



State of Michigan Underground Injection Control Program

Primacy Application to U.S. Environmental
Protection Agency – Region V

Michigan Department of Environmental Quality Office of Oil, Gas,
and Minerals

12/1/2014

State of Michigan Underground Injection Control Program Application

Section A: Letter from the Honorable Governor Rick Snyder State of Michigan

Section B: Statement of Legal Authority from Attorney General Bill Schuette, State of Michigan

Section C: Program Description

Appendix 1: Generalized UIC Permit Processing and Notification Flowchart

Appendix 2: Generalized Compliance and Enforcement Flowchart

Appendix 3: Organization Chart of the Office of Oil, Gas, and Minerals

Section D: Supervisor of Wells Instruction for Class II Underground

Section E: Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, PA 451, 1994, as amended, and Administrative Rules 324.101 – 324.1301

Section F: Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, Compliance and Enforcement Procedure 601.00

Section G: Memorandum of Agreement for Program Delegation between the Michigan Department of Environmental Quality and the United States Environmental Protection Agency, Region V

Section H: Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals Quality Assurance Project Plan for the Class II Underground Injection Control Program

Section I: Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals Underground Injection Control Forms

To be Inserted with Final Application

Statement of Legal Authority from Attorney General Bill Schuette, State of Michigan

To be Inserted with Final Application

I. INTRODUCTION: STRUCTURE, COVERAGE, AND SCOPE

The Michigan Department of Environmental Quality's (MDEQ), Office of Oil, Gas, and Minerals (OOGM) is seeking primacy of the Underground Injection Control (UIC) Program for Class II wells, pursuant to Part C, Section 1425, of Title XIV of the Public Health Service Act: Safety of Public Water Systems (SDWA), Public Law 93-523, as amended from the United States Environmental Protection Agency (U.S. EPA). Currently, there are about 1,286 Class II wells in Michigan. The majority (approximately 69 percent) of these are disposal wells; the balance are operated as secondary recovery wells. All wells associated with oil and gas exploration and production in the state, including Class II injection wells and natural gas storage wells, are regulated under Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and the administrative rules promulgated thereunder. The authority to implement and enforce Part 615 is granted to the Supervisor of Wells (Supervisor), who is the Director of the MDEQ. That authority has been delegated to the Chief and staff of the OOGM. Natural gas storage wells do not fall under the jurisdiction of the Underground Injection Control Program. This program description applies to only Class II wells, for which this primacy application is being made under Section 1425 of the SDWA.

The overall purpose of this program is to protect Underground Sources of Drinking Water (USDW) from contamination by injection operations as specified in Part 615 R 324.801(3), which provides that:

“A permittee of a well shall ensure that an injection well is constructed and operated so that the injection of fluids is confined to strata approved by the supervisor or authorized representative of the supervisor.”

The current regulations under Part 615 are designed to specifically protect aquifers containing fresh water, meaning water that is free of contamination in concentrations that may cause disease or harmful physiological effects and is safe for human consumption. As part of its pursuit of primacy, the OOGM is expanding its definition of protected aquifers to correspond to the definition under the SDWA, meaning an aquifer that either supplies drinking water for human consumption or that contains water with fewer than 10,000 milligrams per liter total dissolved solids.

Under Part 615, the Supervisor has authority to implement SDWA standards for construction and operation of all Class II wells. Existing wells or wells newly converted for injection will meet the requirements of the SDWA if:

1. The wells met the construction requirements specified by the OOGM at the time of their construction; and
2. Injection into the wells will not result in the movement of fluids into or between USDW's if such movement creates a significant risk to the health of persons.

II. OPERATION OF RULES

The Underground Injection Control Program for Class II wells will be administered by the MDEQ, OOGM. Part 615 governs the drilling, construction, operation or conversion of a well to a Class II well under this program.

III. PERMITTING

- A. General Requirements: A person must obtain a Class II well permit before commencing the drilling, operating or conversion of any well.
1. Any person proposing to drill, deepen, convert to, or operate a Class II well in Michigan must secure a written permit from the OOGM.
 2. Signatories: Any permit application or form required for a Class II well must be signed by the permittee, or an authorized agent. An individual who signs as an agent must furnish satisfactory evidence of authority to the OOGM.
 3. Applicable Conditions
 - a. Duty to Comply: A person issued a permit must comply with the conditions of the permit, as determined by the OOGM, pursuant to the requirements of the OOGM contained within Part 615 and rules, orders, and instructions promulgated thereunder.
 - b. Duty to Reapply: Once a permit is voided, revoked, expired, or otherwise terminated, an application for the same location must be made by the applicant as if it were an initial filing.
 - c. Duty to Halt or Reduce Activity: The provisions of Part 615 and the rules, orders, and instructions promulgated thereunder provide Michigan with full enforcement authority to bring a person issued a permit under this article into compliance with the conditions of the permit. Section 61505 of Part 615 states:

“The supervisor has jurisdiction and authority over the administration and enforcement of this part and all matters relating to the prevention of waste and to the conservation of oil and gas in this state. The supervisor also has jurisdiction and control of and over all persons and things necessary or proper to enforce effectively this part and all matters relating to the prevention of waste and the conservation of oil and gas.”

Rule R 324.1014 provides that:

“(1) The supervisor or authorized representative of the supervisor shall have the authority to immediately require corrective action, including suspending any or all components of the oil and gas operations, if the oil and gas operations have been determined by the supervisor to be in violation of the provisions of the act, these rules, permit conditions, instructions, or orders of the supervisor and threatens the public health and safety.

(2) A suspension of oil and gas operations shall be in effect for not more than 5 days or until the operation is in compliance and protection of the public health and safety is ensured. To extend the suspension beyond 5 days, the supervisor shall issue an emergency order to continue the suspension of oil and gas operations and may schedule a hearing under part 12 of these rules. The total duration of the suspension of oil and gas operations shall not be more than 21 days, as provided in section 61516 of the act.”

- d. Duty to Mitigate: A permittee shall correct any adverse environmental impact that results from noncompliance with a permit or Part 615. Continued operation of a Class II well is prohibited until the noncompliance is abated or an extension of time for abatement is issued in writing by the OOGM.
- e. Proper Operation and Maintenance: A permittee must maintain proper operation and maintenance of all Class II wells and facilities; this includes effective performance, adequate funding, adequate permittee staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The operation and maintenance of all Class II wells must be in accordance with the rules under Part 615.
- f. Permit Actions: Under the provisions of Part 615, the OOGM may issue, reissue, modify or suspend a permit for a Class II well. These actions are subject to administrative review. The OOGM may act immediately, without hearing and notice, and order a permittee to plug and abandon a well that is endangering or has the potential to endanger human health or safety or the environment.
- g. Property Rights: The issuance of a Class II well permit does not convey any property rights or exclusive privileges.
- h. Inspection and Entry: Any person authorized by the OOGM may at any reasonable time:
 - i. Enter upon public or private land for the purpose of assuring compliance with the NREPA, and Part 615;
 - ii. Require a permittee to produce all records related to the permitting, drilling, and operating of a well for oil and gas purposes.

