Recommendations R-1: Groundwater/Surface Water Interface (GSI) (COMPLETED)

The DEQ convened key stakeholders for a Collaborative Stakeholders Initiative (CSI) to address long-standing issues associated with Michigan’s cleanup and redevelopment programs. Please go to the “Michigan’s Cleanup and Redevelopment CSI” Web site. Go to www.michigan.gov/deqland, select “Land Cleanup,” “Site Investigation and Cleanup,” and then “Michigan’s Cleanup and Redevelopment CSI.”

The CSI GSI Group was responsible for the passage of 2012 PA 190 (Act 190) that amended Section 20120e (MCL 324.20120e) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The legislative changes became effective on June 20, 2012, and create flexibility in allowing for more progressive options in addressing groundwater venting to surface water including mixing zones, alternative monitoring points, and ecological and/or modeling demonstrations.

The GSI Technical and Program Support (TAPS) Team will be developing a DEQ Policy and Procedure that assists staff in understanding the legislative changes and the addressing the technical aspects of Act 190 that are used for demonstrating compliance and/or the necessity for taking remedial action.


In addition, the Remediation Redevelopment Division (RRD) has provided for additional staff funding in the Water Resources Division (WRD) for GSI assistance and collaboration. This action will provide for a more timely and coordinated review for GSI.

The WRD and CSI GSI Group finalized DEQ Policy and Procedure No. 09-014 that now allows for the use of U.S. Environmental Protection Agency (USEPA) Method 245.1 to quantify the level of mercury in groundwater that is venting to surface water as part of an evaluation of the GSI pathway. This significantly improves the GSI mercury compliance process.

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Recommendation R-2: Part 201/213 Vapor Intrusion Policy and Procedure (IN PROCESS)

Three of the four proposed solutions have been implemented. The Part 201/Part 213 (Leaking Underground Storage Tanks of the NREPA) Guidance Document for the Vapor Intrusion Pathway was finalized in May 2013 and posted to the Remediation and Redevelopment Division (RRD) Web site. This document allows for use of a conceptual site model. The RRD allows for data collection and evaluation processes consistent with the needs of business transactions, as described in recent presentations at
various environmental professional workshops. The RRD has prioritized the collection of empirical data for Michigan sites, collaborating with practitioners and project managers to develop a database for future use. The RRD has engaged with stakeholders to evaluate vapor intrusion as related to the Cleanup Criteria Rules. The Criteria Stakeholder Advisory (CSA) Workgroup provided recommendations to DEQ Director Wyant with respect to Vapor Intrusion Criteria. The recommendations are under review by DEQ staff. The update to the criteria for all hazardous substances will be conducted in 2015, pursuant to the Director’s response to the Stakeholders’ recommendations. The recommendations for the Vapor Intrusion pathway include a tiered approach which allows use of certain site specific conditions (e.g. soil type, temperature), consistent with the ORR Recommendation.

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Recommendation R-3: Revising Part 201, Cleanup Criteria (IN PROCESS)

Background

The Part 7 Cleanup Criteria Rules were rescinded on December 31, 2013. Taking their place are new criteria rules, numbered from R 299.1 to R 299.50, that became effective on December 30, 2013. A link to the new Environmental Contamination Response Activity Rules is available on the Remediation and Redevelopment Division (RRD) Web site.

The Part 201 groundwater and soil cleanup criteria and screening levels, criteria footnotes, and the toxicological and chemical-physical properties of the hazardous substances are now located in the following rules:

- R 299.44 Generic groundwater cleanup criteria (Table 1)
- R 299.46 Generic soil cleanup criteria for residential category (Table 2)
- R 299.48 Generic soil cleanup criteria for nonresidential category (Table 3)
- R 299.49 Footnotes for generic cleanup criteria tables
- R 299.50 Toxicological and chemical-physical properties (Table 4)

As presented in the Cleanup Criteria Requirements for Response Activity Rules, some groundwater, soil cleanup criteria, and screening levels were revised, as compared to the previous September 28, 2012, release of these tables under the Part 7 rules. These changes are noted in a document posted on the RRD Web site.

