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DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
GRAND RAPIDS



LIESL EICHLER CLARK  
DIRECTOR

April 24, 2019

**VIA EMAIL**

Ms. Denise Medemar, Commissioner  
Allegan County Drain Commission  
113 Chestnut Street  
Allegan, Michigan 49010

Dear Ms. Medemar:

**SUBJECT:** Municipal Separate Storm Sewer System (MS4)  
Illicit Discharge Elimination Plan (IDEP) Review Approval  
National Pollutant Discharge Elimination System (NPDES)  
Certificate of Coverage (COC) No. MIG610140  
Designated Name: Allegan County Drain Commission (CDC)

On January 17, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), received the final version of the IDEP for Allegan CDC. The revised IDEP was submitted on your behalf by the Macatawa Area Coordinating Council (MACC). The IDEP was reviewed in accordance with the requirements of NPDES General Permit No. MIG619000. General Permit No. MIG619000, authorizes discharges of storm water from MS4s to the surface waters of the state, and thus you are subject to the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq; the "Federal Act"), Michigan Act 451, Public Acts of 1994, as amended (the "Michigan Act"), Parts 31 and 41, and Michigan Executive Orders 1991-31, 1995-4 and 1995-18.

The IDEP has been reviewed and is approved. At the request of the MACC, this document was also reviewed in accordance with the requirements of the 2016 MS4 permit application. The 2019 IDEP appears to meet the new requirements as well as those of the current permit. However, there are some writer's notes in the text and mis-labeled appendices that should be corrected before submitting a final version with the permit application.

Please begin implementing the January 17, 2019, version of the IDEP immediately. Should you require further information, please contact me at 616-401-9913; [stamoura@michigan.gov](mailto:stamoura@michigan.gov); or at the address below.

Sincerely,

Amanda St. Amour  
Senior Environmental Quality Analyst

cc: Ms. Kelly Goward, MACC (via email)

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# **Illicit Discharge Elimination Program Plan**

**For**

**Allegan County**



**and**

**Allegan County Road Commission**

**National Pollutant Discharge Elimination System  
Storm Water Discharge Permit**

**Approved April 2019**

Original developed 2004, revised 2005

**Prepared in Coordination with:**

Macatawa Area Coordinating Council

301 Douglas Ave

Holland MI 49424

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## I. Introduction

The goal of this Illicit Discharge Elimination Plan (IDEP) is to develop and implement a program within Allegan County that will aid in the improvement of surface water quality. This program will be implemented by the Allegan County Drain Commissioner's (ACDC's) office, the designated entity responsible for implementing Allegan County's MS4 permit. Implementation will occur in coordination with the Allegan County Road Commission (ACRC). This plan was originally developed in 2004 per the 2003 Certificates of Coverage issued to the Macatawa Watershed MS4 permittees, who at that time, applied for coverage under a Watershed General Permit. The plan was revised in April 2005 and approved by the DEQ.

A Macatawa Watershed Storm Water Committee (the Committee) comprised of representatives from each public entity in the watershed met originally to develop this plan. The committee has continued to meet on a quarterly basis to discuss and evaluate the plan as well as other aspects of the MS4 storm water management program.

## II. Objectives

- A. Maintain an accurate map of all known point sources and their respective receiving waters.
- B. Field locate, prioritize, and eliminate illicit discharges and illicit connections found during dry weather.
- C. Minimize infiltration of seepage from sanitary sewers and on-site sewage disposal systems from separate storm sewer system.
- D. Maintain a records management system for discharge point and outfall construction plans, maps, inspection reports, complaint response, etc.
- E. Conduct periodic evaluations of the effectiveness of this plan and progress toward meeting goals.
- F. Review existing ordinances and establish necessary enforcement measures.

## **A. Maintain a Map of Discharge Points and Outfalls**

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The ACDC office and ACRC completed the process of updating their list and map of known point sources, both discharge points and outfalls, during 2015. The database is maintained in the Allegan County GIS system, which is currently only available to county employees on county servers, but printed copies are available upon request. The Macatawa Area Coordinating Council (MACC) also maintains a database of all MS4 discharge points and outfalls within the Holland urbanized area.

Additional discharge points and outfalls will be added to the Allegan County system and MACC database once they are identified or constructed. Some discharge points or outfalls may be removed if it is determined that a discharge point or outfall does not fit the definition of a public discharge point or it no longer exists. Additions, removals, and other changes will be made within 30 days of discovery. The database includes a code assigned to each discharge point and outfall, the receiving water body, and other information. The Allegan County database was developed in GIS and therefore serves as a map of discharge points and outfalls as well as other storm sewer system components.

## **B. Inspect, Investigate, and Eliminate Illicit Discharges and Connections**

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The ACDC office, in coordination with the ACRC, will perform illicit discharge identification and investigation throughout both MS4s without prioritization. The MS4s are located in relatively small isolated systems (*i.e.* neighborhood drainage) within a limited geographic area of the county (portions of the north halves of Laketown and Fillmore Townships).

Inspections will be conducted in dry weather. Dry weather conditions exist if there has less than 0.1” of precipitation in the previous 48-72 hours prior to inspection. Where discharge points or outfalls are submerged or partially submerged, the dry weather screening will occur at the first accessible upstream manhole, or where determined appropriate by the inspector. Rules of confined space entry may require an inspector and an attendant.

### *1. Procedure for Performing Field Observations*

All discharge points and outfalls (both ACDC and ACRC) will be inspected at least once every five years as part of the ACDC’s regular drain maintenance schedule. The dry weather screening procedure will include the completion of the **Dry Weather MS4 Discharge Evaluation** form (Appendix A). Once the discharge point or outfall is located, it will be checked for flow. If no flow is present, then the observation will be recorded on the form. The condition of the pipe will also be assessed, and the current weather conditions recorded. Existing structural data (size and material) will be verified as well as receiving water. Additional observations will also be recorded if present including odor, deposits, floatables, biology (algae, bacterial sheens and slimes), and vegetation. If any information is missing from the existing database, it will be updated. Inspectors will also be encouraged to make additional observations related to presence of trash or evidence of erosion or pollution from surface runoff.



## *2. Procedure for Performing Field Screening when Flow is Present*

If flow is present during a dry weather screening, the inspector will at a minimum make these additional observations on site at the time of the screening: odor, color, turbidity (visual assessment), floatables, deposits/stains, biology, and vegetation. The following chemical assessments will also be completed on site when possible: pH, ammonia, surfactants, and temperature. pH and ammonia will be assessed using test strips, and surfactants will be assessed by collecting a sample in a small glass bottle, securing the lid, shaking vigorously, and looking for bubbles. Temperature will be measured using a water thermometer. Visual and odor assessments are subjective and will be completed on site by the inspectors and recorded appropriately on the form. If sewage is suspected then a sample will be collected, if possible, and tested by the Allegan County Health Department (ACHD) for the presence of *E. coli*. If an illicit connection is suspected, the inspectors will proceed with initiating a source investigation, either themselves if they have been properly trained, or by notifying their supervisor by the close of business the same day that a source investigation is necessary. Inspectors will be provided training in how to carry out all onsite observations and measurements including how to properly fill out the form.

## *3. Procedure for Performing a Source Investigation*

Once a discharge point or outfall has been identified as having a possible illicit connection, investigative activities will commence within two (2) business days starting at the discharge point or outfall and moving upstream within the MS4. The investigation will continue upstream until the potential source is found. Any facility having suspicious dry weather discharge will be subject to inspection. Upon determining that a private facility needs to be investigated, the assigned employee from the ACDC or ACRC office will contact the facility explaining the suspected problem and establish permission to access the property. If it is determined that the facility has a discharge and is under an industrial or construction site NPDES permit, the DEQ will be contacted immediately to guide the response and enforcement procedure.

The following are standard operating procedures for investigating a suspected illicit discharge:

- a. Upon arriving at the site, the property owner and/or facility manager will be advised of the inspector's strategy and interviewed by the inspector about the location of all property lines, storm sewers, storm catch basins, sanitary sewers, sanitary service manholes, waste process lines, and hazardous and polluting material storage areas. A copy of the facility site plans and its related utility system will be requested.
- b. The inspector will obtain and thoroughly review all maps of sanitary sewer and storm drains to determine critical information regarding all documented underground conveyance systems located on or near the property.
- c. The inspector will review the facility plans and inspect the site to determine the location of the best access points to the storm, sanitary, and any process waste lines. All key information will

be noted on a hard copy of the site plan for field use that will become an attachment to the Dry Weather MS4 Discharge Evaluation form.

- d. A review of hazardous and polluting materials (if applicable), and related handling procedures may be requested by the inspector of the property owner and/or facility manager.
- e. All storm drains leaving the property shall be field located by the inspector to determine manholes or catch basins that can be used as access points to monitor for the presence of an illicit discharge.
- f. The inspector may be able to determine the source of an illicit discharge through visual observation and/or odor detection of flow in the storm sewer at selected access points.
- g. The inspector may facilitate televised inspection of portions of storm sewers that look suspicious to identify pollutant sources that cannot be located through visual observation, (*i.e.* blind connections between manholes). The inspector may use tracing dye or other suitable tracking methods to isolate the source of an illicit discharge (proper authorization for the use of tracer dyes must be requested from the MDEQ in accordance with Rule 1097). In addition, water sampling can be performed to verify the presence of an illicit discharge. All of these methods can and will be used at the discretion of the inspecting staff and the owner of the illicit discharge. The inspector should contact the illicit discharge owner immediately to determine the best means for verification.
- h. If an intermittent discharge is detected, and it is expected that the discharge will disappear before sampling or televising can be performed, the inspector should take as many pictures and notes as possible. A grab sample can be taken if the inspector has the appropriate materials and protective gear. This sample can be used as proof of discharge and further analyzed. Priority should be given to eliminating and finding the source of the illicit discharge or connection. However, in order to determine the source, the above mentioned methods in section g may need to be used.

At a minimum, sampling parameters should include: pH, ammonia, and surfactants using the sampling methods as described in the preceding section, *Procedure for Performing a Field Screening when Flow is Present*. All parameters will be measured against the MDEQ and EPA standards for water quality. Onsite conditions, including land use and activities occurring on or near the facility, will be observed and assessed for potential sources of the illicit discharge.

- i. If sewage (bacterial) contamination is suspected either by smell or appearance, the ACHD will be contacted to conduct further testing. A copy of the dry weather evaluation form will be provided to the ACHD as well as a completed ACHD complaint form. The ACHD will conduct a source investigation according the Complaint Investigations Policy. The procedure outlined in the policy is as follows:

- 1) Complaints regarding on-site sewage disposal shall be logged in the complaint unit in the SWORD solutions software system (Appendix B) by the support staff at the Environmental Health Division.
- 2) Investigation and resolution of the complaint by the sanitarian shall be documented in the facility file
- 3) Enforcement action shall be taken if the complaint investigation reveals violations of the water and sanitary regulations which are not corrected within a reasonable period of time. Enforcement action is through the Allegan County Prosecuting Attorney's Office.

The ACHD will follow the local and state regulations for public notification as applicable. If the suspected sewage discharge is from a sanitary sewer, the owner will work with their local Board of Public Works to further investigate and make necessary repairs or corrections.

- j. If the inspector suspects that the discharge may cause a public health concern or has the potential to seriously affect water quality, the appropriate agency, such as the Allegan County Health Department or the Michigan Department of Environmental Quality Pollution Emergency Alert System (1-800-292-4706), will be contacted within 24 hours.
- k. Photographs may be taken by the inspector during the facility review and digital copies will be saved with the Dry Weather MS4 Discharge Evaluation Form as documentation of the conditions on site.
- l. If a suspected facility is inspected and no illicit connection was found at that time, the owner/operator will be notified in writing of such findings.

*Note: A private residence will be inspected using the standard operating procedure outlined above utilizing all available technical information.*

#### *4. Elimination of Illicit Discharges*

Once a facility-based illicit connection/discharge has been identified and verified, the ACHD will be notified, if not the discovering agency, and assume responsibility for initiating enforcement actions. The ACHD will send written notification to the property owner/responsible party pursuant to applicable rules and require the illicit connection/discharge to be eliminated within five (5) days of receiving the letter, or sooner if possible. The ACHD will work with the landowner/responsible party to determine a reasonable schedule to eliminate the illicit connection/discharge if it cannot be completed within 5 days. However, any illicit connection/discharge that jeopardizes public health or water quality will be eliminated within 5 days. The notification will require the owner/responsible party to inform the ACHD when the illicit discharge has been eliminated. If the owner/responsible party does not eliminate the illicit connection within the five (5) day or other agreed upon time period, the ACHD will refer the complaint to the ACDC or ACRC, as applicable,

who will take the action allowable pursuant to pertinent rules to eliminate the illicit discharge. ACDC action typically includes elimination of the illicit discharge by the ACDC, or a hired contractor, with the expenses of the work completed invoiced to the landowner/responsible party. This course of action is specified in the initial notice. If there are problems with compliance up to and including payment of any invoices related to work completed by the ACDC's office, then the Allegan County Sheriff's office will be involved to compel compliance. ACRC action typically includes referring the case to the Allegan County Sheriff's office to compel compliance.

Any sanitary sewer related complaints or issues will be referred to the appropriate Board of Public Works (BPW) and septic system issues will be investigated by the (ACHD). Either the BPW or ACHD, as applicable, will handle enforcement of said issues. The Allegan County Sanitary Code outlines the authority to condemn an existing sewage disposal system. Allegan County Health Department Policy Number 611.4.1 outlines Sewage Complaint Investigations (Appendix C). In summary, the procedure requires a Sanitarian to investigate a sewage related complaint in a timeframe not to exceed five (5) business days. Should the Sanitarian find a substantiated illicit discharge of sewage, they shall issue a certified letter that requires correction in a time period that is not to exceed 30 days. If the landowner or responsible party does not comply within this timeframe, then the Allegan County Sheriff's Office will be involved to compel compliance.

If the complaint originates from a site permitted under NPDES rules, the Michigan Department of Environmental Quality (MDEQ) Kalamazoo District Office will be contacted. If the complaint originates from a construction site permitted under the county's Part 91 program, then the Part 91 staff will be contacted for follow up enforcement. These same procedures also apply to illegal dumping or spills related to sanitary waste, septic systems, NPDES permits, or Part 91 permits.

##### *5. Procedure for Responding to Illegal Dumping/Spills*

The ACHD, ACDC and /or ACRC receive complaint calls from citizens and other agencies related to illegal dumping, spills or other discharges of polluting materials to surface waters (waters of the state and county-owned MS4). All calls received from various agencies are sent to the ACHD for follow up. The ACHD has a policy in place for management of potential contamination spills in waterways that outlines response procedures (Appendix D). After receiving a call, ACHD staff will visit the site within 24 hours or the next business day if the complaint is received during the weekend to make field observations, verify the complaint and determine the next steps if illicit dumping or a spill has occurred. If the incident occurred in a County Drain, then a representative from the ACDC's office will investigate.

If the responsible party can be immediately identified, they will be contacted via mail or in person dependent on the nature and severity of the pollutant. The ACHD office will work with the responsible party to eliminate and clean up the dumping/spill within five (5) days. If circumstances prevent the cleanup from occurring within five (5) days, then the ACHD office will work with the responsible party to determine a schedule appropriate for the pollutant. However, dumping or

spilling of pollutants that jeopardize public health or water quality will be eliminated and cleaned up within five (5) days. If the responsible party cannot immediately be identified, the ACDC office will clean up the dump site or spill within five (5) days and invoice the responsible party for the cleanup expenses once they have been identified. If the responsible party is not cooperative in the clean-up efforts, then the Allegan County Sherriff's Office will be involved to compel compliance.

ACHD staff shall notify the MDEQ immediately upon becoming aware of any release of polluting materials from the MS4 to ground or surface waters of the state that meet the threshold reporting quantities found in the Part 5 Rules (Appendix E). The MDEQ Kalamazoo District office (269-567-3500) will be contacted during working hours and the report will be submitted to the Pollution Emergency Alerting System (800-292-4706) outside of normal office hours. In the event of a chemical spill, the County Emergency Manager will also be contacted.

## 6. Training

Training of field inspectors will be arranged by the ACDC and ACRC to provide the technical expertise and continuity necessary to inspect, identify, locate, and eliminate illicit discharges. At a minimum, training will include public relations, safety, inspection and/or investigative procedures, documentation requirements, and reporting procedures.

The Wayne County Illicit Detection and Elimination Video is one tool used for training all field inspectors. This video will be viewed by all potential inspectors prior to the inspection season. The Michigan Department of Environmental Quality (MDEQ) *Naturally Occurring Phenomena* brochures will be provided to all inspectors (Appendix E). Knowledge of these brochures will ensure that inspectors are aware of natural water quality issues that are frequently observed at discharge points and outfalls during inspections. These materials are available on the MACC's website and will be incorporated into online training that is being developed in 2016. The previous are examples of materials the training may include. Additional materials may be added as applicable.

Dry weather screening inspectors will be trained each year when screenings are scheduled prior to commencing inspections. At a minimum, training will require viewing the Wayne County video, reviewing the naturally occurring phenomena brochures, and an overview of the online database.

ACDC and ACRC staff responsible for overseeing the implementation of the IDEP, completing source investigations, overseeing the elimination of illicit connections, and responding to complaints, will be fully trained once during the permit cycle, within one (1) year of the new permit being issued. Any new employees will be trained within one (1) year of their hire. At a minimum, training will include techniques for identifying an illicit discharge or connection, including field observation, field screening and source investigation; and procedures for reporting, responding to and eliminating an illicit discharge or connection and the proper enforcement response.

The MACC will ensure that the ACDC's and ACRC's inspectors receive all IDEP updates and any necessary program requirements or changes. All inspectors should have a copy of the IDEP plan and the *Natural Occurring Phenomena* brochures, as well as be familiar with the plan and the goals of the program.

### **C. Minimize Infiltration of Raw Sewage**

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The potential for seepage from sanitary sewers that are often located in the vicinity or parallel to storm drains will be investigated in the process of IDEP inspections in cooperation with the proper sanitary sewer authority. Sanitary sewer overflows will be addressed with the owner and/or perpetrator in accordance with the requirements of wastewater NPDES permitting. Problems identified with onsite sewage disposal systems will be coordinated with the Allegan County Health Department.

Part of the IDEP includes reducing chemical and bacterial contamination in our surface waters. A continuing action is to minimize seepage from sanitary sewers and on-site sewage disposal systems (OSDS). Dry weather screening will include identifying any suspected sources of human sewage. Some symptoms of sewage contamination may include growth of algae or other nuisance plants due to increased nutrients, the presence of sewage fungus and unpleasant odors. The use of ammonia test strips is one field screening method for the presence of human sewage waste. The ACDC and ACRC will work with the Allegan County Health Department to address any septic seepage when detected and the Local Board of Public Works when leaks from the sanitary system is detected. There have not been any historic or recent problems of sanitary or septic seepage into the ACDC's or ACRC's MS4.