Monitoring, Record Keeping and Reporting: Permittees of all Class II wells are required to monitor injection pressure and volumes and report this information to the OOGM. The permittee of an enhanced recovery well shall monitor the maximum and average injection pressure and the injection rate on at least a monthly basis. The results are to be submitted to the OOGM annually. The permittee of a disposal well shall monitor the maximum and average injection pressure and the injection rate on at least a weekly basis. The results are to be submitted to the OOGM monthly. Failure to submit annual report by March 1 of the following year will require immediate suspension of use pursuant to Rule 324.801(2).

- B. Duration: A permit for a Class II well is effective for the life of the well, unless the permit is canceled, suspended, expired or is otherwise terminated under the Part 615 rules. A permit will expire two (2) years after issuance unless drilling operations have reached a depth of not less than 100 feet below the ground surface elevation and the drilling operation is diligently proceeding or the well is otherwise being used for its permitted purpose. Any well not being used for its permitted purpose during 12 consecutive months shall be plugged, unless the well is granted temporary abandonment status by the OOGM.
- C. Denial: A permit can be denied if a permittee:
1. Is not eligible for a permit; or
 2. Does not comply with the rules and requirements or orders issued or promulgated by the Supervisor; or
 3. Is not in compliance with or is in violation of Part 615 or any of the rules, requirements, or orders issued or promulgated by the Supervisor or the OOGM.
- D. Suspension: In accordance with the conditions of a permit, the Supervisor may suspend a permit issued under Part 615 upon a finding that:
1. The permit was obtained through fraud or misrepresentation;
 2. The permittee is in violation of the NREPA or Part 615;
 3. The information or conditions upon which the permit was applied for have substantially changed since issuance; or
 4. The operation of a Class II well may result in the significant movement of fluids into or between underground sources of drinking water (USDW).

- E. Transfer: No person shall transfer a permit to any other person except upon prior approval of the Supervisor. Approval of the transfer of a permit requires that the acquiring entity provide the OOGM with an appropriate conformance bond pursuant to Part 615 administrative rules and fully executed transfer form.
- F. Modification: The OOGM may subject to Part 615, require modification of a permit for a Class II well for any of the following causes:
1. The permittee requests or agrees to a modification;
 2. There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance justifying the application of permit conditions and are different from or absent in the original permit. The MDEQ has determined that the cumulative effects on the environment resulting from the permitted well are unacceptable;
 3. The statutes or rules that the permit was based upon have changed by amendment or by a reported judicial decision;
 4. The OOGM Supervisor determines good cause exists for the modification of a compliance schedule as a result of events that the permittee has little or no control and no other remedy is practicable.

Modifications that substantially alter a permit issued by the OOGM will result in the initiation of a new public notice process. A substantial alteration is one that results in the modification of a specific permit condition to the extent that a technical review of the permit is needed, such as a stratigraphic change in injection zone or change of well location.

All Class II well permits will be reviewed no less frequently than every five (5) years to determine if any modifications to a permit should be made in order to maintain compliance with the Part 615 or orders issued or rules promulgated thereunder.

- G. Emergency Permits: An emergency permit can be issued by the Supervisor under the provisions for the issuance of emergency orders and hearing, R 324.1211 that states:

“(1) When an emergency order is issued by the supervisor, the person subject to the order shall be served with the order, either personally or by certified, return receipt mail.

(2) An emergency hearing may be scheduled by the supervisor to consider matters of urgency or as a result of the issuance of an emergency order. Notice of hearing shall be served by certified mail, return receipt requested, not less than 10 days before the hearing date, on other interested persons as the supervisor shall consider necessary and appropriate.”

The Supervisor has the discretion to order a permittee to perform remedial and repair work, or plug a Class II well if appropriate to protect a USDW from endangerment, or the Supervisor may utilize Part 616, Orphan Well Fund, of the NREPA and/or Part 615 funds to plug and abandon a well.

The Supervisor has the discretion of approving, with U.S. EPA concurrence, alternate formulas for calculating the maximum allowable injection pressure for Class II wells and for approving injection pressure limits based on site or area specific criteria.

- H. Area Permits or Project Permits: Area or project permits will not be issued or considered under this program. Application for a Class II well must be made on an individual well basis. All Class II wells under U.S. EPA Area Permits classification after the effective date of this program will be reauthorized by the OOGM unless the OOGM has already issued an individual Class II well permit. Reauthorization of such wells will be accomplished via a file review process.
- I. Compliance Schedules: A schedule for the review of all existing Class II wells will be developed by the effective date of the state program. Any well found to be in noncompliance will be required to cease injection and schedule for testing as soon as possible. Wells that demonstrate mechanical integrity will be authorized by permit to continue operating. Any well that fails to meet the program requirements will be required to comply with the OOGM's corrective action pursuant to Part 615 and Supervisor's orders or instructions. A corrective action plan may be requested by the OOGM if the technical review reveals the presence of wells that could provide a conduit for the migration of fluids into a USDW. Upon approval, this plan becomes an operating condition. The plan must be implemented, completed, and approved by the OOGM before an authorization to inject will be issued.
- J. Process: The permitting of Class II wells is a process that involves three (3) phases of operation. Each phase contains related steps that have been grouped together in an effort to expedite the permitting process. In addition, breakdown of the overall process into three (3) phases assists with the estimation of the time required for final permit issuance. These phases are as follows:

PHASE I Permit Application Review

- A. Step 1 Initial Review
- B. Step 2 Field Review
- C. Step 3 Final Review

PHASE II Public Notification and Permit Decision

- A. Step 1 Publication of Notice
- B. Step 2 Public Hearing

C. Step 3 Permit Decision (Issue, Modify, Deny)

PHASE III Testing, Authorization and Operation

- A. Step 1 Mechanical Integrity Testing
- B. Step 2 Authorization to Inject
- C. Step 3 Well Operation

PHASE I Permit Application Review

This phase begins at the time that the OOGM receives a permit application.

A. Step 1 - Initial Review: An application is reviewed for its content and accuracy. The primary components of a permit application must be identified in this step; deficiencies may result in the entire application being returned to the applicant. The initial application review should be completed by the OOGM degreed geologists or petroleum engineers within five (5) working days from the date of receipt of the application. The following items are required to be submitted and are examined during this step:

1. A three hundred dollar (\$300) application fee if required; and either:
 - a. A single well conformance bond as follows:
 1. \$10,000.00 for wells up to and including 2,000 feet deep, true vertical depth.
 2. \$20,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.
 3. \$25,000.00 for wells deeper than 4,000 feet, but not deeper than 7,500 feet, true vertical depth.
 4. \$30,000.00 for wells deeper than 7,500 feet, true vertical depth; or
 - b. A blanket conformance bond as follows:
 1. \$100,000.00 for wells up to and including 2,000 feet deep, true vertical depth.
 2. \$200,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.
 3. \$250,000.00 for wells deeper than 4,000 feet, true vertical depth.