Criteria Stakeholder Advisory (CSA) Workgroup

A CSA Workgroup was convened by the DEQ on March 26, 2014. The responsibilities of the CSA Workgroup included: developing guiding principles to serve as the basis for updating the existing criteria, reviewing background white papers, reviewing reports of the technical groups, and making recommendations to the DEQ Director. The DEQ hired Public Sector Consultants to facilitate the stakeholder process. Four technical subcommittees were appointed to assist the CSA Workgroup; the Technical Advisory Groups evaluated physical-chemical parameters and toxicity data, exposure pathway assumptions, vapor intrusion, and addressed potential statutory concerns raised during the process. A Web page for information and status of the CSA Workgroup is available on the RRD Web site. The workgroup completed their report and provided a total of 29 recommendations to the Director. The recommendations are under review by DEQ staff. The update to the criteria for all hazardous substances will be conducted in 2015, pursuant to the Director’s response to the Stakeholders’ recommendations.
Recommendation R-4: Part 201 Rules (COMPLETED)

Recommendation R-4 proposes to rescind all rules promulgated under Part 201 except the portion of the Part 7 rules related to establishing generic cleanup criteria and screening levels. Concurrent with this process, Recommendation R-4 stated that the DEQ should promulgate a streamlined and efficient rule package that contains only rules that are necessary for program implementation and performance-based rather than prescriptive.

Act 446 amended Part 201 by rescinding 32 rules in total, upon the effective date of the Act which is December 31, 2012. Below is a summary of rules rescinded.

- Part 1. General Provisions (portions of)
- Part 4. Alternative Water Supplies (all)
- Part 5. Response Activities (portions of)
- Part 7. Clean-Up Criteria (portions of)
- Part 9. Baseline Environmental Assessment (all)

Additional Part 1, 5, and 7 rules, 35 in total, will be rescinded on December 31, 2013.

During the CSI process, an effort was made to incorporate the critical rule language into statute to eliminate the need for rules. This was intended to streamline the process further and complete the process sooner. As of today, there are no efforts being undertaken to promulgate rules other than for the criteria. Therefore, this recommendation has been completed.

Recommendation R-5: Risk-Based Closures and Site Specific Criteria (COMPLETED)

Act 446 amended Part 201 by broadening the use of site-specific criteria to include non-numeric criteria, in addition to numeric criteria, in evaluating the toxicity and exposure risk for sites. Site-specific criteria may be used in a response activity if it can be demonstrated that this criteria better reflects the best available information related to that substance and site conditions.

The Part 213 statutory amendments enacted May 2012 have updated the criteria associated with “free phase” employing current science and the best national practices, and increased regulatory flexibility in managing risk.

The amendments have eliminated the definition of “free product” as being 1/8 inch accumulation of petroleum in monitor wells and instituted the use of the term light nonaqueous-phase liquid (LNAPL) to describe liquids containing one or more compounds that are immiscible or sparingly soluble in water. Additional definitions were also added to the amendments to describe the conditions under which LNAPL may exist at sites including “residual NAPL,” “mobile NAPL,” and “migrating NAPL,” which have become new criteria by which the DEQ will be evaluating “free phase” situations as required in the ORR recommendation.

The amendments have adopted the nationally recognized American Society for Testing and Materials (ASTM) Risk-based Corrective Action for characterizing and assessing risk associated with the sites where LNAPL is present which allows for greater flexibility in managing risks associated with its presence.
In addition to the statutory amendments redefining NAPL, using nationally recognized standards, and allowing for greater flexibility in managing risks associated with NAPL, the DEQ has adopted the nationally recognized and adopted Interstate Technology and Regulatory Council’s (ITRC) evaluative and management practices for LNAPL sites.

The RRD is also working on policy and procedures related to NAPL definitions and NAPL management. See Recommendation R-6 for more details.

**Recommendation R-6: Effective Solubility and Free Phase Contamination (COMPLETED)**

The Part 213 statutory amendments enacted in May 2012 have updated the criteria associated with “free phase” employing current science and the best national practices and increased regulatory flexibility in managing risk.

The amendments have eliminated the definition of “free product” as being 1/8 inch accumulation of petroleum in monitor wells and instituted the use of the term light nonaqueous-phase liquid (LNAPL) to describe liquids containing one or more compounds that are immiscible or sparingly soluble in water. Additional definitions were also added to the amendments to describe the conditions under which LNAPL may exist at sites including “residual NAPL,” “mobile NAPL,” and “migrating NAPL,” which have become new criteria by which the DEQ will be evaluating “free phase” situations as required in the ORR recommendation.

The amendments have adopted the nationally recognized American Society for Testing and Materials (ASTM) Risk-based Corrective Action for characterizing and assessing risk associated with the sites where LNAPL is present, which allows for greater flexibility in managing risks associated with its presence.

The Petroleum Nonaqueous-Phase Liquid (NAPL) Management Resource Document was drafted and made available for public comment via the DEQ listserv and the Remediation and Redevelopment Division Web site. The draft document includes NAPL definitions and NAPL management options. The Resource Document is undergoing final management review.