### **D. Maintain a Records Management System**

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The ACDC maintains permanent files for all of its county drains, including those within the MS4 communities, in the vault of the ACDC office. Separate documents for the purpose of tracking the inventory and inspections of the MS4 systems, including discharge points, outfalls and dry weather screenings, are also kept separately. The files contain the original development plans for the storm sewer system, discharge points and outfalls. The ACRC also maintains permanent files for its MS4 system at their main office. The ACRC will maintain its own separate files related to the MS4 system and IDEP documentation. Both entities will be responsible for providing copies of reports and any related information to the MACC for inclusion in periodic status reports.

All observations and any measurements are recorded on electronic or hard copies of the Dry Weather MS4 Discharge Evaluation Form. Copies of the dry weather evaluations will be forwarded to the MACC upon completion for inclusion in the periodic status reports. The SWORD Solutions Software will be used to track progress of source investigations and removal of illicit connections or discharges as well as document responses to illicit dumping and/or spills (Appendix B).

The ACDC and ACRC will maintain documentation of all illicit connections/discharges, dumping incidents and spills to their respective MS4s including any correspondence with the property owner, source investigation documentation, written plans to eliminate the illicit connection/discharge, and proof that the problem was eliminated. This documentation will be tracked within the SWORD Solutions Software.

All monitoring information on file will be considered public information pursuant to the Freedom of Information Act.

## **E. Plan Evaluation**

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The primary goal of the IDEP is to eliminate and prevent illicit connections and discharges into the County and Road Commission MS4s and waters of the state. To evaluate the effectiveness of this plan and the program implementation, the ACDC and ACRC will periodically (within 3 months of completing dry weather screenings) evaluate what the program has accomplished or is lacking. Specifically, ACDC and ACRC will evaluate the effectiveness of using different detection methods, the number of discharges eliminated using different enforcement methods, water quality monitoring data to measure changes in the receiving water, and program efficiency and staff training frequency. They will consider whether or not the right equipment is being used to conduct dry weather screening and have staff been properly trained in how to use it. They will evaluate whether or not the correct data is being collected or if additional parameters are needed. They will also consider whether the overall procedure is working for the intended purpose of detecting and eliminating illicit discharges. This IDEP plan will be continuously implemented and developed. The Macatawa Watershed Storm Water Committee has made the commitment to meet quarterly and will discuss IDEP updates and changes as appropriate.

ACDC and ACRC staff will provide the input necessary to prepare a report summarizing the accomplishments and recommending improvements to the objectives stated in this plan. The report will outline the illicit connections and discharges found and eliminated, if any. If any illicit connections or discharges are found but not eliminated at the time of reporting, the ACDC and ACRC will provide updates in periodic progress report until elimination is successful. Also included will be estimated frequency of discharge and volume of discharge. A copy of this report will be on file and available upon request at the office of the Macatawa Area Coordinating Council, 301 Douglas Ave, Holland, Michigan, 49424.

Dry weather inspections of known discharge points and outfalls were performed during the first permit cycle 2003-2008 and again during the 2008-2013 cycle. Discharge points and outfalls with known problems may be inspected more frequently to prevent reoccurring problems, though none were discovered during the first two cycles of screenings. Discharge points or outfalls that have had a confirmed significant illicit discharge will have data included in the periodic progress report. This data will include the pollutant(s) of concern (if sampling was performed), estimated volume

and load discharges, the location that this discharge entered the ACDC's or ACRC's MS4 and the waters of the state (from map evaluation), and the current status of the discharge.

## **F. Ordinances and Enforcement Procedures**

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The Committee completed a review all of the existing legal authority and enforcement procedures to assure fulfillment of IDEP requirements (See Section V, Summary of Current Ordinances). The Committee will review the work of the IDEP inspectors to determine barriers to ensure inspection quality. If code or enforcement changes are needed, the Committee will prepare a written report of recommended adjustments and forward this report to the ACDC and ACRC for consideration. The ACDC has authority under the Drain Code (see Section V.D) to eliminate illicit connections to county drains. The ACRC typically relies on the authority of local municipalities and other agency regulations as described in Section V.



### III. Timeline

This new IDEP plan will be implemented immediately upon approval from the MDEQ Storm Water Program. Until this updated plan is approved, the previously approved 2005 plan will continue to be followed. This new IDEP will be effective until such time that a revision is deemed necessary and approved by the MDEQ Storm Water Program.

### IV. Definitions

**Discharge point:** any location where storm water from one owned system empties into another system

**Illicit discharge:** any discharge to, or seepage into, an MS4 that is not composed entirely of stormwater or uncontaminated groundwater except discharges pursuant to an NPDES permit

**Illicit connection:** a physical connection to an MS4 that primarily conveys non-storm water discharges other than uncontaminated groundwater; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections

**Outfall:** a type of discharge point that empties into a water of the state

**Significant illicit discharge:** a discharge that shows evidence of impairing water quality in the receiving water

## V. Summary of Current Regulations

This section contains a discussion of current ordinances, codes, policies, and standard operating procedures, (hereafter referred to as rules). Portions of these rules are meant to be a summary only and not intended to be verbatim or to be inclusive of all rules or portions of rules applicable.

New rules and/or improvements to existing rules designed to eliminate illicit discharges in Allegan County should be considered after a comprehensive review of the tools available in existing ordinances.

A review was conducted of the water quality related rules within the following:

- A. Allegan County Road Commission Rules
- B. Allegan County Water and Sewer Regulations
- C. Allegan County Soil Erosion and Sedimentation Control Ordinance (Part 91)
- D. Allegan County Drain Commissioner's Development Standards for Stormwater Management Systems
- E. The Drain Code of 1956, as amended
- F. The City of Holland Rules and Regulations for Private Sewage Disposal Systems
- G. Laketown Township Ordinances
- H. Environmental Laws of the State of Michigan
- I. Building department inspections

## **A. Allegan County Road Commission Rules**

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The Allegan County Road Commission Permits Manual provided standard specification and administrative rules regulating all work or activity on and over County Roads (Appendix G).

Section I, General, A. Procedure. Requires permits for activities that utilize any portion of the county road rights of way.

Section I, General, B. Basic Minimum Requirements. Permits shall be surrendered to the Road Commission for cause shown or default of any provision of the permit.

Section IV Driveway Permits, E. Drainage. Stormwater runoff from driveways may not adversely affect the drainage pattern of the existing road. Stormwater runoff from private property shall not be discharges on the highway right-of-way.

Section VII, Construction Permits – General Specification, F. Surface Restoration, 4. Restoration Right of Wat. Any disturbance to drainage structures (ditches, culverts) must be restored to the original condition.

Section VII, Construction Permits – General Specification, I. Disposal of Water. Water disposal due in excess of normal runoff or natural precipitation must be approved in advance of any discharge.

## **B. Allegan County Water and Sewer Regulations**

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The Allegan County Water and Sewer Regulations, effective November 20, 1997, draw their authority from Sections 2433 and 2435 of The Public Health Code of Michigan, Act 368, P.A. 1978 as amended. Full document is provided in Appendix B.

Important illicit discharge components of these regulations include:

1. **103.00 ENFORCEMENT:** Allow the Health Officer to access premises subject to the regulations to collect samples necessary for enforcement.
2. **104.00 RIGHT OF ENTRY AND INSPECTION:** Health Officer's must be allowed access to inspect at reasonable times and no person may resist or harm the Health Officer in the performance of his job.
3. **107.00 ABATEMENT OF NUISANCES:** Allows the Health Office to order immediate and complete abatement of situations that threaten public health.
4. **401.00 PREMISE OCCUPANCY:** Prohibits sewage from being discharges or deposited on the ground or into surface waters.

5. **404.00 CONDEMNATION OF EXISTING INSTALLATIONS:** Allows the Health Officer to condemn existing systems that are discharging onto the ground or into surface water or where the discharge could endanger a public or private water supply.
6. **407.00 CONNECTION REQUIRED TO A MUNICIPAL SEWERAGE SYSTEM:** Requires connection to an onsite sewage disposal system if access is not available to a public sanitary system. Also provides for the enforcement of proper connections and any violations of this requirements.
7. **415.00 DRAINS:** Allows The Health Office to issue notices to property owners to connect to proper sewage disposal systems when an illicit discharge or connection is discovered into a public or private drainage system.

### **C. Allegan County Soil Erosion and Sedimentation Control Ordinance (Part 91)**

Part 91, Soil Erosion and Sedimentation Control. of the Natural Resources and Environmental Protection Act, 1994 MI PA 451 as amended by 2000 PA 504, addresses soil erosion and sediment control at construction projects involving an earth change of 1 acre in size or within 500' of a lake or stream. In Allegan County, this law is administered by the Allegan County Health Department. This statute provides a mechanism to address sediment, a pollutant type discharge, into the Macatawa drainage systems. The ordinance requires that a permit be obtained for earth change activities that disturb one or more acres of land, or are location within 500' of Waters of the State or within 500' of a storm drain inlet. The ordinance requires the development and approval of a soil erosion and sedimentation control plan to ensure that sediment is not discharges into an MS4 or Waters of the State. The Ordinance grants authority to a Soil Erosion Control Agent of the Allegan County Health Department to conduct enforcement activities for violations of the permit conditions.

### **D. Allegan County Drain Commissioner's Development Standards for Storm Water Management Systems**

The current County Development Standards were acknowledged by the Allegan County Board of Commissioners on December 22, 2004. The Drain Commissioner's Standards establishes its authority through the Drain Code of 1956 as amended and the Land Division Act 591 of 1996. The current Drain Commissioner's policy is primarily a water quantity control document but does use generally accepted stormwater management techniques to provide for significant water quality improvements. The Drain Commissioner's policy is currently (2018) the accepted stormwater management policy in the Allegan County portion of the Holland urbanized area.

Revised County Standards have been proposed in accordance with the FY2017 State of Michigan NPDES Municipal Storm Water Permit Program. As of January 2019, the revised Standards are still draft and not yet in effect. The revised standards place a greater emphasis on water quality protection while still addressing water quantity concerns.

## **E. Drain Code of 1956**

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The Drain Code of 1856, as amended, Public Act 40 of the State of Michigan, is primarily a water quantity document which relates to establishing drainage districts and construction and maintenance of drains. However, reference to illicit exists as follows:

**Section 280.423** (1) A person shall not continue to discharge or permit to be discharged into any county drain or intercounty drain of the state any sewage or waste matter capable of producing in the drain detrimental deposits, objectionable odor nuisance, injury to drainage conduits or structures, or capable of producing such pollution of the waters of the state receiving the flow from the drains as to injure livestock, destroy fish life, or be injurious to public health. This section does not prohibit the conveyance of sewage or other waste through drains or sewers that will not produce these injuries and that comply with section 3112 of part 31 (water resources protection) of the natural resources and environmental protection act, Act No. 451 of the Public Acts of 1994, being section 324.3112 of the Michigan Compiled Laws. (3) If the department of environmental quality determines that sewage or wastes carried by any county or intercounty drain constitutes unlawful discharge as prescribed by section 3109 or 3112 of part 31 of Act No. 451 of the Public Acts of 1994, being sections 324.3109 and 324.3112 of the Michigan Compiled Laws, that 1 or more users of the drain are responsible for the discharge of sewage or other wastes into the drain, and that the cleaning out of the drain or the construction of disposal plants, filtration beds, or other mechanical devices to purify the flow of the drain is necessary, the department of environmental quality may issue to the drain commissioner an order of determination identifying such users and pollutants, under section 3112 of Act No. 451 of the Public Acts of 1994, being section 324.3112 of the Michigan Compiled Laws. The order of determination constitutes a petition calling for the construction of disposal facilities or other appropriate measures by which the unlawful discharge may be abated or purified. The order of determination serving as a petition is in lieu of the determination of necessity by a drainage board pursuant to chapter 20 or 21 or section 122 or 192 or a determination of necessity by a board of determination pursuant to section 72 or 191, whichever is applicable. A copy of the findings of the department shall be attached to the order of determination which shall require no other signature than that of the director of the department of environmental quality. Upon receipt of the order of determination, the drain commissioner or the drainage board shall proceed as provided in this act to locate, establish, and construct a drain. If the responsible users of the drain are determined to be public corporations in the drainage district, the drain commissioner or the drainage board shall proceed as provided in chapters 20 and 21, as may be appropriate, using the order of determination as the final order of determination of the drainage board. If the responsible users are determined to be private persons, the drain commissioner shall proceed as provided in chapters 8 and 9, using the order of determination as the first order of determination.

## **F. City of Holland Rules and Regulations for Private Sewage Disposal Systems**

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The City of Holland Rules and Regulations for Private Sewage Disposal Systems obtain their authority from the Ordinance Code, section 29-15 of the City of Holland. These regulations pertain to the small number of private residential sewage disposal systems remaining in the city. It is important to note that both the Ottawa County Environmental Health Regulations, (Article III C), and the Allegan County Water and Sewage Regulations, (Section 102.00), claim jurisdiction in their respective portions of the City of Holland. The Allegan County regulations make references accommodating overlap with existing municipal ordinances.

## **G. Laketown Township Ordinances**

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Several sections in the Laketown Township Code of Ordinances include language related to eliminating pollution from storm sewer systems and other surfaces waters. They include:

1. Subdivision IV. – Building Sewers and Connections  
Sec. 34-347. – Discharge into storm drain or natural drain prohibited: Prohibits discharge of sewage or other polluted water into any natural outlet within the Township except for facilities that are permitted to discharge under an NPDES permit.
2. Subdivision V. – Use of Public Sewers  
Sec. 34-676. – Unpolluted Drainage: Requires that storm water and unpolluted drainage water be discharge to sewer systems dedicated for that purpose and only allows other discharges, such as industrial cooling water, under approval of the appropriate state agency.

## **H. Michigan Department of Environmental Quality Regulations**

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The Michigan Department of Environmental Quality (MDEQ) reacts to hazardous spills per Part 31 of Public Act 451 of the State of Michigan and is notified as part of the local Standard Emergency Operating Procedures. The MDEQ telephone number for pollution emergencies is 1-800-292-4706. MDEQ also maintains a quick response Environmental Assistance Center, telephone number 1-800-662-9278.

## **I. Building Department Inspections**

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Units of Government in Allegan County have Building Departments with active inspection programs. New construction is inspected to assure that unlawful sewer connections, for example to a municipal storm drain, do not occur.

## **J. Rules Summary**

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An Illicit Discharge Elimination Program Plan should utilize rules already in existence pertinent to detection, and elimination of an illicit discharge. The existing rules of the public entities within the Holland urbanized area provide a framework for both detection and elimination of illicit

discharges. This framework will need to be enhanced as part of the Allegan County Illicit Discharge Elimination Program Plan. The greatest strength of existing rules resides in the elimination of illicit sanitary sewage type discharges, however other types of illicit discharges referred to as waste, wash water, effluent, and hazardous liquid material are referenced. Existing rules provide for health officer/inspector access and inspection upon private property and specify a method of terminating as well as addressing cost and liability issues associated with an illicit sanitary sewage type discharge. A weakness is that chance discovery of an illicit is generally relied upon rather than a program of regular inspections. A program of regular public storm drainage discharge point and outfall inspections will be addressed in the Allegan County Illicit Discharge Elimination Program Plan. Another general weakness of existing rules addressing illicit discharges is that these rules primarily pertain to sanitary sewage type illicit discharges. New rules may be needed to address elimination of certain illicit discharges. Inspection of public storm drainage outfalls and discharge points in the Holland urbanized area will focus on all types of illicit discharges.

## VI. Resources

Ammonia test strips (25 for \$24.79, December 2018): <http://www.hach.com/ammonia-nitrogen-test-strips-0-6-0-mg-l/product?id=7640211610>

pH test strips (100 for \$26.39, December 2018): <http://www.hach.com/ph-paper-0-14-ph-range-100-pk/product?id=7640233621&callback=qs>

Wayne County IDEP Training Video: <https://www.youtube.com/watch?v=qRljMX4eaS8>



**APPENDIX A**

**DRY WEATHER MS4 DISCHARGE EVALUATION FORM**

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**Allegan County Drain Commissioner**  
**Dry Weather MS4 Discharge Evaluation**

DENISE MEDEMAR  
 Drain Commissioner  
 KRISS DEE KRAKER  
 Chief Deputy

<b>Outfall Name:</b> (select one)	<b>ID No.:</b>	<b>Receiving Water:</b>
<b>Township &amp; Section:</b>	<b>Coordinates:</b> Lat: Long:	

<b>Date:</b>	<b>Time:</b>	<b>Inspector(s):</b>
<b>Weather:</b>	<b>Temperature:</b>	<b>Last Rain:</b>

OUTFALL DATA				
Type:	Size:	Material:	Condition:	Notes:

OBSERVATIONS					
<b>Flow Depth (inches):</b>	<b>Odor:</b> <input type="checkbox"/> None <input type="checkbox"/> Musty <input type="checkbox"/> Sewage <input type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Rotten Egg <input type="checkbox"/> Other:	<b>Color(s):</b> <input type="checkbox"/> None <input type="checkbox"/> Light Brown <input type="checkbox"/> Dark Brown <input type="checkbox"/> Green <input type="checkbox"/> Grey <input type="checkbox"/> Black <input type="checkbox"/> Other:	<b>Turbidity:</b> <input type="checkbox"/> None <input type="checkbox"/> Slightly <input type="checkbox"/> Moderately <input type="checkbox"/> Highly <input type="checkbox"/> Opaque <input type="checkbox"/> Other:	<b>Floatables:</b> <input type="checkbox"/> None <input type="checkbox"/> Trash <input type="checkbox"/> Sewage <input type="checkbox"/> Foam <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	<b>Biology:</b> <input type="checkbox"/> None <input type="checkbox"/> Algae <input type="checkbox"/> Slime <input type="checkbox"/> Bacterial sheen <input type="checkbox"/> Other:
<b>Flow Type:</b>					
<b>Vegetation:</b> <input type="checkbox"/> None <input type="checkbox"/> Normal <input type="checkbox"/> Excessive <input type="checkbox"/> Algae <input type="checkbox"/> Other:	<b>Deposits/Stains:</b> <input type="checkbox"/> None <input type="checkbox"/> Mineral <input type="checkbox"/> Oily <input type="checkbox"/> Grease <input type="checkbox"/> Sediment <input type="checkbox"/> Other:				
<b>Comments:</b>					