NOTE: The blanket conformance bond is not based on number of wells under

the bond but the depth of the wells.

2. In lieu of the conformance bonding listed above, applicants may provide a statement of financial responsibility that meets all of the requirements of R 324.204 *et seq.*
3. A plat that shows the location and total depth of the proposed injection well, shows each abandoned, producing, or drilling well and dry hole within 1,320 feet of the proposed injection well location, and which identifies the surface owner of the land on which the proposed injection well is to be located and each permittee of a producing leasehold within 1,320 feet of the proposed injection well
4. If a well is proposed to be converted to an injection well, a copy of the completion report, together with the written geologic description log or record filed pursuant to R 324.418(a) and borehole and stratum evaluation logs filed pursuant to R 324.419(1). The permittee shall also file an application for change of well status pursuant to R 324.511.
5. Plugging records of all abandoned wells and casing, sealing, and completion records of all other wells within 1,320 feet of the proposed injection well location. An applicant shall also submit a plan reflecting the steps or modifications believed necessary to prevent proposed injected fluids from migrating up, into, or through inadequately plugged, sealed, or completed wells.
6. A schematic diagram of the proposed injection well that shows all of the following information:
 - a. The total depth or plug-back depth of the proposed injection well.
 - b. The true vertical depth and thickness of the disposal or injection interval.
 - c. The geological name of the disposal interval.
 - d. The geological name and the top and bottom depths of all fresh water strata to be penetrated.
 - e. The depths of the top and bottom of the casing or casings and cement to be used in the proposed injection well.
 - f. The size of the casing and tubing and the depth of the packer.
7. Information confirming that injection of liquids into the proposed zone will not exceed the fracture pressure gradient or, information showing that injection into the proposed geological strata will not initiate fractures through the overlying strata.

8. A plan of the steps or modifications needed to prevent significant fluid movement into or between USDW's through the well indicated on the survey must be provided by the applicant and reviewed by the OOGM. The plan should take the following into account:
 - a. The nature and volume of the injected fluids;
 - b. The composition of native fluids and byproducts of injection;
 - c. Potentially affected persons;
 - d. Geology;
 - e. Hydrology;
 - f. The history of operation; and
 - g. Hydraulic connections between the injection zone and USDW's.
9. Signature on the permit application, by the permittee or authorized agent; and
10. Proof that the required direct notifications have been sent.
11. Proposed operating data, excluding injection wells utilized for gas storage, including all of the following data:
 - a. The daily injection rates and pressures;
 - b. The types of fluids to be injected;
 - c. A qualitative and quantitative analysis of a representative sample of fluids to be injected;
 - d. A chemical analysis shall be prepared for each type of fluid to be injected showing specific conductance as an indication of the dissolved solids and a determination of the concentration of the following parameters for chemical balance and indicators for comparison of water quality:
 - i. Calcium
 - ii. Sodium
 - iii. Magnesium
 - iv. Potassium

v. Chloride

vi. Sulfate

NOTE: If the fluid to be injected is fresh water, then an analysis is not required.

e. The geological name of the injection strata and the vertical distance separating the top of the injection strata from the base of the lowest fresh water strata.

f. A plan for conducting mechanical integrity tests of casing pursuant to R 324.805 once every five (5) years.

12. A proposed plugging and abandonment plan.

13. A general review of the surveyed well location which must include:

a. A spot of the well location with distances to nearest section lines.

b. The outlined quarter (1/4) mile Area of Review.

c. The surface and bottom hole location of all oil, gas, disposal, and injection wells within the quarter (1/4) mile Area of Review.

14. A signed and sealed survey by a licensed Michigan land surveyor.

15. A determination that all attachments required are present, complete, and accurate.

16. A check of the applicants' status to determine if the application should be denied further processing as the result of enforcement action by the OOGM. The technical review will not be initiated if an applicant is otherwise ineligible to receive a permit.

NOTE: After the initial review is complete a notice of the permit application is posted to the ~~Department of Environmental Quality~~ MDEQ weekly permit application list. (See Public Notification and Permit Decision, Phase II Step 1).

B. Step 2 - Field Review: Upon completion of Step 1, the application materials are forwarded to the UIC Coordinator and field-office staff, who are also degreed geologists, for review. Generally, an application that is submitted in an acceptable form and satisfies all program requirements should be processed through the field review within 30 working days of submittal. During this review, information contained on the application is further verified from existing information on file with the OOGM or other offices, both inside and outside of the MDEQ. An examination of the following required information is performed in Step 2.

1. A determination that the requirements for proper well construction on new wells are met. All casing, except for casing set pursuant to R 324.413, shall be of sufficient weight, grade, and condition to have a designed minimum internal yield of one and two tenths (1.2) times the greatest expected wellbore pressure to be encountered. The minimum hole size for a given casing shall be determined using Table 410 at R 324.410. The Supervisor may grant an exception to the hole size requirement if it is determined that the proposal provides proper sealing of the well. The following casing is required:
 - a. Surface casing, run and set a minimum of 100 feet below the base of the glacial drift into competent bedrock and 100 feet below all fresh water strata. This casing string must be set with a cement volume sufficient to circulate to the top of the hole; and
 - b. Additional casing if required by the Supervisor to seal off potentially productive oil or gas zones, lost circulation zones, utilized natural brines or mineral zones, storage fields, high pressure zones or reservoirs undergoing secondary recovery.
2. A review of the schematic diagram of the proposed well, which must accompany the application and illustrate the following:
 - a. The total depth of the well, including plugback depths if applicable;
 - b. The depth and thickness of the injection/disposal interval;
 - c. The geological name of the injection/disposal interval;
 - d. A description of the confining zone, including the geological name and thickness;
 - e. The vertical distance between the top of the injection/disposal interval and the base of the lowest USDW;
 - f. A description of the well casing which must include: size, outside diameter, weight, type and setting; and
 - g. The depth; cement volume and type; packer type and setting depth and proposed type of completion which must include tubing size and length
3. A review of the following information:
 - a. The fracture pressure of the confining formation, including calculations;
 - b. The geologic name and depth of the base of fresh water strata;

- c. The name and depth to top and bottom of the confining formations(s);
 - d. The name, and depth to the top and bottom of the injection formation; and
 - e. If the brine is obtained from a facility, the name, facility number, permittee, and location of the surface facility. The proposed maximum injection pressures (in pounds per square inch at the well head) and maximum expected injection/disposal rates (in barrel/day) Injection pressure shall be limited according to the calculation contained in R 324.804 or as otherwise specified in Part II B 4 of this program description.
4. A determination that injection/disposal will be through tubing and a packer, set inside casing within a specified distance above the top of the open hole or the uppermost injection/disposal perforations as determined by the Supervisor; and
 5. An inspection of the proposed well site.
 6. Verification of USDW Protection: All information submitted by an applicant is verified by the OOGM to insure that identifiable USDW's have, in fact, been identified. The proper identification of USDW's involves obtaining information from various sources including, but not limited to:
 - a. A review of available representative water samples from aquifers;
 - b. Calculation of the 10,000 milligrams per liter (Mg/l) Total Dissolved Solids contour using available geophysical logs; or
 - c. A review of publications and research studies conducted by competent authorities such as the Michigan Geological Survey, universities, and the United States Geological Survey.
 7. The location and depth of all wells, whether active or abandoned (oil, gas, brine, mineral, disposal or secondary recovery) within one-quarter (1/4) mile of the proposed well.
 8. The plan of the steps or modifications needed to prevent significant fluid movement into or between USDW's through the well indicated on the survey provided by the applicant will be reviewed by the OOGM.

