYSTEMS AND RELEASE DETECTION
[R 299.9615(1) and 40 CFR §264.193(a)]

C2.D.1 SECONDARY CONTAINMENT TYPE AND PERFORMANCE CRITERIA
[R 299.9615(1) and 40 CFR §264.193(b)]

☒ *Liner external to the tank*

☒ *Vault*

☐ *Double-walled tank*

☐ *Device approved by the director*

C2.D.2 DESIGN PARAMETERS
[R 299.9615(1) and 40 CFR §264.193(c)]

C2.D.2(a) Compatibility and Strength
[R 299.9615(1) and 40 CFR §264.193(c)(1)]

Concrete containment structures have an estimated strength of 4,000 psi, are a minimum of 8 inches thick, and include steel reinforcing bars. At the time of construction, the concrete was coated with a waterproofing chemical and water stop was added to the joints to ensure an impervious surface.

C2.D.2(b) Foundation Integrity
[R 299.9615(1) and 40 CFR §264.193(c)(2)]

Secondary containment areas have been placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift.

C2.D.2(c) Leak Detection Capability
[R 299.9615(1) and 40 CFR §264.193(c)(3)]

The vertical tanks and silos are checked for leaks by visual inspection. Tanks A-H may be checked for leaks in a variety of ways such as by pumping the interstitial space (nothing produced from the pump means no leaked liquid has accumulated in the interstitial space) or by using commonly available liquid sensors such as a conductivity sensor on a cable.

C2.D.2(d) Adequate Drainage
[R 299.9615(1) and 40 CFR §264.193(c)(4)]

Liquids are removed from secondary containment systems within 24 hours of detection. Solids are removed from secondary containment systems within 60 days of detection. Liquids are contained in the containment

structure until they are removed by mechanical means such as pumping.

C2.D.3 External Liner Requirements
[R 299.9615(1) and 40 CFR §264.193(e)(1)]

C2.D.3(a) Capacity
[R 299.9615(1) and 40 CFR §264.193(e)(1)(i)]

Vertical tank secondary containment systems are capable of containing 100% of the largest tank and 10% of the total volume of the tanks stored in the containment area.

Storage Area	Max. Container Storage Capacity, (gal)	Required Capacity (10% of Storage) (gal)	Required Capacity 25 yr, 24 hr storm (gal)	Total Required Capacity (gal)	Actual Containment Capacity (gal)	Att. B6 Drawing
Waste Tank Farm	20,000	11,430	5,805	25,805	46,225	C-2
Reagent Tank Farm	20,000	4,000	2,601	22,601	25,249	C-2

C2.D.3(b) Storm Water Control
[R 299.9615(1) and 40 CFR §264.193(e)(1)(ii)]

The vertical tanks are not under a roof. As a result, the secondary containment system is designed with sufficient capacity to contain precipitation from a 25-year, 24-hour rain fall.

C2.D.3(c) Free from Cracks and Gaps
[R 299.9615(1) and 40 CFR §264.193(e)(1)(iii)]

Secondary containment systems are designed free of cracks and gaps. See Attachment A5 Inspection Schedule for information on inspections performed.

C2.D.3(d) Coverage Around Tank
[R 299.9615(1) and 40 CFR §264.193(e)(1)(iv)]

Concrete secondary containment for Tanks A-H is designed and installed to surround the tanks and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank. The vertical tanks and silos are aboveground tanks located within concrete secondary containment.

C2.D.4 Vault Systems Requirements
[R 299.9615(1) and 40 CFR §264.193(e)(2)]

C2.D.4(a) Capacity
[R 299.9615(1) and 40 CFR §264.193(e)(2)(i)]

See Table C2.A.2. Each tank has its own secondary containment structure. The steel is the primary tank and a failure would result in the containment of the material in the concrete vault lined with steel. Therefore, the volume of the secondary containment is the capacity of the steel tank plus the volume of the interstitial space

allowing the containment structure to hold more than 100% of the tank.

C2.D.4(b) Storm Water Control
[R 299.9615(1) and 40 CFR §264.193(e)(2)(ii)

Treatment tanks are located inside the waste treatment buildings under a roof. As a result no storm water controls are necessary.

C2.D.4(c) Joint Construction
[R 299.9615(1) and 40 CFR §264.193(e)(2)(iii)]

Water stop was added to the joints.

C2.D.4(d) Coating or Lining for Concrete
[R 299.9615(1) and 40 CFR §264.193(e)(2)(iv)]

Chemical resistant coating was added at the time of construction. It is not possible to directly, visually inspect the integrity of the outer vault structure. However, we can infer its integrity by the fact that groundwater is not infiltrating into the annulus between primary tank walls and secondary containment walls.