ANALYSIS				
<b>Temperature (°F):</b>	<b>pH:</b>	<b>Copper (ppm):</b>	<b>Nitrite (ppm):</b>	<b>Surfactants:</b> <input type="checkbox"/> None <input type="checkbox"/> Low <input type="checkbox"/> High
<b>Conductivity (µS):</b>	<b>Ammonia (ppm):</b>	<b>Nitrates (ppm):</b>	<b>phosphorus (ppm):</b>	
<b>Pollution Source:</b> <input type="checkbox"/> Debris/Trash <input type="checkbox"/> Construction Runoff <input type="checkbox"/> Road Crossing <input type="checkbox"/> Septic System <input type="checkbox"/> Gully Erosion <input type="checkbox"/> Upland Source <input type="checkbox"/> Stream Bank Erosion <input type="checkbox"/> Tile Outlet <input type="checkbox"/> Other:		<b>Stream Bottom:</b> <input type="checkbox"/> Cobble/Gravel <input type="checkbox"/> Sand (coarse) <input type="checkbox"/> Muck/Silt (fine) <input type="checkbox"/> Hardpan (solid clay) <input type="checkbox"/> Artificial <input type="checkbox"/> Unknown <input type="checkbox"/> Other:		
<b>Follow Up Needed?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Priority:</b> <input type="checkbox"/> Immediate <input type="checkbox"/> High <input type="checkbox"/> Low	<b>Comments:</b>		

COPIES of this form were provided to:  File  MACC  ACHD  Other:

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## **APPENDIX B**

### **SWORD SOLUTIONS SOFTWARE SCREENSHOTS**

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Permits

Table View Property Permits Well Sewage DHS SESC LOAN Vacant Land Documents Images Vio/Var **Complaints**

Complaint Info Actions / Inspections

Unit #	Received	Entered	Closed	Comp. #

Unit #  Received

Complaint #  Entered  Closed

Category  
Water (res)

Employee  Type  Status

Illness Related # Ill   MDA Outbreak

Occupant Last  Complainant Last   Same

First  First

Middle  Middle

Phone  Phone

Problem:

0 00-00-000-000 / TEST / E17-620 12/20/18 9:58:17 AM

Permits

Table View Property Permits Well Sewage DHS SESC LOAN Vacant Land Documents Images Vio/Var **Complaints**

Complaint Info Actions / Inspections

Date

Status  Closed

Date  Employee  Action Type  Next Inspection

Actions Taken

Notes

0 00-00-000-000 / TEST / E17-620 12/20/18 9:59:17 AM

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## **APPENDIX C**

### **SEWAGE COMPLAINT INVESTIGATIONS**

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ALLEGAN COUNTY HEALTH DEPARTMENT  
POLICIES AND PROCEDURES

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SUBJECT: COMPLAINT INVESTIGATIONS  
NUMBER: 611.4.1 COMPLAINT INVESTIGATIONS

---

EFFECTIVE DATE: 1987 PREPARED BY: Environmental Health Committee  
REVISED: 03/10  
REVIEW DATE: 08/13

---

PURPOSE: To provide mechanism for storage and retrieval of complaints regarding on-site sewage disposal.

POLICY: The Allegan County Health Department shall track all complaints about on-site sewage disposal systems in the ~~Barry Eaton Software System.~~ *SWORD SOLUTIONS SOFTWARE SYSTEM*

- PROCEDURE:
1. Complaints regarding on site sewage disposal shall be logged in the complaint unit in the BEST System by the support staff at the E.H. Division.
  2. ~~Inspections made shall be recorded in the complaint inspection form.~~ *Complaints must be written or received from municipal officials.*
  3. Resolution of the complaint shall be documented in the facility file. *by the sanitarian*
  4. Enforcement action shall be taken if the complaint investigation reveals violations of the water and sanitary regulations which are not corrected within a reasonable period of time. Enforcement action is through the Allegan County Prosecuting Attorney's Office.

DOCUMENT: 611.4.1a Complaint Form *(optional)*

**ALLEGAN COUNTY HEALTH DEPARTMENT**

3255 122<sup>nd</sup> Avenue, Suite 200, Allegan, MI 49010

**Office Administration**  
(269) 673-5411  
**Bioterrorism Preparedness**  
686-4570  
**Personal Health**  
673-5413



**Communicable Disease**  
686-4524  
**Environmental Health**  
673-5415  
**Resource Recovery**  
673-5415

**COMPLAINT FORM**

Date: \_\_\_\_\_

I wish to make a complaint against the following premises:

\_\_\_\_\_

Street Address	Township	Post Office
----------------	----------	-------------

Person residing at above address: \_\_\_\_\_

\_\_\_\_\_

Owner's Name	Street Address & Post Office	Phone Number
--------------	------------------------------	--------------

Nature of complaint as follows:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Complainant: \_\_\_\_\_

Signature

\_\_\_\_\_  
Street Address, City, State and Zip

\_\_\_\_\_  
Phone Number

## **APPENDIX D**

### **MANAGEMENT OF POTENTIAL CONTAMINATION SPILLS IN WATERWAYS**

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**ALLEGAN COUNTY HEALTH DEPARTMENT  
ENVIRONMENTAL HEALTH POLICIES & PROCEDURES**

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SUBJECT: Potential Contamination of Waterways  
POLICY NUMBER: Management of Potential Contamination Spills in Waterways.  
REFERENCE NUMBER:

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EFFECTIVE DATE: 2/25/2014      PREPARED BY: EH Committee  
REVISED DATE:  
REVIEWED DATE: 2/25/2014

---

PURPOSE: To assure a standardized process of communication and response to potential contamination spills of waterways.  
POLICY: Allegan County Health Department will communicate and adhere to the procedure below to identify any potential human health impact.

---

PROCEDURE:

---

1. A potential contamination report can come in from the DEQ, a township or county clerk, a permitted farm; or from a concerned resident.
  2. Whoever receives the report needs to send out communication to the appropriate departments: DEQ representative, Township Clerk, Drain Commission Office, and Local Health Department, and Emergency Operations Manager.
  3. Allegan County Health Department will send a sanitarian out to assess the incident.
  4. The Allegan County Drain Commission Office will send out a staff member to assess the incident if a drain is involved.
  5. The Sanitarian and Drain Commission staff member will provide an update via email to all appropriate departments on their assessment.
  6. The Sanitarian will contact the MAEAP Program Hotline number to inform them of this spill if the potential contaminant is manure @ 269-673-8965 ext. 113.
  7. Based on the Sanitarian and Drain Commission's assessment it will be determined whether there is a need for further activity such as sampling or a health advisory. The EH Service Manager will make this determination with the Health Officer and the Executive Director of County Services.
  8. If it is determined to be an emergency then a call can be made to Emergency Dispatch to activate the emergency response call tree. (Calling dispatch can be done by the health department or any other department if they are unable to reach someone at the local health department.
  9. See Potential Contamination Spill into Waterways Communication Tree attachment to identify key persons in appropriate departments and their contact information.
-

**Potential Contamination Spill into Waterways Communication Tree**  
**Revised 2/25/2014 (needs to be updated at least annually)**

Here is list of people who need to be contacted if there is a potential

1. DEQ- Bruce Washburn email- [WASHBURN2@michigan.gov](mailto:WASHBURN2@michigan.gov)
2. Drain Commission-Denise Medemar- [dmedemar@allegancounty.org](mailto:dmedemar@allegancounty.org)
3. Drain Commission-Glenn Pomp- [gpomp@allegancounty.org](mailto:gpomp@allegancounty.org)
4. Drain Commission-Brent Scholten- [bscholten@allegancounty.org](mailto:bscholten@allegancounty.org)
5. Emergency Manager- Scott Corbin- [scorbin@allegancounty.org](mailto:scorbin@allegancounty.org)
6. Health Department Emergency Preparedness Coordinator- Kathy Yonkers-Wright- [kwright@allegancounty.org](mailto:kwright@allegancounty.org)
7. Health Department-EH Sanitarian- Ray Visscher- [rvissscher@allegancounty.org](mailto:rvissscher@allegancounty.org)
8. Health Department- EH Sanitarian-Jamie Dentler- [jdentler@allegancounty.org](mailto:jdentler@allegancounty.org)
9. Health Department-EH Sanitarian-John Johnson- [jjohnson@allegancounty.org](mailto:jjohnson@allegancounty.org)
10. Health Department-EH Services Manager-vacant
11. Health Department- Interim Health Officer-Angelique Joynes- [ajoynes@allegancounty.org](mailto:ajoynes@allegancounty.org)
12. Allegan County Executive Director of Services- Dan Wedge- [dwedge@allegancounty.org](mailto:dwedge@allegancounty.org)
13. Township clerk of affected township



## **APPENDIX E**

### **PART 5 NOTIFICATION REQUIREMENTS IN MICHIGAN**

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## Release Notification Requirements in Michigan

*While diligent efforts have been made to assure that the information provided in the following table is accurate and complete as of August 18, 2015, there is no guarantee that it covers all of the regulatory requirements for release notification and reporting in Michigan.*

**Chemical releases** in Michigan are potentially reportable under one or more of twenty-seven different **state and federal regulations**. Determining which regulations apply to a specific release can be an overwhelming task. The “Release Notification Requirements in Michigan” table was compiled by the Michigan SARA Title III Program staff in the Department of Environmental Quality (DEQ) to help owners and operators of facilities in Michigan, including vehicles and farms, determine their potential notification and reporting requirements in the event of a chemical release.

Check your permits, licenses, registrations, pollution prevention plans, and local ordinances for *additional* release reporting requirements. In particular, all NPDES permits and most air permits have release reporting requirements in them that are not included on this table.

This table should be used as a tool to identify potential reporting requirements *before* a release occurs, and to identify follow-up reporting requirements based on the release. The table outlines **what** releases must be reported, **when** they must be reported, and **to whom** they must be reported.

### What Is a Chemical Release?

The term “release” means spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing. “Chemical” includes substances considered to be toxic or hazardous as well as substances as seemingly harmless as salad oil.

### Chemical Lists

The EPA published a consolidated list of chemicals subject to SARA Title III, CERCLA, section 112(r) of the Clean Air Act called the “List of Lists.” See the following EPA website for the List of Lists: <http://www2.epa.gov/epcra/epcracerclaa-ss112r-consolidated-list-lists-march-2015-version>

The “List of Lists” includes:

- **CERCLA Hazardous substances**, including **RCRA waste streams** and **unlisted hazardous wastes**, with reportable quantities (RQ) for releases (originally published in 40 CFR 302, Table 302.4).
- **SARA Title III Extremely Hazardous Substances (EHS)** with RQs for releases (originally published in 40 CFR 355).
- **SARA Title III Section 313 Toxic chemicals** (originally published in 40 CFR 372 Subpart D).

The Part 5 Rules, Spillage of Oil and Polluting Materials, were promulgated pursuant to Part 31 of Michigan’s Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). These rules include a list of “**polluting materials**” with threshold reporting quantities for releases.

NREPA Part 201 has been updated and now refers to the **2015 version of the CERCLA list** of hazardous substances.

## NOx Exemption in CERCLA and SARA Title III

On **October 4, 2006**, EPA finalized an exemption for certain releases of emissions of NO and NO<sub>2</sub> (collectively NO<sub>x</sub>) to air from CERCLA and SARA Title III reporting requirements (71 FR 58525). The exemption was effective November 3, 2006, and applies to releases to the air of less than 1,000 pounds of NO<sub>x</sub> in 24 hours that are the result of combustion. The exemption also applies to emissions from combustion-related activities such as detonation or processes that include both combustion and non-combustion operations, such as nitric acid production.

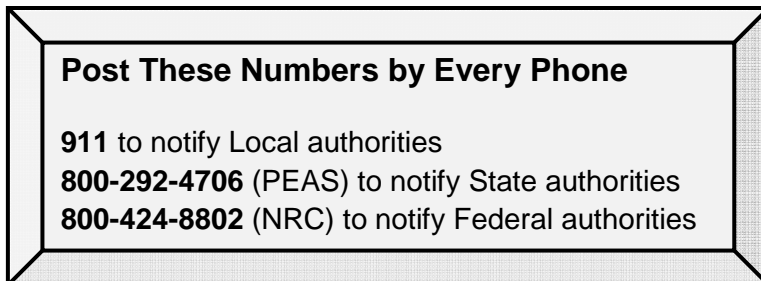
## Petroleum Exclusion in CERCLA

Petroleum, including crude oil or any fraction thereof is excluded from the definitions of "hazardous substance," and "pollutant or contaminant" under CERCLA. Petroleum releases, accordingly, must generally be addressed under the authority of other law such as the underground storage tank (UST) provisions of RCRA, or the Clean Water Act (CWA). This exception, which has become known as the "**petroleum exclusion**," plays a significant role in CERCLA because many sites contain petroleum contamination. Petroleum frequently contains specific listed hazardous substances, the most common of which are benzene, toluene and xylenes. In general, such substances are not treated as CERCLA hazardous substances as long as they are found in refined petroleum fractions and are not present at levels that exceed those normally found in such fractions. Substances present in petroleum as a result of contamination during use or from mixing or combining are not within the petroleum exclusion and in such cases, the substances are considered CERCLA hazardous substances.

NREPA Part 201, Environmental Remediation, section 20114(1)(b) states that the requirements to report a release under this regulation apply to "reportable quantities of hazardous substances established pursuant to 40 CFR 302.4 and 302.6" This regulation references the listed hazardous substances published in the Code of Federal Regulations. It does not adopt the petroleum exclusion that applies to federal regulation of releases of CERCLA hazardous substances. As a result, petroleum constituents, including component substances such as benzene, toluene, and xylenes, plus any additives (e.g., MTBE, lead) are all reportable under Part 201 based on the reportable quantities in the 2015 version of the CERCLA list of hazardous substances published in 40 CFR 302.4 and 302.6.

## Initial Notification: There is **NO PENALTY** for over-reporting!

When there is a release, determining if, when, and to whom it should be reported can be a daunting task even if you are familiar with the table. It is therefore recommended that **if there is a release, immediately call** the following three numbers even if the content or quantity of the released material has not yet been determined:



You can then respond to the release, reassess the situation, and make additional notifications as required (e.g. as specified in the table or in your permits). Your follow-up report will provide details that explain why a release was *or was not* reportable.

SARA Title III section 304 requires that the LEPC be notified immediately of a release. Many LEPCs accept the call to 911 as notification. Others require direct notification. Contact your LEPC in advance to find out their requirements.

## Written Follow-up Report

Written follow-up report forms that are specified in the table are required by regulation. The DEQ has developed a generic written report form called “Spill or Release Report” (EQP 3465) that can be used to report releases of:

- Hazardous and extremely hazardous substances under SARA Title III,
- Hazardous waste under NREPA Part 111,
- Liquid industrial waste under NREPA Part 121,
- Hazardous substances under NREPA Part 201, and
- Polluting materials under NREPA Part 31, Part 5 Rules.

### Hot Tip!

Use the generic Spill or Release Report form to record *initial* notifications.

Links to the release reporting forms and chemical lists referenced in the table are available on the DEQ SARA Title III Release Reporting website. Visit this site for updated DEQ and LEPC contact information.

**NOTE:** Executive Order 2012-14 transferred the DEQ storage tank program to the Bureau of Fire Services in LARA effective December 2, 2012. Phone numbers and email addresses associated with the storage tank program and staff have not changed.

For information regarding a specific regulation, contact the agency specified in the “notes” column of the table. If this is a DEQ division, contact the *district* division office.

General questions or comments regarding this table should be directed to the DEQ Environmental Assistance Center at 800-662-9278 or [deq-assist@michigan.gov](mailto:deq-assist@michigan.gov).

DEQ program information is available at [www.michigan.gov/deq](http://www.michigan.gov/deq) or you may contact the DEQ Environmental Assistance Center.

DEQ Release Reporting website:  
[www.michigan.gov/chemrelease](http://www.michigan.gov/chemrelease)

*Acronyms are defined at the end of the table.*

## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>SARA Title III Section 304 40 CFR 355.40 (<b>EHS &amp; Hazardous Substances</b>)</p>	<p>Release of a CERCLA <b>hazardous</b> substance (40 CFR 302, Table 302.4) or <b>Extremely Hazardous</b> Substance (EHS) (40 CFR 355, Appendix A) from a facility (all buildings, equipment, etc. located on a single site or adjacent sites owned or operated by the same person) at which a hazardous chemical (as defined under 29 CFR 1910.1200(c)) is used, produced or stored (including motor vehicles, rolling stock, and aircraft) in a quantity equal to or greater than its corresponding reportable quantity in any 24-hr period that migrates beyond the facility boundaries.</p> <p>Includes continuous release reportable under CERCLA Section 103.</p> <p>Excludes release that is federally permitted or that results in exposure to persons solely within the boundaries of the facility. See 67 FR 18899 (4/17/02) for guidance on the CERCLA federally permitted release definition for certain air emissions.</p> <p>Does not apply to the application, handling, and storage by an agricultural producer of a pesticide product registered under FIFRA.</p> <p>Excludes release &lt; 1000 lbs of NOx released to the air from combustion or combustion-related activities.</p>	<p>Immediate (within 15 minutes after discovery): to LEPC(s) of any area(s) potentially affected, and SERC (DEQ PEAS line accepts notification on behalf of SERC) by owner or operator.</p> <p>Continuous releases must be identified as such and are reported initially and when there is a significant change in the release.</p> <p>See 73 FR 76948 (12/18/08): Only CAFOs are required to report continuous releases to the air from animal waste.</p> <p>Transportation related releases can be reported to 911.</p>	<p>As soon as practicable (within 30 days) after release: to LEPC(s) and SERC.</p> <p>Not required for releases that occur during transportation or from storage incident to transportation.</p> <p>For continuous releases: Initial written within 30 days after initial telephone notification: to LEPC(s) and SERC.</p> <p>Michigan SARA Title III Program accepts reports on behalf of the SERC.</p>	<p>PEAS: 800-292-4706</p> <p>Contact your LEPC for a phone number to report releases.</p> <p>Call 911 if your LEPC is not active.</p> <p>For further information &amp; LEPC contact information, contact Michigan SARA Title III Program 517-284-7272</p>
<p>CERCLA Section 103 40 CFR 302 (<b>Hazardous Substances</b>)</p>	<p>Release into the environment of a CERCLA <b>hazardous</b> substance (40 CFR 302, Table 302.4) or hazardous constituent in a mixture or solution (including hazardous waste streams) from a vessel or facility (any building, structure, etc. including motor vehicles, rolling stock, aircraft, pipe, pipeline, well, pond, lagoon, impoundment, ditch, landfill, or site where a hazardous substance has come to be located) in a quantity equal to or greater than its corresponding reportable quantity in any 24-hour period.</p> <p>Excludes petroleum, including oil, or any fraction thereof.</p> <p>See 40 CFR 302.6 for notification requirements for radionuclide releases.</p> <p>Includes continuous release: occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal operations or treatment processes.</p> <p>See 67 FR 18899 (4/17/02) for guidance on the CERCLA federally permitted release definition for certain air emissions. See 71 FR 58525 (10/4/06) re Exemption for NOx releases to the air of &lt; 1000 lbs from combustion or combustion-related activities.</p> <p>Does not apply to the application, handling, and storage by an agricultural producer of a pesticide product registered under FIFRA.</p>	<p>Immediate (within 15 minutes after discovery): to NRC by person in charge of vessel or offshore or onshore facility.</p> <p>Continuous releases must be identified as such and are reported initially and when there is a significant change in the release.</p> <p>See 73 FR 76948 (12/18/08) re Exemption from reporting continuous releases to the air from animal waste.</p>	<p>For continuous releases only: Initial written within 30 days after initial telephone notification &amp; Follow-up within 30 days of first anniversary of initial written notification: to EPA Region 5.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>For further information contact Michigan SARA Title III Program 517-284-7272 or EPA's Superfund, TRI, EPCRA, RMP, and Oil Information Center 800-424-9346</p>

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.