The completion of Step 2 (Field Review) occurs when the UIC Coordinator and district supervisor makes a recommendation for approval or requirement for additional work and/or modification that is then forwarded to the Lansing office for consideration. Upon approval, the recommendation will include the plan for protection of USDWs and prevention of fluid migration between formations as a permit condition. The plan must be implemented, completed, and approved by the

Supervisor or authorized representative before an authorization to inject will be issued.

C. Step 3 - Final Review

Upon receipt of the field checked application, the Lansing office will conduct a final review to consider the recommendations of the district Supervisor and UIC Coordinator. If additional information, modifications, or submissions from the applicant are required the Lansing office Permits and Bonding Unit will notify the applicant. Upon receipt of additional requested information, modifications, or submissions, Lansing Central Office will confer with field office staff, district supervisor, and UIC Coordinator to determine if response is satisfactory. If applicant fails to address requested additional information, modifications, or submissions, the applicant will again be notified of deficiencies and the application may be denied. If no additional information, modifications or submissions from the applicant are required and the comment period has concluded, the permit may be issued. The Lansing Central Office will post a notice of permit decision on the weekly permit list published by the MDEQ.

PHASE II Public Notification and Permit Decision

A. Step 1 - Publication of Notice: The OOGM requires three (3) forms of public notice as follows:

1. Written Notice which must be served by the applicant personally or by certified mail to any of the following persons; if the described property is located within one-quarter (1/4) mile of the proposed well:
 - a. The permittee of each well for oil and gas purposes; and
 - b. Each owner of rights to surface or subsurface property that the well penetrates.
2. The applicant submits a notification to the county clerk of the county in which the proposed well is to be located.
3. Notification of the application to the township supervisor for the township in which the proposed well is to be located.

The following information will be included on all notices:

- a. Applicant's name and address;
- b. Proposed well location;
- c. Geological formation name and depth of injection zone;

- d. Maximum injection pressure (in pounds per square inch at the wellhead);
- e. Maximum anticipated daily injection rate (barrels/day); and
- f. Instructions on how the public can comment on an application or object to or obtain additional information about the application

The OOGM will delay further action on the application until the comment period has expired. This period begins on the date the application is published on the MDEQ permit list and continues for 20 days.

- B. Step 2 - Public Hearing: This step is dependent upon receipt of a relevant comment or objection submitted to the OOGM during the notification process detailed in Step 1. A hearing will only be initiated upon a finding by the Supervisor that there is significant public interest.
- C. Step 3 - Permit Decision: After the successful completion of the final review and conclusion of the public notice process, a permit may be issued or denied. Notice of permit issuance or denial will be posted on the weekly permit list published by the MDEQ.

The issuance of a permit authorizes the drilling and construction of the well. No well may be drilled until a permit has been issued by the OOGM. The original, or a copy, must be posted at the drilling site during drilling operations.

PHASE III Testing, Authorization and Operation

The final phase of the permitting process focuses on the steps to be taken relative to the operation of a well. If a mechanical integrity test (MIT) has not been performed and approved, it is required at this time.

- A. Step1 - Mechanical Integrity Tests:
 - 1. Part 1: A Standard Annulus Pressure Test (SAPT) must be performed. Typically, the SAPT is conducted under the supervision of an OOGM area geologist in accordance with the provisions of Part 615 R 324.803.
 - 2. Part 2: Records or a demonstration indicating there is sufficient cementation behind the casing or the results of geophysical logging that shows there is no fluid movement behind the casing.
 - 3. Any well that fails an MIT or fails to demonstrate Part 2, must be retested at the OOGM's request and an authorization to inject will not be issued by the OOGM until the well passes an MIT. All remedial work done on a well must be inspected and approved by the OOGM prior to retesting.

- B. Step 2 - Authorization to Inject: Upon review of the completion information, successful demonstration of integrity and completion of all approved corrective actions the OOGM will issue a written Authorization to Inject.
- C. Step 3 - Well Operation: A permit will expire two (2) year after issuance unless drilling operations have reached a depth of not less than 100 feet below the ground surface elevation and the drilling operation is diligently proceeding or the well is otherwise being used for its permitted purpose. Any well not being used for its intended purpose during 12 consecutive months shall be plugged, unless the well is granted temporary abandonment status. Upon receipt of a request for temporary abandonment status and a showing of just cause, the Supervisor may grant temporary abandonment status for an initial term of not more than 12 months. Extensions for temporary abandonment status may be granted by the Supervisor and may require the permittee to conduct special actions or monitoring.

Any wells that cease to operate or have their temporary abandonment permit expire must be:

1. Plugged and abandoned; or
2. Re-cased according to OOGM requirements; or
3. Permitted or re-permitted for temporary abandonment.

A complete overview of the permitting process is presented on the Generalized UIC Processing and Notification Flowchart (Appendix 1).

IV. FILE REVIEW

- A. General Requirements: Each Class II well in Michigan will undergo a file review within five (5) years of the effective date of the state program. The order of review will be as follows:
1. Wells that are considered to present the greatest potential for environmental harm. This will include wells presently known to be causing harm and those wells that are brought to the OOGM's attention through the complaint process noted in PART XIV.
 2. Wells that have not demonstrated mechanical integrity or those that are due for re-testing based on the five (5)-year test cycle.
 3. Wells that have demonstrated mechanical integrity.
- B. Process: The file review of Class II wells is a process that involves two (2) steps. These steps are as follows:

Step 1- Technical Review: The technical review will be conducted on all wells whether active or abandoned, in the area of review that intersect the injection zone to ensure the prevention of fluid migration into or between USDW's.

The technical review will include:

1. An evaluation to determine the adequacy of the wells' construction with respect to:
 - a. Casing, tubing and packers set in conformance with R 324.408 *et seq.*; and
 - b. A determination of the hydraulic connections between the injection zone and USDW's.
2. An evaluation of the geology;
3. A hydrologic evaluation; and
4. A calculation of maximum injection pressures, or review of documentation supporting higher pressures. The pressure data accepted by the OOGM to determine maximum allowable injection pressures may include but is not limited to
 - a. Step rate tests; and
 - b. Initial Shut In Pressures (ISIP) from fracture data.