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**Recommendation R-7: Storage Tanks (COMPLETED)**

One of the requirements in each of the below recommendations is moving the DEQ storage tank program to the Department of Licensing and Regulatory Affairs (LARA). On October 3, 2012, Governor Rick Snyder issued Executive Order 2012-14 which transfers the Aboveground Storage Tank Program and the Underground Storage Tank Program from the DEQ to the Bureau of Fire Services, within LARA. The regulation of leaking underground storage tanks will remain with the DEQ and the Bureau of Fire Services will work cooperatively with the DEQ in identifying leaking storage tanks. LARA will be responsible for completing the rule changes identified in recommendations above, as well as rescind the Transportation of Flammable and Combustible Liquids rules per Recommendation R-7c. The provisions of the Executive Order become effective on December 4, 2012.

If the Michigan amendments are removed from the rules stated above, the proposed amendments to the Part 5 – Spillage of Oil and Polluting Materials rules (R 324.2001 – R 324.2009) will need to address
storage tank releases. Additional proposed amendments to the Part 5 rules are found in Recommendation W-1.

LARA, therefore, will be responsible for addressing the following five Environmental ARC recommendations pertaining to tank rule revisions:

- **R-7f** – Storage and Handling of Flammable and Combustible Liquids: rescind Michigan specific amendments.
- **R-7g** – Liquefied Petroleum Gas: rescind Michigan specific amendments.

**Recommendation R-7a: Underground Storage Tank [UST] Inspection, Delegation and Certification (COMPLETED)**

R 29.2071 through R 29.2077 were rescinded, effective September 10, 2012.

**Recommendation R-7b: Part 211-UST Regulations (REFERRED TO LARA)**

Bureau of Fire Services is waiting for USEPA to update federal UST regulations before amending the state rules.

**Recommendation R-7c: Transportation of Flammable and Combustible Liquids (COMPLETED)**

R 29.2201 to R 29.2234 were rescinded.

**Recommendation R-7d: Compressed Natural Gas (CNG) Vehicular Fuel Systems (COMPLETED)**

Effective October 13, 2014, R 29.4601 through R 29.4652 were rescinded, and R 29.4701 through R 29.4755 were added to adopt the National Fire Protection Association’s (NFPA) Pamphlet No. 52 entitled “Vehicular Gaseous Fuel Systems Code.”

**Recommendation R-7e: Production, Storage, and Handling of Liquefied Natural Gas [LNG] (COMPLETED)**

R 29.4671 and R 29.4672 were rescinded, effective August 16, 2012.

**Recommendation R-7f: Storage and Handling of Flammable and Combustible Liquids (COMPLETED)**

Effective October 13, 2014, R 29.5101 through R 29.5516 rescinded, and R 29.5601 through R 29.5917 were added to adopt the NFPA’s Pamphlet No. 30 entitled “Flammable and Combustible Liquids (FL/CL) Code.”

**Recommendation R-7g: Liquefied Petroleum Gas (COMPLETED)**
Effective October 13, 2014, R 29.6001 through R 29.6097 were rescinded, and R 29.6101 through R 29.6156 were added to adopt the NFPA’s Pamphlet Number 58 entitled “Liquefied Petroleum Gas Code 2014 Edition.”

Recommendation R-7h: Storage and Handing of Gaseous and Liquefied Hydrogen Systems (REFERRED TO LARA)

Bureau of Fire Services is waiting for the promulgation of a NFPA Pamphlet.

Recommendation R-8: Definition of Background Concentrations for Hazardous Substance in Soil and Groundwater. (IN PROCESS)

Act 446 of 2012 amended Part 201 by amending the definition of “background concentration.” Additional amendments to Part 201 in Senate Bill (SB) 891 were passed by the Legislature, and 2015 PA 542 was signed by the Governor on January 15, 2015 which further clarifies the definition of “background concentration.” A policy on appropriate use of the Michigan Background Soil Survey will be redrafted to include information on the revised definition of “background concentration” after the bill is signed into law. Data collected from the DEQ’s files that are considered representative of background conditions has been undergoing statistical analysis to improve the existing database of background concentrations and calculate background concentration levels for various soil types specific to glacial lobes. This effort will be completed in January 2015.

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Recommendation R-9: Due Care for Indoor Air Inhalation at a Property Subject to Michigan Occupational Safety and Health Administration (MIOSHA) Standards. (COMPLETED)

Recommendation R-9 proposes to amend Part 201 so that indoor air inhalation risk at workplaces could be addressed at the option of an owner or operator of a property by applying the MIOSHA and the U.S. EPA workplace exposure criteria for both workers and non-workers in workplaces, in lieu of generic Part 201 criteria, and without regard to whether or not the extent to which the chemical in question is being used in the workplace.

Act 446 of 2012 amended Part 201 by allowing facilities subject to MIOSHA Standards to achieve compliance for indoor air criteria by complying with MIOSHA Standards. Act 446 limits this compliance pathway to only manufacturing facilities regardless of whether the chemical is used at the facility.