\*This table covers only those reporting requirements found in rules and regulations that apply in Michigan. **Releases might be reportable under multiple regulations.**

**Additional reporting requirements** might be found in **permits**, licenses, registrations, **contingency and pollution prevention plans**, and local ordinances.



## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
NREPA 1994 PA 451 Part 201, <b>Environmental Remediation</b>	<p>(i) Unpermitted release into the environment over a 24-hour period of a <b>hazardous</b> substance (<i>July 1, 2012, edition</i> of the CERCLA list, 40 CFR 302, Table 302.4) in a quantity equal to or greater than its corresponding reportable quantity.</p> <p>Does not include release solely from UST systems regulated under Part 213, and release solely from disposal area licensed under Part 115 and discovered through disposal area's hydrogeological monitoring plan.</p> <p>Release of substance regulated by MI Dept of Agriculture &amp; Rural Development (MDARD) (fertilizer, soil conditioner, or pesticide) excluding normal agricultural practices: <i>also</i> report to MDARD.</p>	<p>Within 24 hours after discovery:                      to DEQ-RRD district office                      (PEAS after hours)                      by                      owner or operator or person                      holding easement interest.</p> <p>Report agricultural release to                      MDARD.</p>	<p>Upon request:                      Provide a response activity plan                      to DEQ-RRD district supervisor.</p>	<p>PEAS: 800-292-4706</p> <p>MDARD Agriculture                      Pollution Emergency                      Hotline: 800-405-0101</p> <p>For further information                      contact DEQ-RRD</p>
NREPA 1994 PA 451 Part 201, <b>Environmental Remediation</b> (Continued)	<p>(ii) The owner or operator has reason to believe that one or more <b>hazardous</b> substances are migrating or have migrated from his or her property and are present beyond the property boundary at a concentration in excess of cleanup criteria for unrestricted residential use.</p> <p>(iii) The release is a result of an activity that is subject to permitting under NREPA Part 615 and the owner or operator is not the owner of the surface property and the release results in <b>hazardous</b> substance concentrations in excess of cleanup criteria for unrestricted residential use.</p> <p>Hazardous substance means a hazardous substance defined in CERCLA (40 CFR 302), hazardous waste as defined in NREPA part 111, petroleum as defined in NREPA part 213, or any substance demonstrated to pose an unacceptable risk to public health, safety, welfare, or the environment.</p> <p>Cleanup criteria for unrestricted residential use means criteria that satisfy the requirements in section 20120a(1)(a) or (16); or as defined under NREPA part 213.</p>	<p>Within 30 days after discovery:                      to DEQ-RRD district office                      and                      owners of property to which                      hazardous substances migrated or                      owner of surface property                      by                      owner or operator of property                      where release occurred.</p> <p>Specific form required for:                      "Notice of Migration of                      Contamination" (Form                      EQP4482).</p>	<p>Upon request:                      Provide a response activity plan                      to DEQ-RRD district supervisor.</p>	<p>For further information                      contact DEQ-RRD</p>

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## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p style="text-align: center;">NREPA 1994 PA 451 Part 83, Pesticide Control Regulation 640, Commercial Pesticide Bulk Storage <b>(Agricultural)</b></p>	<p>Release to the environment of a commercial <b>pesticide</b> &gt;5 gallons or 100 pounds.</p> <p>Reportable agrichemical spills as defined in the provisions of SARA Title III section 304 and CERCLA section 103 shall be immediately reported to PEAS and the NRC.</p> <p>The term “release” excludes normal agricultural practices.</p>	<p style="text-align: center;">Immediate: to PEAS*</p> <p style="text-align: center;">Also notify NRC for spills reportable under SARA Title III &amp; CERCLA.</p> <p style="text-align: center;">*MDARD prefers direct notification to their hotline. PEAS forwards all agriculture calls to MDARD.</p>	<p style="text-align: center;">Within 90 days: to MDARD Pesticide and Plant Pest Management Div. a revised site plan.</p>	<p>MDARD Agriculture Pollution Emergency Hotline: 800-405-0101</p> <p>PEAS: 800-292-4706</p> <p style="text-align: center;">NRC 800-424-8802 or online at www.nrc.uscg.mil</p> <p>For further information contact MDARD 517-284-5644</p>
<p style="text-align: center;">NREPA 1994 PA 451 Part 85, Fertilizers Regulation 641 Commercial Fertilizer Bulk Storage Regulation 642, On Farm Fertilizer Bulk Storage <b>(Agricultural)</b></p>	<p>Release to the environment of a commercial <b>fertilizer</b> &gt;55 gallons liquid or 650 pounds dry, or tank overfills; or an on farm fertilizer &gt; 55 gallons liquid.</p> <p>For storage tank with bladder system instead of diking: also report all overfills and internal spills.</p> <p>The term “release” excludes normal agricultural practices. The term “liquid fertilizer” excludes anhydrous ammonia.</p>	<p style="text-align: center;">Immediate: to MDARD by commercial bulk storage facility personnel</p> <p style="text-align: center;">(For farms, the regulation does not specify who makes the report.)</p>	<p style="text-align: center;">Not required.</p>	<p>MDARD Agriculture Pollution Emergency Hotline: 800-405-0101</p> <p>For further information contact MDARD 517-284-5644</p>
<p style="text-align: center;"><b>Fire Prevention Code</b> 1941 PA 207 Section 29.5g</p>	<p>A fire, explosion, spill, leak, accident, or related occurrence that involves the transportation, storage, handling, sale, use, or processing of hazardous material by a firm, person, or vehicle.</p> <p><b>Hazardous</b> material = explosives, pyrotechnics, flammable gas, flammable compressed gas, flammable liquid, nonflammable compressed gas, combustible liquid, oxidizing material, poisonous gas or liquid, LPG, or irritating, etiologic, radioactive, or corrosive material.</p> <p>Act 207 amended 6/19/2006. The State Fire Marshall is in LARA, Bureau of Fire Services.</p>	<p>Immediately following incident, report known details regarding incident: to LARA Bureau of Fire Services <i>and</i> organized local fire department by owner of firm or vehicle or the person <i>and</i> the chief of first police or organized fire dept upon scene of incident.</p>	<p style="text-align: center;">Not required.</p>	<p>Contact LARA Bureau of Fire Services by calling the MSP HazMat hotline: 800-525-5555</p> <p>For further information: contact local fire department</p>

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## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>49 CFR 171 <b>(Transportation of Hazardous Materials)</b></p>	<p>Initial verbal notice: Incident during transportation (including loading, unloading, temporary storage) involving (1) <b>hazardous</b> material and resulting in death, injury requiring hospitalization, public evacuation <math>\geq</math> 1 hour, major transportation artery or facility closure <math>\geq</math> 1 hour, or flight pattern alteration; (2) fire, breakage, spillage, or suspected radioactive contamination occurs involving a <b>radioactive</b> material; (3) fire, breakage, spillage or suspected contamination involving an <b>infectious</b> substance other than a regulated medical waste; (4) <b>marine pollutant</b> release exceeding 450 L (119 gal) liquid or 400 kg (882 lbs) solid; (5) other per judgment of person in possession of the hazardous material (e.g., continuing danger to life exists at scene of incident); (6) during transportation by aircraft, a fire, violent rupture, explosion or dangerous evolution of heat occurs as a direct result of a battery or battery-powered device.</p> <p>Hazardous material = CERCLA hazardous substance (40 CFR 302, Table 302.4), hazardous waste (40 CFR 262), marine pollutant (49 CFR 172.101 Appendix B), elevated temperature material, listed on Hazardous Materials Table (49 CFR 172.101), or meets criteria for hazard class/division in 49 CFR 173.</p> <p>Written follow-up report: Required for all of above, plus any unintentional release of hazardous material from a package (including tank); or any quantity of hazardous waste discharged during transportation; or structural damage to lading retention system, even if no release, on specification cargo tank with <math>\geq</math> 1000 gal capacity containing hazardous material; or undeclared hazardous material discovered.</p>	<p>As soon as practical but no later than 12 hours after occurrence of the incident: to NRC by each person in physical possession of the hazardous material.</p> <p>(A reportable incident <i>must</i> be reported by telephone, not online.)</p> <p>For infectious substances, notice may be given to the Director, Centers for Disease Control and Prevention, U.S. Public Health Service instead of NRC.</p>	<p>Within 30 days after discovery: to US DOT on DOT Form F 5800.1 (01-2004) “Hazardous Materials Incident Report.”</p> <p>Report online at <a href="https://hazmatonline.phmsa.dot.gov/incident/">https://hazmatonline.phmsa.dot.gov/incident/</a></p> <p>Report must be updated w/i 1 year of incident if: Death results from injury; hazardous material or package info on prior report misidentified; damage, loss or cost not known on prior report becomes known or changes by \$25,000 or 10%.</p> <p>See regulation for exceptions to written report.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>U.S. Public Health Service 800-232-0124</p> <p>For further information contact US DOT Hazardous Materials Information Center at 800-467-4922 or online at <a href="http://www.phmsa.dot.gov/hazmat">www.phmsa.dot.gov/hazmat</a></p>
<p>NREPA 1994 PA 451 Part 31, Water Resources Protection (Release to <b>surface of ground, surface water, groundwater or public sewer system</b>)</p>	<p>Unpermitted release directly or indirectly to public sewer system, surface of ground, surface water or groundwater from an oil storage facility or on-land facility of a “<b>polluting material</b>” (<b>oil, salt,</b> or any material specified in table 1 in R 324.2009) in excess of its threshold reporting quantity during any 24-hour period.</p> <p>See Part 5 rules, effective 8/31/01, for details and exemptions. HB 5586 effective 6/15/04 amended the reporting requirements.</p> <p><i>Rule revisions pending as of November 2014.</i></p>	<p>As soon as practicable after detection: to PEAS <i>and</i> 911 by owner, operator or manager.</p> <p>State agencies call 911 if release reported to them by another state or Canada.</p>	<p>Within 10 days after release: to DEQ-WRD district supervisor <i>and</i> to the local health department where the release occurred, outlining cause, discovery, response &amp; prevention of recurrence.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-WRD</p>

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## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p style="text-align: center;">CWA Section 311 33 CFR 153 (<b>Navigable waters</b> – Coast Guard/DOT) Control of Pollution by <b>Oil</b> and <b>Hazardous</b> Substances, Discharge Removal</p>	<p>Discharge of a harmful quantity of <b>oil</b> or a <b>hazardous</b> substance from a vessel or onshore or offshore facility into or upon navigable <b>waters</b> of the United States or adjoining <b>shorelines</b>.</p> <p>Harmful quantity = oil discharge that violates applicable water quality standards, or causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or a CERCLA hazardous substance (40 CFR 302, Table 302.4) in a quantity equal to or greater than its corresponding reportable quantity.</p> <p>Oil = oil of any kind or in any form including petroleum, crude oil, petroleum refined products, sludge, oil refuse, oil mixed with wastes, etc., as well as vegetable and animal oils.</p>	<p style="text-align: center;">Immediate: to NRC by person in charge of vessel or facility.</p> <p>If direct reporting to NRC not practicable, may report to district Coast Guard or EPA predesignated OSC.</p>	<p style="text-align: center;">Not required.</p>	<p style="text-align: center;">NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p style="text-align: center;">District 9 Coast Guard 216-902-6117</p> <p style="text-align: center;">EPA Region 5 for predesignated OSC 312-353-2318</p> <p>For further information contact EPA Region 5 at 312-353-8200 or District 9 Coast Guard at 216-902-6045</p>
<p style="text-align: center;">CWA Section 311 40 CFR 110 (<b>Discharge of Oil</b>)</p>	<p>Discharges of <b>oil</b> that violate applicable <b>water</b> quality standards, or cause a film or sheen upon or discoloration of the surface of the water or adjoining <b>shorelines</b>, or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.</p> <p>Oil = oil of any kind or in any form including petroleum, crude oil, petroleum refined products, sludge, oil refuse, oil mixed with wastes, etc., as well as vegetable and animal oils.</p>	<p style="text-align: center;">Immediate: to NRC by person in charge of vessel or facility.</p>	<p style="text-align: center;">Not required.</p>	<p style="text-align: center;">NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>For further information contact DEQ-WRD</p>
<p style="text-align: center;">NREPA 1994 PA 451 Part 31, Water Resources Protection (<b>Sewer Systems</b>)</p>	<p>Discharge of untreated sewage or partially treated sewage from a <b>sewer system</b> onto land or into the waters of the state.</p> <p>“Sewer system” means a sewer system designed and used to convey sanitary sewage or storm water, or both.</p>	<p>Immediate (within 24 hours): to DEQ-ODWMA district office (PEAS after hours); Local health depts.; Daily newspaper circulated in source &amp; affected counties; &amp; Affected municipalities.</p>	<p style="text-align: center;">At end of discharge: to same parties notified initially on Form EQP 5857 (Rev. 12/2011) “Report of Discharges of Untreated or Partially Treated Sewage.” Includes results of E. coli testing.</p>	<p style="text-align: center;">PEAS: 800-292-4706</p> <p>For further information contact DEQ-ODWMA</p>
<p style="text-align: center;">NREPA 1994 PA 451 Part 41, <b>Sewerage Systems</b></p>	<p>Discharges of pollutants from <b>sewerage systems</b> (which can include combined sewers) in excess of those authorized by a discharge permit issued by the DEQ to surface water or groundwater as a result of a facility breakdown or emergency.</p> <p>Sewerage systems handle sanitary sewage or other industrial liquid wastes.</p>	<p style="text-align: center;">Promptly: to DEQ-ODWMA district office (PEAS after hours) by owner.</p>	<p style="text-align: center;">Within 72 hours: to DEQ-ODWMA district supervisor, outlining cause, discovery, corrective actions taken to minimize impact, restore operations, and eliminate future unpermitted discharges.</p>	<p style="text-align: center;">PEAS: 800-292-4706</p> <p>For further information contact DEQ-ODWMA</p>

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## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>NREPA 1994 PA 451 Part 211, <b>Underground Storage Tanks</b> Part 213, Leaking Underground Storage Tanks</p>	<p>Releases of a <b>regulated substance</b> of any amount from underground storage tank (UST) systems (includes the emergency shutoff valve on down) subject to registration; overflow from UST fillpipe or vent onto ground; release from aboveground pipe attached to UST system.</p> <p>Regulated substance = petroleum or CERCLA hazardous substance (40 CFR 302, Table 302.4) or substance listed in CAA title 1 part A sect 112. Petroleum includes, but is not limited to, crude oil, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, and petroleum solvents.</p>	<p>(Part 211) Within 24 hours after discovery: to LARA Bureau of Fire Services, Storage Tank Division by email, or fax on Form EQP 3826 (Rev. 4/12) If free product, Form EQP 3800 (Rev 02/2003) required by UST owner or operator, or employee of owner or operator.</p> <p>Includes releases discovered years after UST system removed</p>	<p>(Part 213) At 180 days Initial Assessment Report on Form EQP3841 (Rev. 02/2003) if not closed; at 365 days Final Assessment Report on Form EQP3842 (Rev. 11/2006) if still not closed; at closure Closure Report on Form EQP3843 (Rev. 02/2003) to DEQ-RRD district project manager.</p>	<p>Email: <a href="mailto:deq-std-tanks@michigan.gov">deq-std-tanks@michigan.gov</a> Fax:517-335-2245</p> <p>For further information contact DEQ-RRD or phone 800-MICHUST</p>
<p>NREPA 1994 PA 451 Part 111, <b>Hazardous Waste</b> Management (Generators; Treatment, Storage &amp; Disposal Facilities (TSDF); Transporters)</p>	<p>Any amount of characteristic <b>hazardous waste</b> or listed hazardous waste (as defined in R 299.9203 "Hazardous Waste Rule 203") reaches the surface water or groundwater, or A fire, explosion, or other release of hazardous waste or hazardous waste constituent occurs that could threaten human health or the environment. or A release of &gt;1lb (or ≤1lb if not immediately cleaned up) hazardous waste to the environment from a tank system or associated secondary containment system.</p> <p>Additional hazardous waste reporting requirements under NREPA Part 201 and CERCLA.</p> <p>NREPA Part 111 requires transporters to comply with 49 CFR 171 and 33 CFR 153.</p>	<p>Immediate: to PEAS (or for Tank systems/secondary containment, within 24 hours of discovery: to DEQ-OWMRP)</p> <p>and to NRC if threat to human health or environment outside facility by generator, or owner or operator of TSDF, or transporter.</p>	<p>For large quantity generators and TSDF: Within 15 days after incident IF the contingency plan had to be implemented: to DEQ-OWMRP.</p> <p>For tank/secondary containment systems: Within 30 days of discovery: to DEQ-OWMRP.</p> <p>For transporters: to US DOT if required per 49 CFR 171.</p>	<p>PEAS: 800-292-4706</p> <p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>For further information contact DEQ-OWMRP</p>
<p>NREPA 1994 PA 451 Part 121, <b>Liquid Industrial Waste</b></p>	<p>The <b>liquid industrial waste</b> spill could threaten public health, safety, welfare, or the environment, or has reached surface water or groundwater.</p> <p>Liquid industrial waste includes nonhazardous brine, by-product, industrial wastewater, leachate, off-spec commercial chemical product, sludge, sanitary or storm sewer clean-out residue, grease trap clean-out residue, spill residue, used oil, or other liquid waste not regulated by other laws.</p>	<p>Immediate: to PEAS and local authorities by generator, transporter, or owner or operator of facility.</p> <p>Refer to MCL 324.12111(1) for required report elements</p>	<p>Prepare within 30 days after incident. Submit upon request: to DEQ-OWMRP district supervisor.</p> <p>Refer to MCL 324.12111(1) for required report elements</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-OWMRP</p>
<p>NREPA 1994 PA 451 Part 55, <b>Air Pollution</b> Control</p>	<p>Abnormal condition, start-up, shutdown, or malfunction that results in emissions exceeding permissible (in rule, permit or order) levels of <b>hazardous air pollutants</b> (HAPs) (CAA Sect. 112(b)) or <b>toxic air contaminants</b> (as specified in permit) for &gt; 1 hour, or any air contaminant for &gt; 2 hours.</p> <p>Written follow-up report only required for emission exceedences lasting &gt; 2 hours.</p>	<p>As soon as possible, but not later than 2 business days after discovery: to DEQ-AQD district office (PEAS after hours) by owner or operator.</p>	<p>Within 10 days after start-up, shutdown, or abnormal condition, malfunction corrected. Or within 30 days of abnormal condition, malfunction discovery- whichever first: to DEQ-AQD district supervisor.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-AQD</p>