Step 2 - Operational Review: An operational review will be performed on the disposal or injection well in question and will include:

1. A review to determine if the well has been monitored and reported as required;
2. A review to determine if the well has been operated at an appropriate pressure with adequate controls to prevent fracturing of the confining zone; and
3. A review to determine if the well has demonstrated mechanical integrity within the five (5) years prior to the file review date. If not, MITs must be scheduled, performed and passed.

If any of the areas in either the technical or operational review are found to be deficient, injection will be ordered halted, and corrective action must be initiated. The corrective action performed must be reviewed and approved by the OOGM before injection may be reauthorized.

V. TECHNICAL REQUIREMENTS

- A. Well Construction: New wells must be constructed in accordance with Part 615 R 324.408 *et seq.* that provides for running and cementing of surface and additional strings of casing while R 324.801 addresses the requirements for corrosion inhibiting fluids in the tubing-casing annulus and the packer setting. These two (2) rules are used in combination to assure that all USDW's are protected.

Construction and operation in a manner such that the injection of fluids is confined to strata approved by the Supervisor or authorized representative of the Supervisor as follows:

1. Surface casing set into an impervious zone below the lowest fresh water zone and cemented with enough slurry to circulate to the surface; and intermediate or long string if required by the Supervisor;
 2. Tubing set on a packer to within a specified distance above the injection zone and surrounded by a corrosion inhibiting annular fluid; and
 3. Access to casing annuli at the surface.
- B. With respect to existing wells and well conversions a successful demonstration of Mechanical Integrity per Part 615 R 324.803 will be sufficient to prove adequate well construction. Where the OOGM Supervisor determines that the permittee of an existing Class II well is not in compliance with any requirement of Part 615, the permittee may be required to isolate USDW's by:
1. Cementing surface casing by re-circulating the cement to the surface from a point 50 feet below the lowest fresh water;
 2. Running and cementing additional casing strings or liners as required by the Supervisor; or
 3. Isolating the uppermost injection zones by placing cement sufficient to fill the calculated casing-hole annulus a specified distance above the top of the open hole or the uppermost injection/disposal perforations as determined by the Supervisor.
- C. Mechanical Integrity: Mechanical integrity tests will be conducted in accordance with the provisions of R 324.803.

This rule specifies a demonstration that there is:

1. No significant leak in the casing, tubing, or packer (Casing, tubing and packer integrity must be demonstrated prior to initial injection and at least once every five (5) years by a SAPT at no less than 300 pounds per square inch pressure,

with no more than a 5 percent difference over a 30-minute period. Whenever practicable, SAPTs will be conducted in the presence of an area geologist. Additionally they must meet standards generally accepted in the petroleum industry, and must be reviewed and approved by the OOGM. In addition to the initial SAPT the permittee must provide a quarterly annulus liquid gain or loss report); and

2. Adequate cementation to prevent fluid movement into or between USDW's with respect to fluid movement, two (2) methods of proof have been approved:
 - a. The results of a Radioactive Tracer Survey used in combination with a temperature survey or noise log, or the results of a temperature survey, noise log, or Oxygen Activation Log; or
 - b. Records demonstrating adequate cementing including, but not limited to witnessing of cementation by an OOGM representative, submission of cementation records including cement tickets and a well completion report, or a Sonic Cement Bond/Variable Density Display log (e.g. CBL/VDL).

Alternate methods of demonstrating mechanical integrity will be considered with regard to their adequacy and may be authorized by the Supervisor, with U.S. EPA concurrence.

- D. Well Operation: Wells will be operated in accordance with Part 615 that states that wells must:
1. Confine injected fluids to the approved interval; and
 2. Inject through tubing surrounded by a corrosion inhibiting fluid; and
 3. Pass mechanical integrity tests as described in B above.

Any proposed change in permit specifications must be submitted to the OOGM prior to implementation if the proposed change would alter an approved permit condition.

- E. Plugging and Abandonment: Permanent abandonment of wells is conducted in accordance with the provisions of R 324.901 and R 324.902 that specify that a permittee shall confine oil, gas, brine, and fresh water to the strata in which the oil, gas, brine, and fresh water occur by using cement plugs or other plugs approved by the Supervisor as follows:
1. A bottom hole cement plug a minimum of 200 feet in length, allowed to set undisturbed for minimum of 4 hours, reached a compressive strength of 100 pounds per square inch or more, and is tagged to ensure that it is still in place before setting the next plug uphole; or

2. A mechanical bridge plug or other approved bridge plug set with a minimum of 50 feet of cement placed on the bridge plug before setting the next plug uphole; or
3. A cement plug at the base of the surface casing using either of the following methods:
 - a. In static hole conditions, a cement plug set a minimum of 100 feet below the surface casing and extending a minimum of 100 into the surface casing; or
 - b. A mechanical open hole bridge plug or other approved bridge plug set a minimum of 100 feet below the surface casing with a cement plug on the open hole bridge plug extending a minimum of 100 feet into the surface casing.

NOTE: Surface casing shall not be pulled unless required by the Supervisor.

If surface casing is not present, a mechanical open hole bridge plug or other approved bridge plug set at a minimum of 100 feet below the base of the glacial drift or 100 feet below the deepest fresh water stratum, whichever is the greater depth, and shall circulate cement to within 5 feet of the surface.

The method of cement placement shall be at the discretion of the Supervisor, although the primary method approved is the pump and plug or displacement method. Plugging requirements are a permitting condition and will be specified in the plugging and abandonment plan submitted with the permit application and approved by the OOGM.

VI. COMPLIANCE AND ENFORCEMENT

- A. Strategy: Enforcement authority for implementation of Part 615 granted under the provisions of the NREPA.

The enforcement process is designed to achieve the maximum rate of voluntary compliance through an incrementally increasing sanction probability system. Compliance and enforcement are conducted in accordance with the provisions of the MDEQ OOGM Compliance and Enforcement Policy and Procedure 601.00 (Section F). This document details the processes and procedures used by the OOGM to insure compliance with the provisions of Part 615 and include sections on:

1. Compliance and enforcement processes;
2. Escalated compliance and enforcement processes;
3. Settlement issues, compliance coordination;

4. Tracking, and measurements; and
5. Coordination and management of multimedia cases.

In the event of an imminent or obvious environmental or public health risk, the Supervisor can issue an Administrative Consent Order that is immediately enforceable without prior administrative review. The order is, in effect, an injunction to cease noncompliance.

- B. Unannounced inspections are conducted by each of the area geologists employed by the OOGM. The inspections include the following:
1. Physical inspection of well, well related equipment, piping, pumping, and fluid containment facilities on at least an annual basis; and
 2. Monitoring of wellhead injection pressure; and annular pressure.