The stakeholder process included the Deputy Director for MIOSHA and representatives from the Department of Community Health in developing the statutory language for indoor air inhalation due care considerations. This recommendation is considered completed.

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Recommendation R-10: Soil Relocation Statute MCL 324.20120c and Associated Rules (COMPLETED)

Act 446 of 2012 amended Part 201 by including provisions and notice requirements for relocating contaminated soil within a facility, and from a facility to an offsite location. In addition to clearly defining that only contaminated soils are regulated, the legislation exempts relocated soil from becoming a new facility under Part 201 or a solid waste under Part 115.
Recommendation R-11: Source Control Requirements under MCL 324.20114(1) and R 299.5526(4) (COMPLETED)

Senator Thomas Casperson introduced SB 891 in early 2014. Under the proposed changes, a “source” would be defined as the place or container (e.g., landfill or underground storage tank) from which the release originated. The bill has passed both the Senate and the House and 2015 PA 542 was signed by the Governor on January 15, 2015.

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Recommendation R-12: Relationship between Part 201 and Part 213 (NOT TO BE IMPLEMENTED)

Amendments to Part 213, Leaking Underground Storage Tanks, of the NREPA, became effective on May 1, 2012. The Legislature did not support the combining of Parts 201 and 213 into one statute and one program. Given this, the DEQ will not pursue further action on this item.

Recommendation R-13: Part 201 Due-Care Plans Submitted As Response-Activity Plans for Small Business Administration (SBA) Loans (COMPLETED)

In many lending scenarios, including the SBA loans, a person is often required by the lender to obtain the DEQ’s approval of an analysis of the Part 201 and 213 “due care” obligations at the property. Neither Part 201 nor Part 213 contained a mechanism to obtain the approval. Act 446 includes new processes under both Part 201 and Part 213 whereby a person may submit due care documentation to the DEQ for approval.

The RRD Policy and Procedure titled, *Time Frame for DEQ Review of Due Care Plan/Report Submitted by SBA Loan Applicants* and identified as No. RRD-17 has been rescinded citing the Act 446 of 2012 amendments where the expedited reviews of due care plans are applied to all due care documentation, not just SBA loan applicants.

The Collaborative Stakeholder Initiative (CSI) Due Care Stakeholder Group has been expanded to include more representation from financial lenders, developers, and the Michigan Municipal League. The CSI Due Care Stakeholder Group has a draft outline of recommendations for statutory and policy changes; the outline will be fleshed out and complete in the next couple of months. There is not a hard timeline on it and it is not planned to be acted upon during this legislative session, but will easily be available for the next.

Recommendation R-13 was already completed when the 2012 amendments became law and an expedited Due Care review process was put into place for all reviews, including SBA loans. The current stakeholder process is above and beyond the recommendation.

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Recommendation R-14: Boron Standard for Groundwater (IN PROCESS)

The RRD attempted to update the exposure assumptions and toxicity data through stakeholder engagement in 2012 and 2013; however, consensus was not achieved. The RRD has re-engaged with stakeholders to review the physical-chemical properties, toxicity endpoints, and exposure assumptions
as related to the Cleanup Criteria Rules. The CSA Workgroup has developed recommendations and provided them to Director Wyant. The recommendations are under review by DEQ staff. The update to the criteria for all hazardous substances will be conducted in 2015, pursuant to the Director’s response to the Stakeholders’ recommendations. Boron is one of the hazardous substances included in the criteria and will be addressed as a part of the review.

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Recommendation R-15: Quality Review Team (COMPLETED)

The RRD’s Field Operations Quality Review Team was disbanded in December 2012. It has been replaced with an enhanced District Peer Review Process, wherein the District Supervisor has been given authority to approve all submittals. Ten Technical Support Teams have been enhanced and/or created within RD to serve as a technical resource to project managers and district staff. A formal Division Policy and Procedure on both the District Peer Review Team and the Technical Support Teams became effective on September 4, 2012.

Recommendation R-16: Flexibility When Site Exceeds Only Secondary Non-Health-Based Standards (NOT TO BE IMPLEMENTED)

Recommendation R-17 Part 201 Cross References (COMPLETED)

As of December 31, 2013, the remaining Part 5 Rules and Part 7 Rules have been rescinded, leaving only the newly promulgated Environmental Contamination Response Activity Rules, and the Part 10 Compliance with Section 20107a (Due Care) Rules. In the Part 10 Rules, there are a few remaining references to sections of Part 201 that have been repealed, and to subsections of 20107a that have been amended and now have different meanings. These fourteen erroneous cross references have been identified and will be put forward for consideration in updating the rules in 2014.

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