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## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>NREPA 1994 PA 451 Part 55, <b>Air Pollution Control</b> (Permit to Install Exemptions)</p>	<p>Emergency venting of <b>natural gas</b> from transmission and distributions systems or <b>field gas</b> from gathering lines in amounts &gt; 1,000,000 standard cubic feet per event.</p> <p>Emergency = unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property or the environment if not controlled immediately. See R 336.1285(mm), effective 6/20/2008, for details.</p>	<p>Within 24 hours of the event: to PEAS by owner or operator.</p>	<p>Not required.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-AQD</p>
<p>Public Health Code 1978 PA 368 Part 133, <b>Dry Cleaning</b></p>	<p>Condition or incident presents a threat or hazard to <b>public health</b> or safety.</p>	<p>Immediate: to DEQ-AQD district office (PEAS after hours) by owner or operator.</p>	<p>Within 30 days after incident: To DEQ-AQD district supervisor.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-AQD</p>
<p>NREPA 1994 PA 451 Part 615, Supervisor of Wells (<b>oil and gas production fields</b>)</p>	<p>A loss, spill or release of (1) any amount of <b>brine, crude oil, or oil or gas field waste</b> <i>unless</i> it is less than 42 gallons and occurs while an authorized representative is on site and is completely contained and cleaned up within 1 hour,  or (2) any unpermitted amount of <b>natural gas</b>, or (3) <b>chemicals</b> used in association with oil and gas activities.</p>	<p>Within 8 hours after discovery of: 42 gallons or more of brine, crude oil, or oil or gas field waste, or any amount of chemical or natural gas, or; less than 42 gallons if the spill contacts surface water, groundwater, or other environmentally sensitive resources, or is not completely contained and cleaned up within 48 hours: to DEQ-OOGM district office (PEAS after hours) by permittee.</p>	<p>Within 10 days after discovery of loss or spill: to DEQ-OOGM district supervisor on Form EQP-7233 (Rev 1/2012) "Report of Loss or Spill." by permittee</p> <p>Written report only for less than 42 gallons of brine, crude oil, or oil and gas field waste if spill does not contact surface water, groundwater, or other environmentally sensitive resources, and is completely contained and cleaned up within 48 hours.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-OOGM</p>
<p>49 CFR 191 Transportation of Natural and Other Gas by Pipeline</p>	<p>An incident, meaning: (1) Event that involves a release of <b>gas</b> from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility that results in: Death or hospitalization; or Property damage <math>\geq</math> \$50,000; or estimated gas loss of <math>\geq</math> three million cubic feet. (2) Event that results in emergency shutdown of LNG facility. (3) Significant event per operator.</p> <p>Written Incident reports not required for LNG facilities.</p> <p>Applies to pipeline systems and the transportation of gas through those systems in or affecting interstate or foreign commerce. (See 49 CFR 191.3 for details.)</p>	<p>Earliest practicable moment following discovery: to NRC by operator.</p> <p>Notification must electronic unless there is a safety-related condition to report.</p>	<p>As soon as practicable, and within 30 days after discovery: to US DOT. on DOT Form PHMSA F 7100.1 "Incident Report – Gas Distribution System." or PHMAS F 7100.2 "Incident Report – Gas Transmission and Gathering Systems" or PHMSA F 7100.3 "Incident Report – Liquefied Natural Gas (LNG) Facilities"</p> <p>Supplemental report filed as necessary as soon as practicable.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>For further information contact US DOT Pipeline Safety Information Center at 202-366-4595 or online at <a href="http://ops.dot.gov">http://ops.dot.gov</a></p>

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.

\*This table covers only those reporting requirements found in rules and regulations that apply in Michigan. **Releases might be reportable under multiple regulations.**

**Additional reporting requirements** might be found in **permits**, licenses, registrations, **contingency and pollution prevention plans**, and local ordinances.



## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>49 CFR 195 Transportation of <b>Hazardous Liquids by Pipeline</b></p>	<p>Release of hazardous liquid (<b>petroleum, petroleum products, or anhydrous ammonia</b>) or <b>carbon dioxide</b> from a pipeline system that results in any of the following: (a) Explosion or fire; (b) Release of <math>\geq 5</math> gallons (except if <math>&lt; 5</math> barrels released due to maintenance and release not otherwise reportable, confined to property, does not pollute water, and cleaned up promptly); (c) Death of any person; (d) Injury requiring hospitalization; or (e) Property damage <math>&gt; \\$50,000</math>. (See 49 CFR 195.50, revised 1/8/02, for details)</p> <p>Applies to pipeline facilities and the transportation of hazardous liquids associated with those facilities in or affecting interstate or foreign commerce. (See 49 CFR 195.1 for details.)</p>	<p>Earliest practicable moment following discovery: to NRC by operator if Release caused: Death or hospitalization; Fire or explosion; Property damage; Water pollution; or was Significant per the operator.</p>	<p>As soon as practicable, and within 30 days after discovery: to US DOT on DOT Form PHMSA F 7000-1 "Accident Report – Hazardous Liquid Pipeline Systems"</p> <p>Supplemental report must be filed within 30 days after operator receives changes or additions to original report.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>For further information contact US DOT Pipeline Safety Information Center at 202-366-4595 or online at <a href="http://ops.dot.gov">http://ops.dot.gov</a></p>
<p>1978 PA 368 Part 135, <b>Radiation Control</b></p>	<p>For any emergency. Or for incident involving naturally occurring or accelerator produced <b>radioactive material</b>- Immediate notice if: Incident may have caused or threatens to cause: dose to body 25 rems, to skin 150 rems, to extremities 375 rems (per rule 247); 24 hour concentration exceeds 5000 times limits specified in table II of rules 261 to 269; contamination causes operation shut down for 1 week, or property damage <math>&gt; \\$100,000</math>.</p> <p>Notice within 24 hours if: Incident may have caused or threatens to cause: dose to body 5 rems, to skin 30 rems, to extremities 75 rems (per rule 247); 24 hour concentration exceeds 500 times limits specified in table II of rules 261 to 269; contamination causes operation shut down for 1 day, or property damage <math>&gt; \\$1000</math>.</p>	<p>Immediate or within 24 hours (see reporting criteria): to DEQ-OWMRP Radiological Protection Section (PEAS after hours) or MSP Operations Division for all <b>Power Plant</b> related incidents (day or night). by licensee or registrant.</p>	<p>Within 30 days after release: to DEQ-OWMRP Radiological Protection Section by licensee or registrant.</p> <p>Written report also required if level of radiation or concentration of radioactive material in unrestricted area <math>&gt; 10</math> times any applicable limit.</p> <p>See Rule 250 (R 325.5250) for required report content.</p>	<p>DEQ-OWMRP Radiological Protection Section 517-284-5185</p> <p>MSP Operations Div 517-241-8000</p> <p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-OWMRP Radiological Protection Section</p>
<p>10 CFR 20 (Standards for Protection Against <b>Radiation</b>)</p>	<p>For incident involving source, by-product, or special nuclear <b>radioactive material</b>- Immediate notice if: Event that may have caused or threatens to cause: effective dose equivalent to individual 25 rems, lens dose equivalent 75 rems, shallow-dose equivalent to skin or extremities 250 rads; individual could receive 5 times annual limit on intake in 24 hours. OR Any lost, stolen, or missing licensed material in an aggregate quantity equal to or greater than 1000 times the quantity specified in appendix C to part 20 under such circumstances that it appears to the licensee that an exposure could result to persons in unrestricted areas.</p> <p>Notice within 24 hours if: Event that may have caused or threatens to cause: an individual in 24 hours to receive effective dose equivalent <math>&gt; 5</math> rems, lens dose equivalent <math>&gt; 15</math> rems, shallow-dose equivalent to skin or extremities <math>&gt; 50</math> rems; individual could receive <math>&gt; 1</math> times annual limit on intake in 24 hours.</p>	<p>Immediate or within 24 hours (see reporting criteria): to USNRC by USNRC Licensee responsible for the incident.</p>	<p>Within 30 days of incident: to USNRC by licensee.</p> <p>Report content specified in 10 CFR 20.2003</p> <p>Written report also required for occurrences as specified in 10 CFR 20 Section 20.2203 and after the occurrence of any lost, stolen, or missing licensed material becomes known to the licensee, and if at the time the report is filed all licensed material in a quantity greater than 10 times the quantity specified in appendix C to part 20 is still missing.</p>	<p>US Nuclear Regulatory Commission (USNRC) 301-816-5100</p> <p>For further information contact DEQ-OWMRP Radiological Protection Section 517-284-5185</p>

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.

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**Additional reporting requirements** might be found in **permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.**



## Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
MIOSHA 1974 PA 154 Section 61, Records & Reports; Notice of <b>Fatalities or Hospitalization</b>	A release that results in a <b>fatality</b> within 30 days of the incident or in-patient <b>hospitalization</b> within 24 hours of the incident.  Note: the OSHA amendment to require employers to report all work-related hospitalizations within 24 hours becomes effective Jan 1, 2015. Michigan intends to adopt the new rules by reference within 6 months of the Sept 18, 2014 FR publication.	Within 8 hours: for a fatality or Within 24 hours: for hospitalization to MIOSHA Hotline by Employer.	Not required.	MIOSHA Fatality or Catastrophe Hotline 800-858-0397  For further information contact LARA-MIOSHA 517-322-1831
TSCA 40 CFR 761.125 ( <b>PCBs</b> )	Spills of <b>PCBs</b> at concentrations of 50 ppm or more and subject to decontamination requirements under TSCA that: contaminate surface water, sewers, drinking water supplies, grazing lands or vegetable gardens, or exceed 10 pounds.  (TSCA specifies that these requirements are in addition to any under CWA or CERCLA. e.g. CERCLA requires spills of 1 pound or more to be reported to NRC.)	As soon as possible after discovery, and within 24 hours: to EPA Region 5.	Not required to be submitted. Records of cleanup and certification of decontamination shall be documented.	EPA Region 5 Corrective Action Section 312-886-7890  For further information contact EPA Region 5 Corrective Action Section
SARA Title III Section 313 40 CFR 372 ( <b>Toxic chemical</b> release reporting)	Covered facilities as defined in 40 CFR 372 subpart B are subject to <b>toxic</b> chemical release reporting for toxic chemicals and chemical categories listed in 40 CFR 372 subpart D.	Not applicable.	Annually by July 1: to EPA & SERC on EPA's Form R "Toxic Chemical Release Inventory Reporting Form" (EPA Form 9350-1, Rev.10/2011)  Report aggregate releases (permitted & unpermitted)	Michigan SARA Title III Program accepts reports on behalf of SERC  For further information contact Michigan SARA Title III Program 517-284-7272

*Table prepared by the Michigan SARA Title III Program in the DEQ*

### Acronyms used in table:

AQD = Air Quality Division  
 AST = Above Ground Storage Tank  
 CAA = Clean Air Act  
 CAFO = Concentrated Animal Feeding Operation  
 CERCLA = Comprehensive Environmental Response, Compensation and Liability Act of 1980  
 CFR = Code of Federal Regulations  
 CWA = Clean Water Act  
 DEQ = Michigan Department of Environmental Quality  
 DOT = Department of Transportation  
 EHS = Extremely Hazardous Substance  
 EPA = U. S. Environmental Protection Agency  
 EPCRA = Emergency Planning & Community Right-to-Know Act  
 FIFRA = Federal Insecticide, Fungicide, & Rodenticide Act  
 FL/CL = Flammable and combustible liquids  
 FR = Federal Register  
 HAP = Hazardous Air Pollutant

HazMat = Hazardous Materials  
 HB = House Bill  
 LARA = Michigan Department of Licensing & Regulatory Affairs  
 LEPC = Local Emergency Planning Committee  
 LNG = Liquefied Natural Gas  
 LPG = Liquefied Petroleum Gas  
 MCL = Michigan Compiled Laws  
 MDARD = Michigan Department of Agriculture & Rural Development  
 MIOSHA = Michigan Occupational Safety and Health Administration  
 MSP = Michigan Department of State Police  
 NRC = National Response Center (U.S. Coast Guard)  
 NREPA = Natural Resources & Environmental Protection Act  
 ODWMA = Office of Drinking Water & Municipal Assistance  
 OOGM = Office of Oil, Gas, and Minerals  
 OPS = Office of Pipeline Safety (US DOT)  
 OSC = On Scene Coordinator  
 OWMRP = Office of Waste Management & Radiological Protection

PA = Public Act (Michigan)  
 PCB = Polychlorinated biphenyl  
 PEAS = Pollution Emergency Alerting System  
 PHMSA = Pipeline & Hazardous Materials Safety Administration  
 RMP = Risk Management Program  
 RRD = Remediation and Redevelopment Division  
 SARA = Superfund Amendments and Reauthorization Act of 1986  
 SERC = State Emergency Response Commission  
 TRI = Toxic Chemical Release Inventory  
 TSCA = Toxic Substance Control Act  
 TSDF = Treatment, Storage & Disposal Facility  
 US DOT = U.S. Department of Transportation  
 USNRC = U. S. Nuclear Regulatory Commission  
 UST = Underground Storage Tank  
 WRD = Water Resources Division

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.

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**Additional reporting requirements** might be found in **permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.**



## **APPENDIX F**

### **NATURALLY OCCURRING PHENOMENON BROCHURES**

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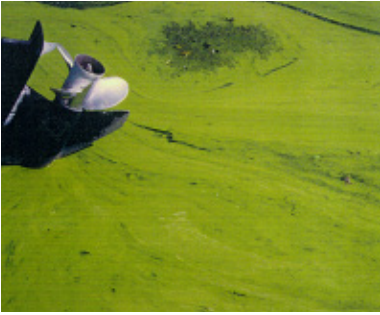


# Algae

A NATURALLY-OCCURRING PHENOMENON

# Algae

## A NATURALLY-OCCURRING PHENOMENON



The Department of Environmental Quality often receives complaints of the presence of scum on a lake, or that someone has dumped red, bright green, black or bluish-green paint, oil, or even antifreeze into a lake, river, or stream. This phenomenon is often due to the presence of algae rather than the discharge of some type of substance.

Algae are simple plants that live in oceans, lakes, rivers, ponds, and moist soil. Algae grow in many forms. Some are microscopic and consist of just one cell and others are made up of many cells that form strands or colonies. Algae are more simple than aquatic plants as they lack a true root, leaf, and stem system. Some algae species drift or swim, while others are attached to stones or aquatic plants in the water. All algae contain chlorophyll (a green pigment). They help purify the air and water by the process of photosynthesis.

Some algae multiply rapidly in polluted lakes and rivers. Thick layers of algae, called algal blooms, may form when nutrients (mainly phosphorus and nitrogen) build up in the water in amounts in excess of naturally-occurring nutrients. Fertilizers, pet waste, improperly functioning septic tanks, grass clippings, leaves, and other yard wastes are all sources of nutrients. The increased algae population sometimes upset the natural balance of life in water because during algae decomposition, oxygen is removed from the water and this may cause fish to die.



Algae are generally grouped according to color. The color is based upon the chlorophyll and other pigments found in the algae cells. Blooms of algae can give the water an unpleasant taste or odor, reduce clarity, and color the water body a vivid green, brown, yellow, or even red, depending on the species of algae.

## Blue-Green Algae

The cells of blue-green algae are different from the other algae. Most blue-green algae can be seen only with a microscope and often smell badly. Besides chlorophyll, they contain blue or red pigments. Although lakes with large numbers of blue-green algae usually appear blue-green in color, the combination of pigments can cause some blooms to appear reddish, brownish, or even black. Unlike other algae which use nitrogen available in the water, many blue-green algae species can use nitrogen from the air as a nutrient source. Due to this ability, blue-green algae blooms most often occur in late summer when the nitrogen in the water is often lower. A few species of blue-green algae form slippery, dark coatings on rocks along rivers and lakeshores. Some species of blue-green algae are toxic and can poison animals that drink water containing these organisms.

*Notice the different color appearances due to pigments.*



## Green Algae

Green algae occur in fresh water in a free-floating form. Most species are microscopic and live in lakes, ponds, and streams. Large quantities of such algae may color an entire lake and appear like green paint. Green algae blooms are often found during early to mid-summer months. However, some lakes have been known to reflect a green color during a “whiting event” not related to algae bloom. This event does not produce thick surface algae mats.





For more information, including tips to help reduce the amount of nutrients that can enter a lake from your home activities, please contact the district office or call the State of Michigan's Environmental Assistance Center at 1-800-662-9278.

If you find pollution and believe it is human-induced, please report it to the State of Michigan's Pollution Emergency Alerting System (PEAS) hotline: 1-800-292-4706.



Michigan's Environmental Justice Policy promotes the fair, non-discriminatory treatment and meaningful involvement of Michigan's residents regarding the development, implementation, and enforcement of environmental laws, regulations, and policies by this state. Fair, non-discriminatory treatment intends that no group of people, including racial, ethnic, or low-income populations, will bear a disproportionately greater burden resulting from environmental laws, regulations, policies, and decision-making. Meaningful involvement of residents ensures an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.

01/2016

# Bacteria

A NATURALLY-OCCURRING PHENOMENON





# Bacteria

## A NATURALLY-OCCURRING PHENOMENON

The Department of Environmental Quality often receives complaints claiming that “someone dumped paint or a rust-colored substance” or that there is an unnatural colored oil-like sheen in moist areas or in a water body. Some oil-like films, coatings, and slimes, although they may look bad, are natural phenomena. These phenomena are caused by single-celled organisms called bacteria.