NOTE: Where feasible and when practicable the OOGM will use permittee provided gauges to measure wellhead injection and annular pressures.

Upon a finding that a violation exists, the enforcement process ensures that a well will be re-inspected on a frequency that is based on the type of violation and associated risks until the violation is resolved and compliance reached.

A complete overview of the compliance and enforcement process is presented on the Generalized Compliance and Enforcement Flowchart (Appendix 2).

- C. Systems Comparison: Each part of Michigan's compliance and enforcement system contains an action which correlates to an action utilized by the U.S. EPA. A comparison of the actions taken by U.S. EPA and Michigan follows:

| U.S. EPA Action | Michigan Action |
|----------------------------|--|
| Notice of Noncompliance | Violation Notice |
| Administrative Order | Administrative Consent Agreement or Order |
| Civil or Criminal referral | Referrals to Department of Attorney General or Michigan Department Of Natural Resources, Law Enforcement Division, Environmental Investigation Section |

Although the U.S. EPA and Michigan are bound to different guidelines regarding timing, notification, publication, administrative adjudication and legal action, the systems are similar in terms of the intended effect for each item noted above.

VII. STAFFING AND RESOURCES

- A. Personnel: The current staffing for all programs administered by the OOGM consists of a total 63 full time employees, 20 in the Lansing Central Office, 40 assigned to specific field districts throughout the state, and 11 staff involved purely in administrative and support roles that are shared with other MDEQ divisions, of which approximately three (3) full time-equated positions are allocated to OOGM programs. Of this total, 63 positions, 60 full-time-equated positions are allocated to the oil and gas program, based on funding levels appropriated by the Michigan Legislature.

A complete overview of the staff organization is presented on the organizational chart (Appendix 3).

All field operations are coordinated by the Field Operations Section (FOS) supervisor and district supervisors associated with seven (7) district offices around Michigan (Cadillac, Gaylord, Kalamazoo, Lansing, Marquette, Saginaw Bay, and Warren District Offices). All inspectors report directly to their respective district supervisors and the FOS supervisor. Currently, Lansing Central Office is responsible for permitting within the Permits and Bonding Unit, and for production and well records within the Petroleum and Mining Geology Unit. Both Lansing Central Office units have unit supervisors and together make up the Permits and Technical Services Section (PTSS), which is managed by the PTSS supervisor. If Class II UIC primacy is obtained the OOGM will hire a specialist position for necessary coordination of UIC requirements and to liaison with the U.S. EPA. All positions will be fully integrated to allow the OOGM to provide a comprehensive program for the management and supervision of Michigan's petroleum resources and the protection of USDW's. A description of all OOGM positions, including the proposed UIC Coordinator Position, follows.

Supervisor of Wells – One (1) position – full time; responsibility and title of the MDEQ Director. Part 615 vests broad authority in the Supervisor of Wells to regulate oil and gas activities in Michigan, including Class II injection wells for disposal and secondary recovery activities related to oil and gas operations. Most practical responsibilities of the Supervisor of Wells as indicated by statute and administrative rules are delegated to the Assistant Supervisor of Wells. The Supervisor of Wells/Director of the MDEQ reports directly to the Governor of Michigan.

Assistant Supervisor of Wells (State Administrative Manager 17) – One (1) position – full time. This position serves as the administrative head of the OOGM and reports to the Supervisor of Wells/Director of the MDEQ. Duties and responsibilities include the following: coordinates the UIC program with the U.S. EPA; oversees fiscal affairs; manages staff activities; attends regular meetings of the Interstate Oil and Gas Compact Commission (IOGCC) and the Ground Water Protection Council (GWPC); prepares professional assistance for staff training; supervises staff to ensure proper program operation; maintains public relations;

makes presentations on the OOGM operations; conducts informal and formal hearings related to spacing, regulation exceptions, secondary recovery, and related issues; conducts routine staff meetings to monitor activity; and constructs OOGM goals with staff assistance. This person must have a bachelor's degree in either Geology or Petroleum Engineering with advanced training or a minimum of three years related experience. In addition a working knowledge of MDEQ and OOGM policy and procedures, technical and professional writing, industry practices and techniques, computer technology, business administration, communication skills, and specialized knowledge of oil and gas rules is required.

State Administrative Manager (SAM) 15 – (PTSS Supervisor and FOS Supervisor)
– Two (2) positions - full time.

PTSS Supervisor (SAM 15) – Manages the implementation of the OOGM central office programs for oil and gas, mineral wells, and mining. Oversees section with 17 supervisory, professional, technical, and administrative staff, with functions of permitting, escalated enforcement, bonding, recordkeeping, oil and gas production, and administrative hearings. Coordinates activities indirectly through two (2) first-line supervisors and directly through one (1) staff specialist. Represents the OOGM as an associate member or committee member at organizations such as the IOGCC and the GWPC. Serves as a member of OOGM management team, directs strategic planning, and advises OOGM Chief. Oversees staff and all activities related to the permitting, monitoring, and reporting of wells and associated facilities including Class II well operations, and computer and data management operations. This person must have a bachelor's degree in either Geology or Petroleum/Mining Engineering with advanced training or a minimum of three (3) years related experience. In addition a working knowledge of MDEQ and OOGM policy and procedures, technical and professional writing, industry practices and techniques, computer technology, business administration, communication skills, and specialized knowledge of oil and gas rules is required.

FOS Supervisor (SAM 15) – Manages the OOGM field implementation of oil and gas, mineral wells, and mining programs. Oversees section with 40 supervisory, professional, technical, and administrative staff, with functions of permit review, recordkeeping, oil and gas production, sand dune mining, metallic and nonmetallic mining, orphan well plugging, orphan well environmental remediation, and compliance and enforcement. Plans, coordinates, organizes, and provides controls of the section's activities indirectly through three first line supervisors and directly through four staff specialists. Serves as a member of OOGM management team, directs field strategic planning, and advises OOGM Director on staff performance, workload analysis, section plans and priorities. Makes appointments to committees and workgroups, assigns staff for special projects (coordinates with PTSS supervisor on OOGM/statewide issues), and insures OOGM's priorities are being followed. Conducts or participates in staff meetings or special meetings to address OOGM and section issues. Represents the OOGM as needed on a variety of internal and external organizations, agencies, legislators, media, and in hearings or trials.

Participates and organizes OOGM's public outreach. Serves as the OOGM Senior management sponsor of the Field Integration Team (FIT), chairperson of the hydraulic fracturing work group and the consistency committee. Drafts (or directs the drafting of) policies and procedures, rules, and other OOGM internal and external directives and guidance documents. Serves as management representative on the OOGM training committee. Provides training for staff either through third parties or internally. Monitors section and program budgets and directs the acquisition of safety equipment and all other equipment and supplies for the section. This person must have a bachelor's degree in either Geology or Petroleum/Mining Engineering with advanced training or a minimum of three (3) years related experience.