C2.D.4(e) Prevention of Vapor Formation and Ignition
[R 299.9615(1) and 40 CFR §264.193(e)(2)(v)]

The secondary containment does not have a vent system to prevent the build-up of combustible gases. However, combustible gases are not expected to form in the secondary containment vault. As described in Attachment A2 Chemical and Physical Waste Analysis Plan, MDWTP screens and processes waste in order to prevent an adverse reaction. This includes monitoring for the evolution of gas and ignitable vapors. Additionally, there is no path for combustible gases to enter containment.

C2.D.4(f) Exterior Moisture Barrier
[R 299.9615(1) and 40 CFR §264.193(e)(2)(vi)]

It is not known if the secondary containment was constructed with an external moisture barrier. The concrete vault is monitored by a leak detection system as indicated by C2.D.2(c). Moisture is not migrating into the vault; therefore it is designed to prevent moisture.

C2.D.5 ANCILLARY EQUIPMENT WITH SECONDARY CONTAINMENT
[R 299.9615(1) and 40 CFR §264.193 (f)]

C2.D.5(a) Secondary Containment Type and Performance Criteria
[R 299.9615(1) and 40 CFR §264.193(f)]

Equipment ancillary to the vertical tanks and treatment tanks are utilized within secondary containment.

C2.D.5(b) Design Parameters
[R 299.9615(1) and 40 CFR §264.193(f)]

See secondary containment information provided above.

C2.D.5(c) Exempted Ancillary Equipment and Inspections
[R 299.9615(1) and 40 CFR §264.193(f)]

Ancillary equipment information is provided in the engineering drawings. Inspection requirements are outlined in Attachment A5 Inspection Schedule.

C2.D.6 REQUIREMENTS FOR TANK SYSTEMS THAT ARE NOT IN COMPLIANCE WITH SECONDARY CONTAINMENT
[R 229.9615(2)]

C2.D.6(a) Aboveground Tanks
[R 229.9615(2)(a)]

All tanks that store liquid waste are in compliance with secondary containment requirements.

C2.E VARIANCES FOR SECONDARY CONTAINMENT
[R 299.9615(1) and 40 CFR §264.193(g)]

☒ Technology-based Variance

C2.E.1 TECHNOLOGY-BASED VARIANCE
[R 299.9615(1) and 40 CFR §264.193(g)]

C2.E.1(a) Nature and Quantity of Wastes
[R 299.9615(1) and 40 CFR §264.193(g)(1)(i)]

Silos 1 - 6 are designed for and limited to storage of granular or dusty materials including either hazardous waste or products used in the stabilization process including, but not limited to, cement kiln flue dust, lime kiln flue dust, powdered silicates and fly ash. Storage capacities are provided above.

C2.E.1(b) Design and Operation
[R 299.9615(1) and 40 CFR §264.193(g)(1)(ii)]

Silos are elevated approximately 10 feet above their concrete footings and the concrete floor of the plant. Concrete is sloped south to north, to direct liquids towards the north retaining wall. A canopy covers the silos and prevents precipitation from falling on the concrete floor. Information on the overfill and spill prevention controls are provided in C2.F of this attachment. Concrete underneath the silos is 4000 psi strength.

C2.E.1(c) Hydrogeological Setting
[R 299.9615(1) and 40 CFR §264.193(g)(1)(iii)]

Concrete floor located directly under the silos has been constructed with water stop in all joints and waterproofing chemical to make the surface impervious to the flow of waste into soil or groundwater.

C2.E.1(d) Other Factors
[R 299.9615(1) and 40 CFR §264.193(g)(1)(iv)]

Spilled materials would not migrate away from the area due to their solid nature and a lack of precipitation. The silos are central to the plant preventing any spilled materials from migrating off the paved area to threaten surface or groundwater supplies. The cover over the silos prevents run on precipitation from allowing material to migrate. If precipitation contacted spilled material, the concrete slope would direct all liquids towards the north retaining wall and secondary containment trench.

C2.E.1(e) Zone of Engineering Control
[R 299.9615(1) and 40 CFR §264.193(g)(3)]

If a leak or spill of the solid material were to occur, it would fall down onto the concrete plant floor. In the worst case, the leak would be detected 24 hours later (though immediate detection is much more likely). The spilled material would be vacuumed up and the silo taken out of service for repair. All silos are located100 feet from the south edge of concrete paving. The addition of a secondary containment curb would not add to protection already provided by the existing concrete floor, structures and canopy.

C2.E.2 VARIANCE IMPLEMENTATION PROCEDURES
[40 CFR §264.193(h)]

Silos 1-6 have received variances from secondary containment requirements in previous permits. Information below provides the basis for the already approved variance. The variance has already been implemented and the tank systems are operating in the manner outlined in this attachment.