Slimes, films, and rock coatings can be found anywhere that groundwater carry minerals such as iron, manganese, copper, and sulfur. Slimes, oil-like films, and rock coatings are often made by bacteria that are reacting to the presence of minerals in the water. Bacteria live in wet areas, including: on the water surface, in the water column, and in the lake sediment. Some bacteria are getting energy and some are performing other life functions by transforming minerals to different chemical forms. These bacteria are of no threat to human health and have been involved in the iron and manganese cycles for billions of years. Some bacteria are very useful because they remove harmful materials from water.

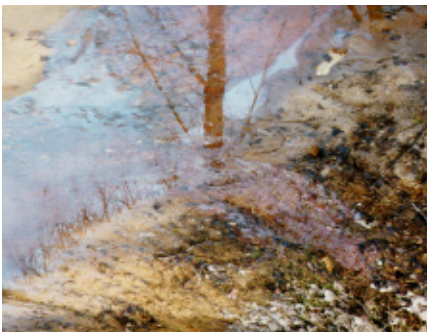




*Notice the purple color (sulfur) and iron (brown)*

Bacteria create oil-like films when they attach themselves to the water surface. Sunlight bounces off the films, giving them an oily appearance. To test the difference between a bacterial film and oil floating on the water, break the film. If the film stays broken, it is a natural bacterial film. If it flows back into place, it is petroleum, which indicates pollution.

Bacteria produce different color films, coatings, and slimes. Bacteria that precipitate (settle out of water as a solid) copper minerals may make turquoise blue films. Green and purple bacterial slimes may appear when sulfur is present, while white slimes occur in the presence of aluminum, sulfur, or calcium minerals. Iron bacteria produce brown or reddish-brown deposits.





If you find pollution and believe it is human-induced, please report it to the State of Michigan's Pollution Emergency Alerting System (PEAS) hotline at 1-800-292-4706.

For more information please contact any district office or call the State of Michigan's Environmental Assistance Center at 1-800-662-9278.



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# Foam

A NATURALLY-OCCURRING PHENOMENON



# Foam

## A NATURALLY-OCCURRING PHENOMENON

The Department of Environmental Quality often receives complaints claiming that “someone discharged laundry detergents into the lake” or that there are suds on the river or stream. This phenomenon is often the result of natural processes, not environmental pollution. Foam can be formed when the physical characteristics of the water are altered by the presence of organic materials in the water.

The foam that appears along lakeshores is most often the result of the natural die-off of aquatic plants. Plants are made up of organic material, including oils (e.g., corn oil and vegetable oil). When the plants die and decompose, the oils contained in the plant cells are released and float to the surface. Once the oils reach the lake surface, wind and wave action pushes them to the shore. The concentration of the oil changes the physical nature of the water, making foam formation easier. The turbulence and wave action at the beach introduces air into the organically enriched water, which forms the bubbles.

Foam commonly occurs in waters with high organic content such as productive lakes, bog lakes, and in streams that originate from bog lakes, wetlands, or woody areas. Oftentimes, streams that originate from woody areas will have a brown tint in the water. The brown tint is often caused by the presence of tannin, which is a substance that gives wood its brown color. The tannin is released during the decomposition of wood along with other materials that cause foaming when they are introduced in water. It is quite common to find foam in dark-colored streams, especially during late fall and winter, when plant materials are decomposing in the water.







*Naturally-occurring foam: on Stoney Creek in Southeast Michigan and on the Grand River in the Jackson area.*

**Some foam in water can indicate pollution. When deciding if the foam is natural or caused by pollution, consider the following:**

- **Wind direction or turbulence:** Natural foam occurrences on the beach coincide with onshore winds. Often, windrows of foam can be found along a shoreline and streaks of foam may form on open waters during windy days. Natural occurrences in rivers can be found downstream of a turbulent site.
- **Proximity to a potential pollution source:** Some entities such as the textile industry, paper production facilities, oil industries, and fire fighting activities work with materials that cause foaming in water. If these materials are released to a water body in large quantities, they can cause foaming. In addition, the presence of silt in water, such as from a construction site can cause foam.
- **Composition:** Presence of decomposing plants or organic material in the water.
- **Feeling:** Natural foam is usually persistent, light, not slimy to the touch.

If you find pollution and believe it is human-induced, please report it to the State of Michigan's Pollution Emergency Alerting System (PEAS) hotline at 1-800-292-4706.

For more information please contact any district office or call the State of Michigan's Environmental Assistance Center at 1-800-662-9278.



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01/2016



# Bryozoan





## Bryozoan Colonies: A Naturally-Occurring Phenomena



The Department of Environmental Quality often receives complaints claiming that there are gelatinous balls, floating blobs and even “water boogers” some as large as basketballs on the lake shore or in a lake or pond. This phenomenon is due to the presence of bryozoans, also called moss animals.



Bryozoans are water animals that live in colonies made up of microscopically-connected individuals called zooids. Bryozoans are invertebrates (animals without backbones) that have a box-like or tube-shaped body, a U-shaped gut, and a cluster of tentacles to trap small particles of food. Worldwide, there are about 5,000 species of bryozoans.



Colonies of freshwater bryozoans form gelatinous ball-like masses and are commonly found in small farm ponds in water less than a meter in depth and in shallow eutrophic (nutrient enriched) lakes and open areas of swamps for brief periods. They have also been reported to wash up on shores of deep inland lakes after storms.

If you find pollution and believe it is human-induced, please report it to the State of Michigan’s Pollution Emergency Alerting System (PEAS) hotline: 1-800-292-4706. For more information, please contact any Surface Water Quality Division district office or call the State of Michigan’s Environmental Assistance Center at 1-800-662-9278.



## **Foam: A Naturally-Occurring Phenomena**

The Department of Environmental Quality often receives complaints claiming that “someone discharged laundry detergents into the lake” or that there are suds on the river or stream. This phenomenon is often the result of natural processes, not environmental pollution. Foam can be formed when the physical characteristics of the water are altered by the presence of organic materials in the water.

The foam that appears along lakeshores is most often the result of the natural die-off of aquatic plants. Plants are made up of organic material, including oils (i.e., corn oil and vegetable oil). When the plants die and decompose, the oils contained in the plant cells are released and float to the surface. Once the oils reach the lake surface, wind and wave action pushes them to the shore. The concentration of the oil changes the physical nature of the water, making foam formation easier. The turbulence and wave action at the beach introduces air into the organically enriched water, which forms the bubbles.

Foam commonly occurs in waters with high organic content such as productive lakes, bog lakes, and in streams that originate from bog lakes, wetlands, or woody areas. Oftentimes, streams that originate from woody areas will have a brown tint in the water. The brown tint is often caused by the presence of tannin, which is a substance that gives wood its brown color. The tannin is released during the decomposition of wood along with other materials that cause foaming when they are introduced in water. It is quite common to find foam in dark-colored streams, especially during late fall and winter, when plant materials are decomposing in the water.



*Naturally-occurring foam: on Stoney Creek in Southeast Michigan and on Grand River in the Jackson area.*

Some foam in water can indicate pollution. When deciding if the foam is natural or caused by pollution, consider the following:

- ◆ **Wind direction or turbulence:** natural foam occurrences on the beach coincide with the onshore winds. Often, windrows of foam can be found along a shoreline and streaks of foam may form on open waters during windy days. Natural occurrences in rivers can be found downstream of a turbulent site.
- ◆ **Proximity to a potential pollution source:** some entities such as the textile industry, paper production facilities, oil industries, and fire fighting activities work with materials that cause foaming in water. If these materials are released to a water body in large quantities, they can cause foaming. In addition, the presence of silt in water, such as from a construction site can cause foam.
- ◆ **Presence of decomposing plants or organic material in the water.**
- ◆ **Feeling:** natural foam is usually persistent, light, not slimy to the touch.

If you find pollution and believe it is human-induced, please report it to the State of Michigan’s Pollution Emergency Alerting System (PEAS) hotline at 1-800-292-4706. For more information please contact any Surface Water Quality Division district office or call the State of Michigan’s Environmental Assistance Center at 1-800-662-9278.

This publication was developed through the cooperative efforts of the Environmental Assistance and Surface Water Quality Divisions, Michigan Department of Environmental Quality, 800-662-9278.

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the Office of Personnel Services, PO Box 30473, Lansing, MI 48909.



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Michigan Department of Environmental Quality



# Pollen



**John Engler, Governor ♦ Russell J. Harding, Director**



## **Whiting Events (Calcium Carbonate Precipitate): A Naturally-Occurring Phenomena**

The Department of Environmental Quality often receives complaints claiming that someone dumped a white milky substance into the lake. In some lakes, a naturally-occurring phenomenon makes the color of the water change from clear blue to gray or milky white. This phenomenon is often the result of natural processes, not environmental pollution.

The cause for this whiting phenomenon is the precipitation (coming out of the water as a solid) of calcium carbonate. Calcium carbonate is a white, crystalline mineral that is widely distributed in nature and is the main ingredient in limestone, marble, coral, calcite, and chalk. Whiting events occur in lakes with very high concentrations of calcium carbonate (hard water lakes) during early summer. As the calcium carbonate precipitates, it forms chalky white clouds underwater and rains calcium carbonate on the lake bottom. When the calcium carbonate particles consolidate on the lake bottom, they form a soft rock called marl.



*Marl from lake bottom (left) and calcite (large crystalline rock on right).*

In the summers of 1998 and 1999, NASA's satellite captured images of a mysterious flush of color that spread across Lake Michigan (please refer to the photo on the cover). The color change was attributed to either a whiting event or an algae bloom.

Some white material in water can indicate pollution. When deciding if the milky appearance is natural or caused by pollution, consider the following:

- ◆ Proximity to a potential pollution source. Some industries such as mining, metal cutting, salt processing, and paper manufacturing have materials that can cause water to appear milky when released into the environment. A defined waste stream into the lake could indicate a pollutant source, while a sudden change of color from within the lake may indicate a whiting event.
- ◆ The time of year. Whiting events most often occur in early to mid-summer.
- ◆ A simple field test. Gather white particles by filtering some of the lake water through a fine filter. Next, place a drop of vinegar on the filtered white particles. Bubbling or fizzing will occur in the presence of calcium carbonate. This is the same reaction that would occur if you put vinegar on baking soda.

If you find pollution and believe it is human-induced, please report it to the State of Michigan's Pollution Emergency Alerting System (PEAS) hotline at 1-800-292-4706. For more information please contact any Surface Water Quality Division district office or call the State of Michigan's Environmental Assistance Center at 1-800-662-9278.

*Special thanks and credit to Larry Bean, rock collector, Livonia, Michigan.*

This publication was developed through the cooperative efforts of the Environmental Assistance and Surface Water Quality Divisions, Michigan Department of Environmental Quality, 800-662-9278.

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the Office of Personnel Services, PO Box 30473, Lansing, MI 48909.



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Michigan Department of Environmental Quality



# Whiting Events



**John Engler, Governor ♦ Russell J. Harding, Director**

## **APPENDIX G**

### **ALLEGAN COUNTY ROAD COMMISSION PERMITS MANUAL**

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# ALLEGAN COUNTY ROAD COMMISSION



## PERMITS MANUAL

### **STANDARD SPECIFICATIONS and ADMINISTRATIVE RULES regulating all work or activity on and over County Roads**

Common/Policies/Permits Manual 2012

PERMITS MANUAL  
INCLUDING  
ADMINISTRATIVE RULES, PERMIT FORMS, AND FEE SCHEDULE  
REGULATING  
ALL WORK OR ACTIVITY

Adopted by  
ALLEGAN COUNTY ROAD COMMISSION  
DECEMBER 1, 2012  
PURSUANT TO; ACT 200, PUBLIC ACTS OF 1969  
and ACT 212, PUBLIC ACTS OF 1980

ALLEGAN COUNTY ROAD COMMISSION  
1308 Lincoln Road, Allegan, Michigan, 49010  
(269)673-2184

Michigan Department of Transportation Construction and Material Specifications used in this Manual are from the current edition of “Standard Specifications for Construction”. Numbers shown in parenthesis ( ) refer to specific sections in that manual.

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## DEFINITIONS

**Backfill** – Replacement of soil around and over a pipe or drainage structure.

**Bedding** – Organization of soil or other approved material to support a pipe or structure.

**Board** – Board of County Road Commissions, and its duly appointed agents.

**Bury** – Depth of top of pipe or structure below grade of roadway ditch.

**ACRC** – Allegan County Road Commission.

**Cap** – Rigid structural element surmounting a pipe.

**Carrier** – Pipe directly enclosing a transmitted fluid (liquid or gas).

**Casing** – A larger pipe enclosing a carrier.

**Coating** – Material applied to or wrapped around a pipe.

**Conduit or Duct** – An enclosed tubular runway for protecting wires or cables.

**County** - Allegan County

**County Engineer** – Managing Director of the Allegan County Road Commission or agent.

**Cradle** – Rigid structural element below and supporting a pipe.

**Direct Burial** – Installing a utility underground without encasement by plowing.

**Encasement** – Structural element surrounding a pipe.

**Encroachment** – Unauthorized use of highway right-of-way or easements as for signing, fences, building, etc.

**Flexible Pipe** – A plastic, fiberglass, or metallic pipe having large ratio of diameter to wall thickness which can be deformed without undue stress.

**Frontage** – Private property line abutting the right-of-way.

**Gallery** – An underpass for two or more pipelines.

**Grounded** – Connected to earth or to some extended body which serves instead of the earth whether the connection is intentional or accidental.

**Grout** – A cement mortar or a slurry of fine sand or clay, as conditions govern.

**HMA** - Hot Mix Asphalt.

**Highway, Street, Subdivision Street, or Road** – A general term denoting a public way for purposes of vehicular travel, including the entire area with the right-of-way.

**Inspector** - Inspector of the Allegan County Road Commission.

**Jacket** – Encasement by concrete poured around a pipe.

**Manhole** – An opening in an underground system which workmen or others may enter.

**MDOT** – Michigan Department of Transportation.

**MUTCD** – The current version of the “Manual on Uniform Traffic Control Devices”.

**Overfill** – Backfill above a pipe or structure.

**Permittee** – Permit applicant, contractor, or agent of either.

**Permit Inspector** – An employee of the Allegan County Road Commission assigned the duty of issuing permits and inspecting work sites for permit compliance.

**Right-of-Way** – A general term denoting land property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes as established by the Road Commission or the apparent right-of-way line.

**Rigid Pipe** – A welded or bolted metallic pipe or reinforced, prestressed, or pretensioned concrete pressure pipe designed for diametric deflection of less than 1.0%.

**Roadbed** – That portion of the roadway between the outside edges of the finished shoulders.

**Road Commission** – Allegan County Road Commission.

**Roadside** – A general term denoting the area adjoining the outer edge of the roadway.

**Roadway** – The portion of a highway, including shoulders, for vehicular use.

**Semi-rigid pipe** – A large diameter concrete or metallic pipe designed to tolerate diametric deflection up to 3.0%.

**Sidefill** – Backfill alongside a pipe.

**Slab** – Slab between but not contacting pipe or pavement.

**Sleeve** – Short casing through pier or abutment of highway structure.

**Traveled way** – the portion of the roadway for the movement of vehicles.

**Trenched** – Installed in a narrow open excavation.

**Untrenched** – Installed without breaking ground or pavement surface, such as jacking or boring.

**Vent** – Appurtenance to discharge gaseous contaminants from casings.

**Walled** – Partially encased by concrete poured alongside the pipe.



## I GENERAL

### A. PROCEDURE

Permits are required for utilizing any portion of County Road rights-of-way by any person, partnership, association, corporation, or governmental entity to construct, operate, maintain, or remove a facility or perform any other work except sidewalk installation or repair.

Reasonable permit requirements and a schedule of fees may be adopted. Fees to be charged sufficient to cover only the necessary and actual costs applied in a reasonable manner for the issuance of the permit and for review of the proposed activity, inspection and related expenses. After the work authorized in the permit has been completed, itemization of all costs shall be supplied upon request of the permit holder. (Act 212, PA 1980 MCLA 224.19b)

Applications are to be submitted on the appropriate forms of the Road Commission. After the application is given a permit number and is signed by the Permit Inspector, it becomes a permit.

The permit does not relieve the applicant from meeting any applicable requirements of law or of other public bodies or agencies.

Any rules or regulations mentioned on the application/permit form and not mentioned in this manual are applicable.

All applications shall meet the following basic requirements before they are accepted for processing:

1. Each Application shall be completely filled out and signed by the applicant and contractor, if known.
2. Plans or drawings shall accompany each copy of this application unless otherwise not required, showing existing highway pavement, ditches, right-of-way, and property lines, highway appurtenances, utilities, and dimensions thereof. Permit applications from utility companies will not require other utility locations to be shown.
3. A Permit and Inspection Fee Schedule (Schedule "A") is attached to and made a part of this policy. See Schedule "A".

### B. BASIC MINIMUM REQUIREMENTS

1. The Road Commission reserves the right of inspection of any construction or reconstruction within the highway right-of-way.
2. Five (5) days notice may be required before commencement of an operation covered by permit.
3. The permittee shall have a copy of the permit available at the site during construction.

B. BASIC MINIMUM REQUIREMENTS (continued)

4. A permit shall be surrendered to the Road Commission for cause shown or default of any provision of the permit.
5. Work authorized by the permit shall be completed to the satisfaction of the Road Commission on or before the completion date shown on the permit. Extension of time may be granted for cause shown.
6. Excavation work within the right-of-way, including the installation of utility pipes and cables shall not be permitted between November 15<sup>th</sup> and March 31<sup>st</sup> except by special authorization of the County Engineer.

C. DEPOSITS

1. Deposits are required to protect the Road Commission against the cost of completing or repairing faulty construction and to recover the necessary and actual costs for review of the proposed activity, inspection, and related expenses.
2. Acceptable types of deposits may be a certified check, cashier's check, money order payable to the Road Commission, or cash deposited with the Road Commission.
3. Under certain conditions, a surety bond executed on standard bond forms furnished by the Road Commission may be accepted.
4. The type and amount of a deposit shall be determined by the Permit Inspector.
5. Deposits may be furnished by either the applicant or the contractor, as approved by the Permit Inspector.
6. Contractors may post a blanket deposit yearly; however, the estimated work going on at any one time shall not exceed the amount of the bond.

D. INDEMNITY AND INSURANCE

1. A permittee shall save harmless the Road Commission against any claim for damages arising from his negligence or his contractor's negligence in operations covered by this permit.
2. General liability insurance carried by an applicant or contractor will usually be acceptable.
3. Certificates are to be issued to the Road Commission in the following amounts: \$1,000,000, property damage, each occurrence, and \$1,000,000, personal injury, each occurrence.

I GENERAL (continued)

D. INDEMNITY AND INSURANCE (continued)

4. Certificates of Insurance requirements may be waived for permits for residential and farm drives, tree trimming or removal and other minor work when performed by the applicant or his contractor.