Executive Secretary (Executive Secretary 10) – One (1) position – full time. This person assists the SAM 17 and the SAM 15s in all areas of the division administration. Duties include organizing and scheduling for the entire professional staff; maintaining a filing system; preparing reports and correspondence; coordinating travel arrangements; assisting with the drafting and preparation of the agenda and minutes for the Oil and Gas Advisory Committee; assisting with public relations; screening calls; and performing other related duties. This person will have a working knowledge of computers and data management, all related office equipment, office procedures, communication skills, writing skills, and MDEQ and OOGM policy and procedures.

Permits and Bonding Unit Supervisor (Environmental Manager 14) – One (1) position – full time. This position supervises three (3) geologists, comprising the Permits and Bonding Unit. This position is responsible for managing the positions that are responsible for reviewing all types of well permit applications, including enhanced recovery and saltwater disposal wells. This unit determines specifications for well construction and Class II operations; evaluates impact of proposed wells within the area of review; compiles inventory of all Class II wells; evaluates public comments and objections to permit applications and makes recommendations; provides technical assistance to field geologists; manages data files and records; and prepares reports and presentations. This supervisor position requires a bachelor's degree in Geology or Petroleum/Mining Engineering; a working knowledge of geohydrology, geophysical logging, well construction, completion techniques, computer technology, data management and business administration.

Permitting Geologist (Geologist 9/10/11/12) – Three (3) positions – full time. These positions review permit applications, determine specifications for well construction and Class II operations; evaluate impact of proposed wells within the area of review; compiles inventory of all Class II wells; evaluate public comments and objections to permit applications and makes recommendations; manage data files and records; and prepares reports and presentations. These Geologist 9-12 positions require a bachelor's degree in Geology or Petroleum/Mining Engineering; a working knowledge of geohydrology, geophysical logging, well construction, completion techniques, computer technology, data management and business administration.

Petroleum Engineer (Engineer Specialist 13) – One (1) position – full time. Serves as staff specialist for regulatory requirements of Class II injection wells, where specialized engineering expertise is applied in petroleum and reservoir engineering in the areas of hydrocarbon exploration, production methods and trend analysis, operation practices, and reservoir analysis for the OOGM. This position implements the requirements under Part 615 of the NREPA, with respect to central production facilities, mechanical integrity tests, well testing, injection well reporting, exception to no flare, hydrocarbon production reporting and prorationing, confidential well status, and reporting requirements for drilling and completion operations of oil and gas wells. This position interprets various Supervisor of Wells Orders, Supervisor of Wells Special Orders, and Supervisor of Wells Instructions; maintains literature and computer data files; enforces applicable statutes and rules; provides information to individuals and constituent groups; serves on inter and intra agency committees; evaluates and prepares technical reports. This position tracks mechanical integrity test due dates and reviews test data, communicating regularly with district geologists and U.S. EPA staff.

District Supervisor (Environmental Manager 14) – Three (3) positions – full time. The District Supervisor manages and oversees Area Geologists in implementing the oil and gas, mineral wells, and mining programs in the field in the respective district office. Program coverage includes Class II wells for brine disposal wells and enhanced oil recovery.

Area Geologist (Geologist 9/10/11/12) – 26 positions – full time. Area Geologists oversee the implementation and enforcement of Part 615 of the NREPA, and other division programs in assigned field areas. Program goals include fostering orderly development of oil and gas resources while minimizing impacts to soil and water resources. Staff in these positions are responsible for regulation of oil and gas exploration and production, including underground injection for oilfield waste disposal and secondary recovery in assigned area; protection and cleanup/remediation of surface waters, ground waters and soils contaminated or impacted from oil and/or gas operations; handling and resolving complex and controversial problems that arise in their assigned area at an expert level utilizing principles of good customer service; providing detailed information relating to division programs through established reporting systems. These positions make field determinations of any noncompliance with the oil and gas law; inspect well locations, surface facilities, casing operations and drilling operations to determine compliance with permit conditions and specifications; supervise plugging of all wells and approve plugging techniques; certify compliance with the rules for abandonment; prepare reports; investigate problems and complaints and recommend corrective action; witness the mechanical integrity testing of all wells. These positions require a bachelor degree in Geology or Petroleum/Mining Engineering. A working knowledge of industry standards, plugging methods, well construction and MDEQ and OOGM policy and procedures is also required.

Enforcement and Bonding Specialist (Environmental Specialist 13) – One (1) position – full time. Enforcement and Bonding Specialist has responsibility for direct statewide enforcement and compliance coordination working on escalated enforcement cases referred by OOGM District Compliance Coordinators for violations of Part 615 of the NREPA; and has direct statewide responsibility for the financial assurance requirements for oil, gas, mineral wells, and mining operations. This person must be able to plan, coordinate, and administer all phases of the bonding program. The position is responsible for implementing and evaluating goals, policies, procedures, and analyses related to the OOGM bond program, including maintaining and monitoring the OOGM bond information and bond activities databases and providing information and expert technical direction to OOGM as well as the oil and gas, mineral wells, and mining industries. This position has primary responsibility as Statewide Compliance Specialist for working with the Department of the Attorney General to prepare for Administrative Hearings pertaining to Part 615 as well as being Statewide Bond Specialist, and requires advanced knowledge of Part 615 and of the Administrative Procedures Act.

Administrative Section Supervisor (SAM 15) – One (1) position – full time. This position is responsible for OOGM financial and budget operations. This person maintains detailed files and records on all expenditures; processes bonds; deposits all division revenue; prepares requisitions, invoices, and payments; and processes all claim vouchers and other billings. This person must have a working knowledge of the state and department accounting procedures, office procedures, all office equipment, phone etiquette, grammar and spelling, letter writing and department and division policy and procedures.

UIC Coordinator/Specialist (Geologist/Petroleum Engineer 13) – One (1) position – full time. This position is responsible for coordinating the Class II UIC primacy program as the primary point of contact with USEPA. This person will coordinate activities related to primacy requirements such as periodic reporting, MIT tracking, oversight of the technical review of permit applications, coordination of public notifications and permit application hearings. This position has primary responsibility for overall coordination of state Class II UIC program interaction with U.S. EPA and will be responsible for management and review of the periodic U.S. EPA oversight inspection program. This person must have a working knowledge of underground injection control technology and techniques, departmental policies and procedures, permit application processes, well construction and mechanical integrity, and departmental compliance processes. Additionally, this person must have an intimate knowledge of the requirements of a U.S. EPA delegated Class II UIC program, the state program description, state/U.S. EPA Memorandum of Agreement (MOA) and any other documents related to the management of a Class II primacy program. This position requires advanced knowledge of Part 615 and of the Administrative Procedures Act.

- B. Program Activity Tracking: Respective UIC vs. non-UIC activities will be tracked via a computer aided time system. The system will capture hour's spent, relative

percentages of time, and individual ratios of time related to UIC vs. non-UIC duties. Underground Injection Control Program activities are anticipated to be disproportionately high as compared to non-UIC activities. This expectation is based on the technical and administrative requirements for each program.