C2.F CONTROLS AND PRACTICES TO PREVENT SPILLS AND OVERFILLS
[R 299.9615(1) and 40 CFR §264.194(b)]

C2.F.1 SPILL PREVENTION CONTROLS
[R 299.9615(1) and 40 CFR §264.194(b)]

Waste transfers to and from tanks are completed in areas that meet secondary containment requirements.

C2.F.2 OVERFILL PREVENTION CONTROLS
[R 299.9615(1) and 40 CFR §264.194(b)]

Silos 1-6 and tanks 16-19, 21 and 25 are all equipped with level indicators that are monitored by the operator filling the tank to prevent overflow. Treatment tanks A-H are filled in a manner that allows enough capacity to add reagents without overflowing. Loading, unloading and treatment operations are closely monitored by facility personnel in order to prevent overflow.

C2.F.3 FREEBOARD MAINTENANCE
[R 299.9615(1) and 40 CFR §264.194(b)]

Adequate freeboard is maintained in all treatment tanks at all times in order to allow for proper mixing. If the equipment operator observes a condition which does not provide sufficient freeboard to allow proper mixing within a treatment tank, the operator will cease mixing.

C2.G INSPECTIONS

[R 299.9615(1) and 40 CFR §264.195(a)]

See section A5 Inspection Schedule

C2.H RESPONSE TO LEAKS OR SPILLS AND DISPOSITION OF LEAKING OR UNFIT-FOR-USE TANK SYSTEMS

[R 299.9615(1) and 40 CFR §264.196]

C2.H.1 RESPONSE ACTIONS FOR LEAKS AND SPILLS

[R 299.9615(1) and 40 CFR §264.196(a)]

C2.H.1(a) Waste Flow Stoppage

[R 299.9615(1) and 40 CFR §264.196(a)]

Upon detection of an unfit tank or secondary containment the addition of hazardous waste into the tank system will cease.

C2.H.1(b) Waste Removal

[R 299.9615(1) and 40 CFR §264.196(b)]

Liquid waste must be removed from secondary containment within 24 hours of detection. Solid waste must be removed from secondary containment within 60 days of detection.

See Attachment A7 Contingency Plan for waste removal associated with a release to the environment.

C2.H.1(c) Visible Release Containment

[R 299.9615(1) and 40 CFR §264.196(c)]

See Attachment A7 Contingency Plan.

C2.H.1(d) Repair, Replacement, or Closure

[R 299.9615(1) and 40 CFR §264.196(e)]

An investigation of the tank system to determine whether the tank will be repaired, replaced or closed.

C2.H.1(e) Certification of Major Repairs

[R 299.9615(1) and 40 CFR §264.196(f)]

Major repairs or replacement of a tank will have a qualified Professional Engineer certify the tank has been repaired and is capable of handling hazardous wastes without release for the intended life of the system in accordance with 270.11(d) prior to placing the tank system back in service.

C2.H.2 REQUIRED NOTIFICATIONS AND REPORTS

[R 299.9615(1) and 40 CFR §264.194(d)]

C2.I CLOSURE AND POST CLOSURE REQUIREMENTS

[R 299.9615(1) and 40 CFR §270.14(b)]

☒ Category A - *where decontamination is practical and secondary containment is provided*

☒ Category B - *where decontamination or removal is not practical and where secondary containment is provided and tank system will be closed as a landfill*

☐ Category C - *where decontamination is practical and where secondary containment is not provided*

☐ Category D - *where decontamination or removal is not practical, and where secondary containment is not provided, and tank system will be closed as a landfill*

See Attachment A11 Closure Care Plan and Attachment A12 Closure Cost estimate.

C2.J SPECIAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES

[R 299.9615(1) and 40 CFR §270.16(j)]

C2.J.1 IGNITABLE OR REACTIVE WASTES PRECAUTIONS

[R 299.9615(1) and 40 CFR §264.198]

Ignitable or reactive waste is stored and treated in such a way that waste is protected from any material or conditions that may ignite or improperly react the waste.

C2.J.2 DISTANCE REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

[R 299.9615(1) and 40 CFR §264.198(a) and (b)]

A protective distance is maintained between the tank system, public roadways and adjoining property lines in accordance with NFPA 30 requirements.

C2.J.3 INCOMPATIBLE WASTES

[R 299.9615(1) and 40 CFR §264.199]

MDWTP takes precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste is 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 (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. Additionally, smoking is prohibited in waste treatment and storage areas.

Precautions are taken to prevent reactions which may generate extreme heat or pressure, fire or explosions, or violent reactions; produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; damage the structural integrity of the device or facility; through other like means threaten human health or the environment.

Pre-approval and waste screening procedures used to document the compliance with this requirement are provided in Attachment A2.