E. RESOLUTIONS

1. Resolutions adopted by the governmental unit in cases where the applicant is a city, village, township, or county, may be used in lieu of a Bond or Insurance Certificate.
2. The Road Commission's Standard Resolution Form can be used, or the form may be used as a guide for adequate wording and content.
3. The Permit Inspector may require a construction performance bond from a contractor doing permit work for a governmental unit, in addition to the resolution.

II UTILITY PERMITS

A. This group includes the following:

1. Public and private utilities for electric power, communication lines, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation, and similar lines.
2. Such utilities may involve underground, surface or overhead facilities, either singularly or in combination.

B. MAJOR CONSTRUCTION

1. Communication lines and electrical power.
2. Street lights.
3. Gas, water, sewer, oil, and other products, mains, pipelines, or other facilities.
4. Buried communication lines, and electrical conduit or cable.

C. MINOR CONSTRUCTION (May be covered by Annual Permit)\*

1. Routine maintenance, inspection and modernization of communications, or electrical power lines which does not include extension or relocation of the lines.
2. Routine maintenance, inspection and modernization of underground facilities involving no relocation or extension.

## II UTILITY PERMITS (continued)

### C. MINOR CONSTRUCTION (continued)

3. Installation of individual service connections.
4. Adding guys and anchors to existing utility poles.
5. Landscaping and incidental tree trimming.

\*Advance notice shall be given in writing of maintenance activities covered by an annual permit when such activity involves disturbing the traveled portion of the road or shoulders. (Emergency repairs excepted.)

Refer to CONSTRUCTION SPECIFICATIONS which will apply to most of the work covered under UTILITY PERMITS.

### D. LOCATION

1. Utility lines shall be located in accordance with the Road Commission's published policy and standard plan for the location of utilities within the public road right-of-way.
2. In general, utility lines shall be located to minimize the need for later adjustment to accommodate future highway improvements and to permit servicing such lines with minimum interference to highway traffic.
3. Longitudinal installations shall be located on a uniform alignment as near as practicable to the right-of-way so as to provide a safe environment for traffic operation and to preserve space for future highway improvements or other utility installations.
4. To the extent feasible and practical, utility line crossings of the highway shall cross on a line generally perpendicular to the highway alignment.
5. Conditions which generally are unsuitable or undesirable for pipeline crossings shall be avoided. These include locations such as deep cuts, near footings of bridges and retaining walls, across intersections at grade on ramp terminals, at cross drains where flow of water, drift, or streambed load may be obstructed; within basins of an underpass drained by a pump, if pipeline carries a liquid or liquefied gas; and in wet or rocky terrain where it will be difficult to attain minimum bury.
6. No utilities will be allowed to attach to bridges or culverts.

### III UTILITY LOCATIONS

A. Communication lines, telephone poles, cable conduit, cable television, and sanitary sewer lines shall be located on the South and West side of the road centerline.

1. Buried Communication lines – 15 feet to 18 feet from centerline.
2. Aerial or Buried Communication lines – 28 feet or 32.5 feet from centerline.
3. Cable conduit or buried communication lines alternate location – 31 feet from center-line.
4. Cable television, buried cable – 16 feet to 18 feet from centerline. Aerial cable – 25 feet to 30 feet from centerline.
5. Sanitary sewer line – centerline.

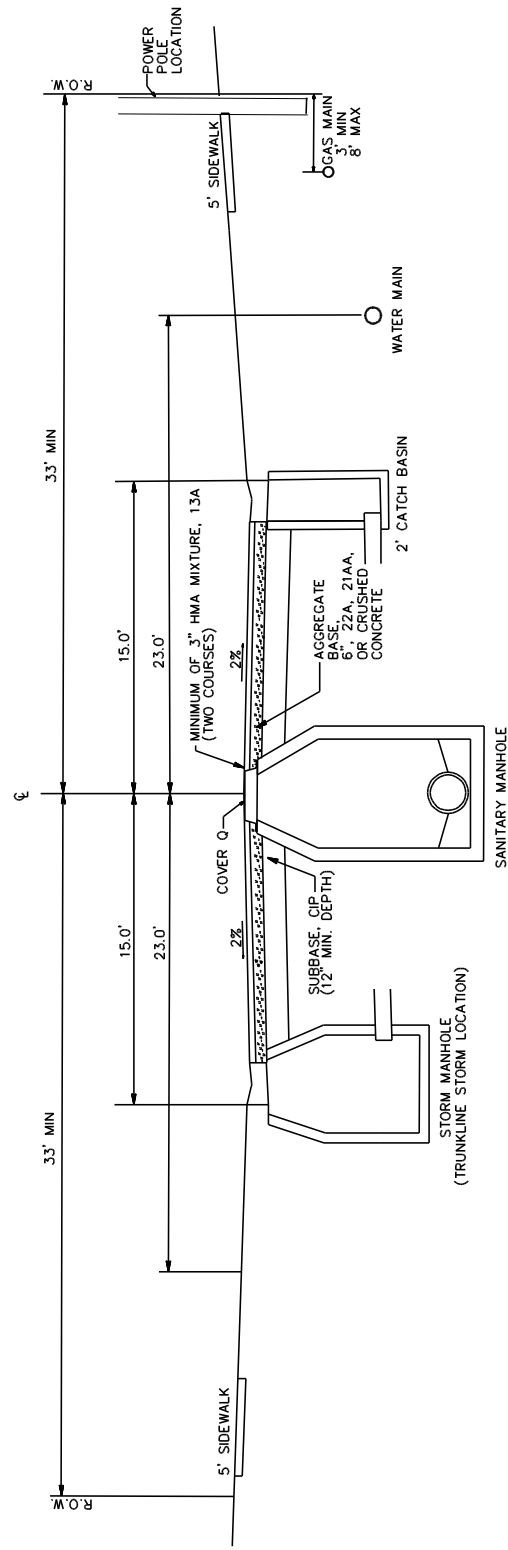
B. Gas lines, electrical service poles, electric cables, and water mains shall be located on the North and East side of the road centerline.

1. Gas lines – 25 feet to 30 feet from centerline.
2. Electric service poles – 32.5 feet from centerline.
3. Electric buried cable – 32 feet from centerline.
4. Water mains – 23 feet from centerline.

C. Storm sewer may be located on either side of the road centerline at such distance as may be necessary to accommodate curb and gutter placement.

The policy may be modified when it is felt necessary upon consideration of engineering information submitted by the utility or developer.

# ALLEGAN COUNTY ROAD COMMISSION UTILITY LOCATION DIAGRAM



(NO SCALE)  
DECEMBER 2012

MATERIALS AND WORKMANSHIP SHALL COMPLY  
WITH CURRENT MICHIGAN DEPARTMENT OF  
TRANSPORTATION STANDARD SPECIFICATIONS

#### IV DRIVEWAY PERMITS

##### A. DEFINITIONS

1. Circle Driveway – A private driveway that enters and leaves private property at two points within the same frontage.
2. Commercial Driveway – A driveway serving a commercial establishment, industry, governmental or educational institution, hospital, church, apartment building, or other large traffic generator.
3. Divided Driveway – A driveway designated so that traffic leaving the highway is separated from traffic entering the highway.
4. Driveway Construction – Construction of a new driveway, approaches, installation of drainage culverts, any change or reconstruction of existing driveways, grades or surfaces within the right-of-way.
5. Field Entrance Driveway – A driveway serving a farmyard, cultivated or uncultivated field, timberland, or undeveloped land not in use.
6. Residential Driveway – A driveway serving a private home.
7. Utility Structure Driveway – A driveway serving a utility structure requiring only occasional access.

##### B. DRIVEWAY PERMITS – GENERAL

1. The permit fee will include the cost for the Road Commission's inspector to make the initial investigation visit and one follow-up compliance inspection visit to the driveway site. Additional visits, as required, will be charged for at cost.
2. At the initial visit to the driveway site, the inspector will determine whether or not a culvert pipe is necessary and what diameter and length such culvert pipe shall be.
3. The inspector will also determine at the initial visit whether the location of the driveway, as proposed, meets the minimum requirement for safe sight distance both for the property owner's/proprietor's vehicle and the vehicles traveling on the public roadway.
4. All driveway construction work and culvert installation shall be done in accordance with Road Commission standards and specifications. The work may be done by a licensed contractor or by the owner of the property.

IV DRIVEWAY PERMITS (continued)

5. The issuance of a Driveway Permit by the Road Commission does not exempt the property owner from compliance with local zoning ordinances, building codes or building permit requirements.

C. RESIDENTIAL DRIVEWAYS

1. One residential driveway shall be permitted for each platted lot or for unplatted residential property with less than 100 feet of frontage provided a minimum of 550' of stopping sight distance is available.
2. One additional residential driveway may be permitted for residential property for each 70 feet in excess of the first 100 feet of frontage provided a minimum of 550' of stopping sight distance is available.
3. Two residential driveways may be permitted on the same property in lieu of #2 above, to serve a circle driveway if the frontage of the property is 80 feet or more provided a minimum of 550' of stopping sight distance is available.
4. Residential driveways on the same property shall be at least 45 feet apart, center to center.
5. If located adjacent to an uncurbed intersecting highway, the point of curvature of the driveway radius shall be at least 50 feet from the edge of pavement of the intersecting highway.
6. All residential driveways and farm field drives shall be surfaced with processed road gravel or better within the right-of-way.

Requirements for hard surfaced residential driveway will be the following; concrete surfaces will not be allowed in the right-of-way.

- a. MDOT Spec. 22A road gravel, 21AA road gravel, or crushed concrete, 6 inches thick, HMA surface 36A, or 13A, 3" thick.

OR

- b. HMA, full depth, 36A or 13A, 6" thick, minimum 2 lifts.



#### IV DRIVEWAY PERMITS (continued)

##### C. RESIDENTIAL DRIVEWAYS (continued)

7. Low Usage Driveways: All driveways serving cultivated fields, timberland, undeveloped land, or utility structures, are designated as “low usage driveways”. The driveway surface shall be a minimum of 6” thick compacted of MDOT Spec. 22A road gravel, 21AA road gravel, or crushed concrete.
8. Joint Drives: Joint residential driveways will not be permitted.
9. Grade: The grade of a residential or field entrance driveway shall not exceed 10% within the right-of-way. Driveway will not be allowed to cause runoff to enter the roadway.

##### D. COMMERCIAL DRIVEWAY PERMIT

1. The owner must submit a drawing showing existing roadway, location of building, both proposed and existing, and appurtenances and dimensions thereof, and details of internal traffic circulation, parking facilities and relationship to property owners.
2. Permit applicant shall specify number and type of drives, anticipated type and volume of traffic, type of roadside development and other operational considerations.
3. The permit applicant shall deposit an amount of money with the Road Commission sufficient to cover the permit fee, inspection of the paving forms, and field inspection by the Road Commission inspector.

##### E. DRAINAGE

1. The run-off water from driveways shall not adversely affect the drainage pattern of the existing road.
2. Storm drainage from private property shall not be discharged on the highway right-of-way.

##### F. GRADE OR PROFILE

1. The grade of all driveways between the highway edge of pavement and the edge of the shoulder shall conform to the slope of the shoulder.
2. The grade of a commercial drive shall not exceed 5.0% within the right-of-way.
3. The paved surface of any driveway may extend up to and abut the roadway pavement, but shall not be higher than the edge of the roadway nor designed or constructed so as to drain water onto the surface of the roadway.

IV DRIVEWAY PERMITS (continued)

G. SURFACE AND BASE

1. The area of a commercial driveway approach within road right-of-way shall conform to one of the following specifications (concrete drives may only be installed adjacent to concrete curb and gutter):

a. In driveways carrying vehicles heavier than passenger cars or a frequency of use greater than 100 vehicles per day, the following MDOT specification material shall be used:

(1) MDOT Spec. 22A Road Gravel, 21AA Road Gravel, or Crushed Concrete, 8 inches thick (compacted) and HMA Mixture 4C, 4” thick,

OR

(2) MDOT Spec. P1 concrete 8 inches thick,

OR

(3) HMA base 4 inches thick, 3C, and 2 inches of HMA surface 4C.

b. In driveways carrying passenger cars only at a frequency use less than 100 vehicles per day, the following materials may be used:

(1) MDOT Spec. 22A road gravel, 6 inches thick, (compacted) and HMA Mixture - 13A, 3 inches thick.

OR

(2) MDOT Spec. P1 concrete 6 inches thick.

## V PERMITS FOR PARADES, BANNERS, AND TEMPORARY CLOSURES

- A. Permits are required to temporarily close a road or subdivision street, or a section thereof, for the purpose of a celebration, parade, festival, bicycle tour, dog sled race, automobile tour, marathon foot race, block party or similar activity. A permit is also required to temporarily place a banner, sign, or decoration in such a manner so that it will be overhanging the travelled way of a road or street.

Requests for permits issued under this section of this policy shall be made by an authorized official of the governing body of a city, village, township, or charter township or an authorized representative of an organized association, club, or group.

1. Requests for the temporary closing of a highway shall indicate the time and date the highway is to be closed to traffic, the date and time the highway is to be reopened to traffic, and such other information as the Road Commission may require.
2. No permit shall be issued for the partial or complete closing of a highway unless the Road Commission is satisfied that adequate arrangements have been made for the handling of highway traffic during such closure.
3. All barricades, traffic control devices, lights, flagpersons, or traffic control persons, are to be furnished or provided for by the requesting party or organization.
4. The Road Commission may require a Bond and proof of liability insurance coverage as a condition to issuing a permit under this section.
5. The banner or decoration shall be securely fastened and be at least 18 feet above the surface of the traveled way.

## VI PERMITS FOR PRIVATE ENGINEERS AND SURVEYORS

- A. Permits will be required for all private engineering, seismographic or land surveying field crews doing any work in the county road rights-of-way.
- B. Permits may be obtained for periods of up to one year or for any monthly, weekly, or daily period.
- C. Field crews, when working in road rights-of-way, must comply with the current Michigan Manual of Uniform Traffic Control Devices to provide advance warning to the motoring public.
- D. A certificate of liability insurance coverage must be furnished prior to the issuance of a permit.

VII CONSTRUCTION PERMITS – GENERAL SPECIFICATIONS

A. BORING AND JACKING: When crossing the road bed with pipe, the bore-and-jack method shall be used unless otherwise authorized by the County Engineer.

1. Casing shall be used on all pipe placed under the roadway unless otherwise directed by the County Engineer.
  - a. Where pipelines are encased, the encasement shall extend a suitable distance beyond the slope or ditch lines.
  - b. Casing pipes shall be sealed at the ends with a flexible material to prevent flowing water and debris from entering the annular space between the casing and the carrier.
2. The leading edge of the pipe must always precede the auger by ½ times the diameter of the pipe.
3. Soil borings may be required at boring pit locations, and the cost of these borings will be at the expense of the applicant.
4. Face of boring pits shall be located not closer than 10 feet from the edge of pavement.
5. Backfill for all excavations shall be compacted to at least 95% of maximum density.

B. OPEN CUTTING (WHEN ALLOWED)

1. The pavement or gravel surface shall be cut back so that the opening is at least one foot wider on each side than the width of the trench.
2. If the pavement is asphalt or concrete, the pavement shall be cut by sawing unless otherwise approved.
3. Unless approved by the County Engineer, open cuts will not be allowed during the period November 15<sup>th</sup> through March 31<sup>st</sup>.

C. BACKFILLING AND COMPACTION OF BACKFILL

1. Backfill shall be placed in two stages: First, sidefill to the level of the top of pipe, and second, overfills to former surface grade.
  - a. Placed in 6-inch layers to within 6 inches of the existing gravel surface and to within one foot of the existing paved surface, to a density of 95%.
  - b. The final 6 inches shall be MDOT Spec. 22A Road Gravel, 21AA Road Gravel, or Crushed Concrete, compacted.

VII CONSTRUCTION PERMITS – GENERAL SPECIFICATIONS (continued)

C. BACKFILLING AND COMPACTION OF BACKFILL (continued)

- c. All backfill will be subject to check by Controlled Density Method (205.03.4 a).
2. Sand-Gravel backfill material shall consist of approved bank-run or gravel or an approved mixture of sand with gravel or stone (205.03.4).

D. DEPTH OF COVER MATERIAL

1. Gas pipes, underground electric cables, underground telephone cables, and all other underground utilities shall be placed at a depth that will provide not less than 30 inches of cover.
2. Individual service lines extending from transmission lines may be placed at a depth that would provide less than 30 inches of cover, but in no case less than 18 inches of cover at the discretion of the County Engineer.

E. DISPOSAL OF EXCAVATED MATERIAL

1. Excavated material shall be stockpiled in such locations that it does not obstruct vision or unduly interfere with safe travel on the highway.
2. The applicant shall dispose of all surplus material outside of the right-of-way, or the material if suitable, may be leveled on the right-of-way in an approved manner.

F. SURFACE RESTORATION: The roadway and shoulder surface shall be restored when it has been open cut or damaged during or as a result of the construction activity. Extensive scarring, cracking, or settlement shall be considered as damage. Asphalt restoration to be up to 100' as deemed necessary.

1. ASPHALT SURFACE

- a. Local Roads. Any asphalt surface shall be restored by placing 4 inches (two lifts) of HMA 13A.
- b. Primary Roads. Any HMA surface shall be restored by placing 2-1/2 inches of HMA 3C, then 2 courses of 1-1/2 inches each of HMA 4C.
- c. If HMA material is not available, a minimum of 3 inches of compacted cold patch asphalt over 12 inches of compacted gravel base MDOT Spec. 22A may be used. The Board will require the removal of this patch and replacement with HMA pavement when it becomes available.

VII CONSTRUCTION PERMITS – GENERAL SPECIFICATIONS (continued)

F. SURFACE RESTORATION (continued)

2. GRAVEL ROADS

- a. All trenches are to be backfilled with approved material to within 12 inches of the surface within the limits of the roadbed. The top 12 inches within the roadbed will be filled with processed road gravel MDOT Spec. 22A, 21AA Road Gravel, or Crushed Concrete, immediately after the trench is backfilled and compacted.
- b. Fill shall not be mounded to allow for settling; such settling as may occur shall be filled back even with the roadway surface.

3. SHOULDER RESTORATION Shoulders shall be restored when they have been removed or disturbed during, or as a result of the construction activity.

- a. The shoulder shall be restored to be as good or better than the former condition prior to construction.
- b. If the shoulders are contaminated with excavated material, the contaminated portion shall be removed and replaced with admixed gravel MDOT Spec. 22A.
- c. Shoulder restoration shall be done as soon as possible immediately following the installation. Such restoration shall be done piece-meal dependent upon the scope and duration of the construction.

4. RESTORATION OF RIGHT-OF-WAY

- a. Ditches, ditch slopes and other areas within the right-of-way shall be restored to their original condition.
- b. All culverts and ditch enclosures removed in good condition shall be relaid in proper position. Culverts and other drainage structures that cannot be reused shall be replaced in accordance with current Road Commission standards and to the satisfaction of the County Engineer.
- c. Slopes shall be restored to Class A tolerances (205.03.N) Areas where vegetation has been disturbed or removed shall have vegetation restored by the methods selected based on the criteria as shown in section (816) of the current MDOT Standard Specifications for Construction.

VII CONSTRUCTION PERMITS – GENERAL SPECIFICATIONS (continued)

F. SURFACE RESTORATION (continued)

5. LAND MONUMENTS AND PROPERTY CORNERS Land monuments and property corners shall not be moved or otherwise disturbed except as directed by the County Engineer.

G. MANHOLE COVERS, GRADE

1. Height of manhole covers shall be determined as follows:
  - a. If the manhole falls within a paved road, the cover shall be flush with the pavement.
  - b. If the manhole falls within a gravel road or the shoulder of the paved road, the cover shall be 6 inches below the surface.
  - c. If the manhole falls within a ditch, the cover shall be either sufficiently lower than the bottom of the ditch to allow for normal ditch maintenance or the ditch shall be relocated around the manhole and away from the road with a stable earth berm around the manhole.
2. The type of manhole cover is at the discretion of the County Engineer.

H. DUST CONTROL IN THE WORK ZONE

1. The permittee shall maintain his work area in a safe, dust free condition until all work is completed in a given area.
2. This will include the removal of material (mud, dirt, etc.) tracked onto the road surface.
3. Dust control shall be provided on any unpaved detour, bypass and shoulder which is to be used by traffic.
4. Any material to be used for dust control must be approved by the County Engineer.

I. DISPOSAL OF WATER

1. Any water disposed of by the Permittee in excess of normal agricultural runoff of natural precipitation into the County Road Commission road drainage system, must be approved by the County Engineer in advance of any discharge.

VII CONSTRUCTION PERMITS – GENERAL SPECIFICATIONS (continued)

I. DISPOSAL OF WATER (continued)

- a. The Permittee must furnish information relative to the location of discharge points and the date of discharge.
2. The outletting of subsurface water into roadside ditches will generally be unacceptable.
3. The Permittee agrees to do all necessary restoration of the road drainage system and to either alter dewatering operations or to cease altogether for public safety.
4. All well points shall be located as far from the travelled way as possible.

J. MAINTAINING TRAFFIC AND TRAFFIC CONTROL (812)

1. Signs and signing:

- a. The signs, sign support standards, barricades, and traffic control devices necessary for the protection of traffic in accordance with the current MUTCD shall be furnished by the Permittee.
- b. The Permittee shall not begin any operations in a given area until all of the stop signs and street name signs have been reset, auxiliary barricades erected, and flasher lights attached to all required barricades.
- c. Traffic control signs and street name signs shall be removed, temporarily reset, and maintained by the Permittee. The traffic control signs shall be reset in locations where required by law and continue to serve their intended purposes. The signs shall be mounted so as to be easily visible to traffic. All signs shall comply with the current version of the MUTCD.
- d. The Permittee shall be responsible for placement and maintenance of all temporary construction signing. The permittee shall relocate and maintain the temporary signs, as directed by the County Engineer. Upon completion of the project, traffic control signs will be reset in their proper position by the Permittee.
- e. All signs erected or relocated by the Permittee shall be at the expense of the Permittee. All erected and existing signs which are damaged during the course of construction will be replaced with signs meeting the current requirements of the MUTCD.



VII CONSTRUCTION PERMITS – GENERAL SPECIFICATIONS (continued)

J. MAINTAINING TRAFFIC AND TRAFFIC CONTROL (continued) (812)

2. Partial Closure of Roads: When partial closure of a road is approved by the County Engineer for purposes of open-cut crossings or construction within or immediately adjacent to the travelled portion of the road, the following requirements shall apply:
  - a. All required signing shall be in place and bypass lanes, if required, shall be completed before the partial closure begins. All temporary signing will comply with the current version of the MUTCD.
  - b. All Traffic Regulators must review the training requirements described in the current edition of the Michigan Manual on Uniform Traffic Control Devices Part 6, Chapter 6E, prior to performing work.
  - c. After working hours, signs which are not appropriate shall be covered or removed so that traffic will not be confused.
  - d. When a partial closure must remain in effect overnight, proper lighting will be required.
  - e. When traffic conditions warrant, in the opinion of the County Engineer, the County Engineer reserves the right to require the Permittee to cease operations and to restore the road to full use during period of peak traffic hours.
3. Detours
  - a. Signing for all approved detours will be installed by the Permittee at the expense of the Permittee. The Permittee must give the Road Commission at least 72 hours advance notice, not including Saturdays, Sundays, or Holidays, for all detours.
  - b. The Road Commission shall be responsible for notifying all concerned parties when the detour will be in effect and when the road has been reopened with the detour no longer in effect.
  - c. The Permittee shall be responsible for any necessary repairs or improvements of the detour route to maintain the route and to repair any damage as a result of the detour.

J. MAINTAINING TRAFFIC AND TRAFFIC CONTROL (continued) (812)

4. Refusal or Revocation of Permit

a. None of the provisions contained in this section shall be construed to limit the authority of the authorized representative of the Board to refuse to issue permits when the conditions of the roads are such that the Contractor's operations would cause harm or injury to the highway and/or the travelling public.

b. Failure of a Contractor or Permittee to comply with permit provisions shall be just cause to revoke any such permit issued to the Contractor or Permittee.

5. Trees: A Contractor or Permittee before destroying, removing, trimming, tunneling or boring any trees shall comply with the provisions necessary to the issuance of a permit for such work. A separate permit will not be required in addition to the construction permit.

VIII ROADSIDE MOWING

The Allegan County Road Commission allows private parties to mow the roadsides of county roads and has the authority to regulate such mowing pursuant to act 200, Public Acts of 1969 and Act 212, Public Acts of 1980.

1. A permit must be applied or in person at the Road Commission office, prior to commencing work.
2. Insurance coverage provision in the amounts of \$1,000,000, property damage, each occurrence, and \$1,000,000 personal injury, each occurrence, will be required. Also proof of Worker's Compensation Insurance will be required.
3. The initial mowing of any county roadside must be completed by August 31, of any year. Additional mowing, if applicable, may be completed at any time. Earlier completion dates may be required by individual townships.

IX TREES

A. Permit Requirements

1. A permit will be required for any tree removal, trimming, or tunneling.
2. Permits may be obtained from the Permit Department of the Road Commission.

IX TREES (continued)

3. The applicant will be required to provide location, size, and species of trees affected. A Contractor must show on the construction plans or on separate sheets similar to the plans, the above information in such a way that is readily identifiable in the field. He must also indicate thereon which individual trees he proposes to remove, tunnel, or trim and extent of trimming.
4. Before destroying or removing any trees larger than 4 inches in diameter, located within the presumed 66-foot right-of-way, written permission must be obtained from the owner of record of the land where the tree is located. The Road Commission shall require a copy of the approval signed by the owner of record of the property abutting the presumed right-of-way.

B. Disposal of Materials

1. All stumps, limbs, litter, and logs are to be disposed of outside of the road right-of-way.
2. The abutting property owner has the right to the wood, if he wants it, to dispose of as he sees fit.
3. Logs and major limbs may be cut into disposable lengths and piled neatly in the right-of-way, at least 10 feet from the travelled road for removal by others.
  - a. If, after 2 weeks, the wood has not been removed by others, the Permittee shall dispose of it.

C. Tunneling or Boring Under Trees

1. Tunneling or boring must be below the major root system and extend a distance of 1 foot on either side for each 2 inches or trunk diameter.
2. All voids around the tunneled or bored facility shall be backfilled with excavated material and thoroughly compacted to avoid settlement.
3. If the tree is severely damaged or dies within 1 year as a result of the tunneling or boring, the Permittee will be required to remove it at his own expense.

X     TRANSPORTATION PERMITS

A. GENERAL PROVISIONS

1. Permits will be issued only to the companies or individuals actually doing the transporting to move vehicles and/or loads which exceed the legal size and weight limitations provided that the vehicle and/or loads cannot be readily dismantled, reduced or otherwise rearranged to come within the legal limits.
2. All applications for permits to be issued under these regulations shall be in writing on forms provided by the Road Commission and properly executed by the owner of the vehicle for which the permit is being requested.
3. Prior to the issuance of permits under this section (Section IX), the Applicant shall furnish proof of insurance coverage naming the Allegan County Road Commission as an additional insured for the term of the permit for \$1,000,000, Bodily Injury and \$1,000,000, Property Damage for operations arising out of this permit.
4. The Permittee shall be liable for the payment of any and all claims, demands, lawsuits, and judgments arising directly or indirectly out of issuance of said permits, and for this purpose shall agree to defend, indemnify and save harmless the Board therefrom.
5. During the time of weight restrictions, as set forth in Act 300 of the Public Acts of 1949, as amended, (commonly referred to as Frost Law Restrictions) and at any other time when conditions are unfavorable, permits will not be issued for overweight loads. Permits issued for overweight vehicles and/or loads on a seasonal basis will not be valid during periods of reduced loading restrictions.
6. No special transportation permit will be issued which would allow vehicles to cross posted bridges and/or culverts while carrying loads which exceed the posted limitations. Any permit so issued will in no way supersede posted load limitations on any bridge or other highway structure.
7. No permit will be issued for overweight loads in excess of the licensed elected gross weight of the vehicle.
8. None of the provisions contained in this Section shall be construed so as to limit the authority of the authorized representative of the Board to refuse to issue Special Transportation Permits when the conditions of the road are such that above legal load limitations would cause harm or injury to the highway.

**B. SPECIAL TRANSPORTATION PERMIT – SINGLE MOVE BASIS**

1. Permits may be issued to move vehicles and/or loads exceeding the legal allowable height limitation of 13 feet–6 inches, provided that prior to the issuance of such permits, the proposed route is checked for interference with overhead facilities and other obstacles and that clearance shall first be obtained from all public and private corporations, and private individuals whose facilities may be affected by the proposed move.
2. Permits may be issued allowing vehicles and vehicles with trailers of excess width (over 8 feet) to travel on County Roads except that no permit shall allow width in excess of 14 feet without special permission therefore.
3. Permits may be issued for vehicles of excessive length as long as the movement of such vehicles will not jeopardize the safety of the travelling public, and will not cause unreasonable interference with normal traffic over county roads.
4. Special Transportation Permit
  - a. Permit will be issued on a single move basis.
  - b. An application for each permit must be submitted in person for approval prior to the issuance of said permit.
  - c. Proof of insurance, any bond, or deposit fee, and permit fee must be deposited with the Road Commission prior to issuance of permit and Cab Card.
5. Small buildings such as garages, farm sheds, construction sheds, etc., which do not exceed 13 feet-6 inches in height, 12 feet in width and 30 feet in length when loaded on a transport vehicle may be permitted to be moved under this type of permit under certain conditions. Buildings exceeding these dimensions will require a Permit to Move a Building.
6. MDOT standards for signing and flags on oversize loads shall be complied with.
7. Vehicles transporting loads exceeding 12 feet in width or 90 feet in overall length shall be protected by one or more pilot cars equipped with roof mounted amber revolving light.
8. Permits are not valid for moving on Sundays and Holidays, or at any time when weather, road or traffic conditions, create a potentially hazardous condition, except under special conditions.

C. EXTENDED SPECIAL TRANSPORTATION PERMIT

1. Permits may be issued to move oversize loads on an extended (up to one year) basis provided that the vehicles and loads do not exceed 13 feet 6 inches in height, 12 feet 6 inches in width, and up to 75 feet in combined length. This will also include mobile homes up to 14 feet wide, 80 feet in length with combined length not to exceed 95 feet.
2. All such permits will expire on December 31, and will be so marked.
3. Permits will be issued only for such vehicles as mobile cranes, lowboys, overlength or overwidth trailers, self-propelled construction machinery and pole trailers.
4. A written application must be submitted for approval with the permit fee prior to issuance of this type of permit.
  - a. Applicants will submit a list of equipment to be included on the permit.
  - b. It shall be the responsibility of the applicant to furnish copies of the permit to all units.
  - c. Permits are not valid for moving on Sundays and Holidays, or at any time when weather, road, or traffic conditions create a potentially hazardous condition.

D. SPECIAL PERMIT TO MOVE A BUILDING

1. Any applicant not known to normally engage in building moving shall be required to furnish proof of building moving experience to the satisfaction of the Road Commission. Such proof may include, but is not limited to, copies of past contracts and permits, photographs, and letters of reference.
2. Movement of houses and other buildings on county roads shall take place only when accompanied by an escort vehicle. No such movement shall be allowed between sundown and sunrise, or on Sundays and Holidays.
3. The permit shall designate the route to be taken and shall remain in force only as long as designated on the permit or it is necessary to complete the designated movement, or until revoked.
4. A permit to move a building or extraordinarily oversize load will be issued only if the applicant telephones or otherwise notifies the Road Commission office not less than 24 hours in advance of the proposed move and supplies the following information:
  - (a) The type, size, and weight of the load.

X TRANSPORTATION PERMITS (continued)

D. SPECIAL PERMIT TO MOVE A BUILDING (continued)

- (b) The proposed route of the move.
- (c) The time and date of the move.
- (d) Possible interference by trees or utility lines.

When received the permit is reviewed, approved, and faxed back to the applicant along with an invoice.

E. SEASONAL TRANSPORTATION PERMIT – MILK HAULERS

In compliance with Sec. 711, Public Act 300 of 1949, as amended, when necessary information is submitted in writing by a milk hauler requesting to transport legal weight loads on a highway during spring weight restrictions, a permit shall be granted upon approval by the Board of County Road Commissioners of Allegan County for the requested route on the application, under the following conditions and restrictions:

1. Permit must be carried in the vehicle.
2. Speed limit not to exceed 35 mph.
3. Normal legal loadings only.
4. Time of day.
5. The Board of County Road Commissioners have the right to suspend this agreement if weather or road conditions warrant such action.

F. SEASONAL TRANSPORTATION PERMIT – FARM PERMITS

1. Permits are issued to individuals and not to feed suppliers or contractors.
2. All suppliers must be listed on the application.
3. It will be the responsibility of all applicants to furnish copies of permits to their suppliers.
4. Permit covers feed, livestock, and commodities.
5. Permit is valid for the entire seasonal weight restriction period.

X TRANSPORTATION PERMITS (continued)

F. SEASONAL TRANSPORTATION PERMIT – FARM PERMITS (continued)

- a. Legal loading only.
  - b. 35 mile per hour speed limit on restricted roadways.
  - c. Permit valid 24 hours a day.
6. Violation of the permit voids the permit for the supplier or contractor deemed to be in violation of said permit.

XI DUSTLAYER APPLICATION PERMIT

- A. Application of approved dustlayer material by private or commercial operators is permitted under certain conditions set forth by the Road Commission.
1. A permit must be applied for in person at the Road Commission office.
  2. Insurance coverage provisions must be complied with.
  3. Enough advance notice should be given to enable the road to be graded to provide a suitable application surface.
  4. The surface of the roadway, prior to application, shall be dry and receptive to the application.
  5. The extent and frequency of the operation shall be such that at no time will there be any “run-off” of the application material.
  6. Regulations of the MDNRE shall be adhered to at all times.
  7. The Road Commission may, at their sole discretion, do any grading or other maintenance activities, and may cancel or alter the permit at any time.



SCHEDULE "A"

ALLEGAN COUNTY ROAD COMMISSION

PERMIT AND INSPECTION FEE SCHEDULE

Effective December 1, 2012

	<b>Permit Fees</b>	<b>Other</b>
<b><u>DRIVEWAYS</u></b>		
Residential Drive	\$50.00	
Field Drive	\$50.00	
Commercial Drive/Change of Use Permit	\$200.00	
Commercial Drive Improvement	\$200.00	
Private Road Approach	\$200.00	
Temporary Construction Drive	\$500.00	
<b><u>UTILITIES</u></b>		
Overhead Utility Installation	\$100.00	
Underground Utility Installation	\$100.00	
Sanitary, Water Main, Irrigation, Storm	\$200.00	Deposit may be required
Open Cut Crossing, If Allowed	\$200.00	Deposit may be required
Bored Crossings	\$100.00	
Annual Utility Permit, Maintenance & Repair	\$200.00	
Annual Utility Permit, Service Connections	\$200.00	
Annual Utility Permit, Tree Trimming	\$200.00	
<b><u>PLATS &amp; SITE CONDOMINIUM WITH PUBLIC ROADS</u></b>		
Preliminary Plat Review	\$500.00	
Plan Review	\$500.00	
Revisions	\$100.00	

<b><u>TRANSPORTATION PERMITS</u></b>		
Single Move	\$50.00	Deposit may be required
Extended Transportation	\$100.00	
Building & Special Move	\$100.00	
Milk Hauler	\$50.00	
Utility Seasonal Transportation Permit	\$50.00	
Agricultural Commodities Seasonal Transportation Permit	\$50.00	
<b><u>OTHER</u></b>		
Tree Removal	No Charge	\$20 per additional bore \$200 per mile
Surveying	No Charge	
Dustlayer	No Charge	
Parades, Events	\$10.00	
Soil Boring (up to 10 borings)	\$200.00	
Seismic Testing	\$200.00	
Test Wells	\$200.00 Ea.	
Wind Turbine Construction: All applicable permit fees above will apply and a deposit to be determined by the Allegan County Road Commission.		
Hydraulic Fracturing: All applicable permit fees above will apply and a deposit to be determined by the Allegan County Road Commission.		

## SCHEDULE “B”

### ALLEGAN COUNTY ROAD COMMISSION

#### SAMPLE BLANK FORMS

1. Application and Permit to construct, operate, maintain, use and/or remove within a county road right-of-way.  
– From CRA100 (Rev. 3/05) or Form 100
2. Application and Permit to move equipment, buildings, tanks, machinery, and mobile homes.  
– Single Move – Form 101
- 2a. Application and Permit to move equipment, buildings, tanks, machinery, and mobile homes.  
– Annual – Form 101A
3. Application and Permit to construct a driveway approach. – Form 103
4. Application and Permit to cut trees within the road right-of-way. – Form 104
5. Permit Construction Inspection Charges – Itemized Time Ticket Form 622
6. Request for Movement of Milk at Legal Weights During Weight Restrictions.

Note: These permit applications are available on the Allegan County Road Commission website as fillable forms at [www.alleganroads.org](http://www.alleganroads.org) in the Permits section.