- C. Program Funding: The OOGM operates on an annual budget that is prepared and submitted to the Michigan Legislature for consideration. The state's fiscal year runs from October 1 to September 30. The operating budget of the OOGM oil and gas program is appropriated from dedicated funds. This fund, known as the Oil and Gas Regulatory Fund, receives monies deposited from the collection of permit fees, per well gas storage fees, interest on the balance in the fund, and a surveillance fee which is set annually and is based upon the current prices for oil and gas and the projected amount of production expected during the upcoming year. On the average, annual collections meet or exceed the funds required to operate the OOGM. The fund is required to maintain a balance of at least \$7 million. Should federal grant money be made available, the amount of that allocation would be placed in this fund. The state also operates an orphan well plugging fund that is maintained through a \$1.5 million allotment from the states' severance taxes.

VIII. MONITORING AND REPORTING

Permittees of brine disposal wells must monitor and record the injection pressure, injection rate, and cumulative volume of injected fluids on a weekly basis and must report the results to the OOGM monthly unless a lesser frequency is approved by the Supervisor. The permittee of a secondary recovery injection well must monitor and record the injection pressure, injection rate, and cumulative volume of injected fluid on a monthly basis and must report the results to the OOGM annually unless a lesser frequency is approved by the Supervisor. Each permittee of an injection well must file an annual monitoring report, on a form provided by the Supervisor, summarizing the data of the monitoring required by rule. Unless the report is filed by March 1 of each year for the previous calendar year injection shall not continue until the report is submitted and written approval is received from the Supervisor or authorized representative of the Supervisor.

All records pertaining to an injection well must be retained by the permittee for a period of three (3) years.

A permittee must verbally notify the Supervisor or authorized representative of the Supervisor of any pressure test failure, significant pressure change, or other evidence of a leak in an injection well, within 24 hours of the test failure, pressure change, or evidence of a leak. Oral notification must be followed by a written notice of the pressure test failure or other evidence of a leak to the Supervisor or authorized representative of the Supervisor within five (5) days of the occurrence. If the permittee has been required to cease injection as a result of a test failure or other evidence of a leak, injection may not be resumed until the permittee has tested or repaired the well, or both.

IX. AGENCY INVOLVEMENT

The MDEQ OOGM, will be the sole agency involved with the administration of the Underground Injection Control Program for Class II wells in Michigan. However, with respect to wells located or to be located on state or federal land, the OOGM will consult with the appropriate state or federal agency or agencies regarding the terms and conditions of a Class II permit and will provide for proper notification to such agencies with respect to the issuance of permits.

X. WELL INVENTORY

The OOGM maintains a comprehensive inventory of Class II wells. As a part of the inventory process, all data pertaining to the permitting and physical makeup of Class II wells is entered in a computer file which can be accessed randomly for the purposes of reporting. Each well will be inspected at least once annually by OOGM field staff, and the well status will be reported to the Lansing office of the OOGM. Changes will be added to the computer file thus maintaining an accurate and verifiable inventory.

XI. EXEMPTED AQUIFERS

The UIC program is designed to protect USDW's. Although federal UIC regulations have provisions to exempt an aquifer, or a portion of an aquifer, Michigan will not seek to exempt any USDW's under its approved program.

XII. USE OF DIESEL FUELS IN HYDRAULIC FRACTURING

The U.S. EPA Guidance #84, February 2014, requires a UIC permit for using diesel fuel for hydraulic fracturing operations. Michigan UIC requirements prohibit the injection of fluids above fracture gradient for the formation into which fluids will be injected. Therefore, the OOGM will not issue any Class II permits for the use of diesel fuel to fracture producing formations.

XIII. REVIEW OF EXISTING WELLS

All existing Class II wells were required to demonstrate mechanical integrity within five (5) years after the effective date of the federal UIC Program. The OOGM will continue to maintain the schedule of compliance established under the federal program. Any Class II wells which have not met mechanical integrity requirements will be given priority in establishing a file review schedule. A person who was issued a federal permit before the delegation of authority to Michigan may continue to operate the well and will be subject to the existing schedule of testing and reporting. Operation of the well subjects the person to the requirements of Part 615. Any terms specified in a federal permit may be enforced by the state as if ordered by the OOGM.

XIV. PUBLIC PARTICIPATION

At least one (1) public hearing will be conducted by the OOGM prior to the completion of Michigan's primacy application. The hearing will provide all interested persons with an opportunity to comment on the proposed program. Input on the program will not be limited to oral presentations at each hearing. Written comments will be accepted and reviewed in the same manner as those received orally. Upon the U.S. EPA's delegation to the OOGM to issue Class II Permits, each permit application will be subject to the public notification requirements specified in Part II J. Phase II of this program description.

XV. RESPONSE TO COMPLAINTS

Upon receipt of either a written or oral complaint against a permittee or authorized person associated with the drilling, operating, or plugging of a well, the OOGM will notify a field inspector to initiate an investigation into the complaint. The investigation will include a visual inspection and review of well records, referral to other state agencies as appropriate for non-UIC matters, and formal enforcement action by the OOGM as needed. A person filing a complaint is considered a potentially affected party and will be entitled to notification of all actions taken by the OOGM with respect to enforcement action.

Appendix 1: Generalized UIC Permit Processing and Notification Flowchart

Generalized UIC Permit Processing & Notification Flowchart

Legend

District/Unit Staff

UIC Coordinator

District/Unit Supervisor

Applicant submits permit application or application to convert existing well to Lansing DEQ and notifies County Clerk and all residences within ¼ mile of proposal.

Return to applicant

Notifies Twp. Supervisor and posts UIC application on weekly permit list. Initiates 20 day comment period

No Major Deficiencies

Permitting Geologist (Lansing) conducts initial UIC application Completeness Review

Major Deficiencies and/or applicant ineligibility

Significant public interest

Yes

No

Hold a Public Hearing. Address comments in Permit Review.

Permitting Geologist (Lansing) requests additional information, revision, and modification from applicant. Tolls the UIC application

Forward UIC application and review findings to Area Geologist, District Supervisor, and UIC Coordinator

Area Geologist (District) conducts Technical/Field Review

Applicant fails to address requested additional information, revision, and modification. UIC Application is denied.

Forward review findings and potential final permit conditions to the District Supervisor and UIC Coordinator

Post UIC permit denial on DEQ weekly permit list.

Yes

Based upon review findings - Is additional information, revision, or modification necessary?

At conclusion of 20 day comment period, Permitting Geologist (Lansing) incorporates final permit conditions. UIC application is approved. Permit is issued.

Based upon review findings - Is additional information, revision, or modification necessary?

Post UIC permit issuance on DEQ weekly permit list. UIC well can now be drilled or existing well converted.

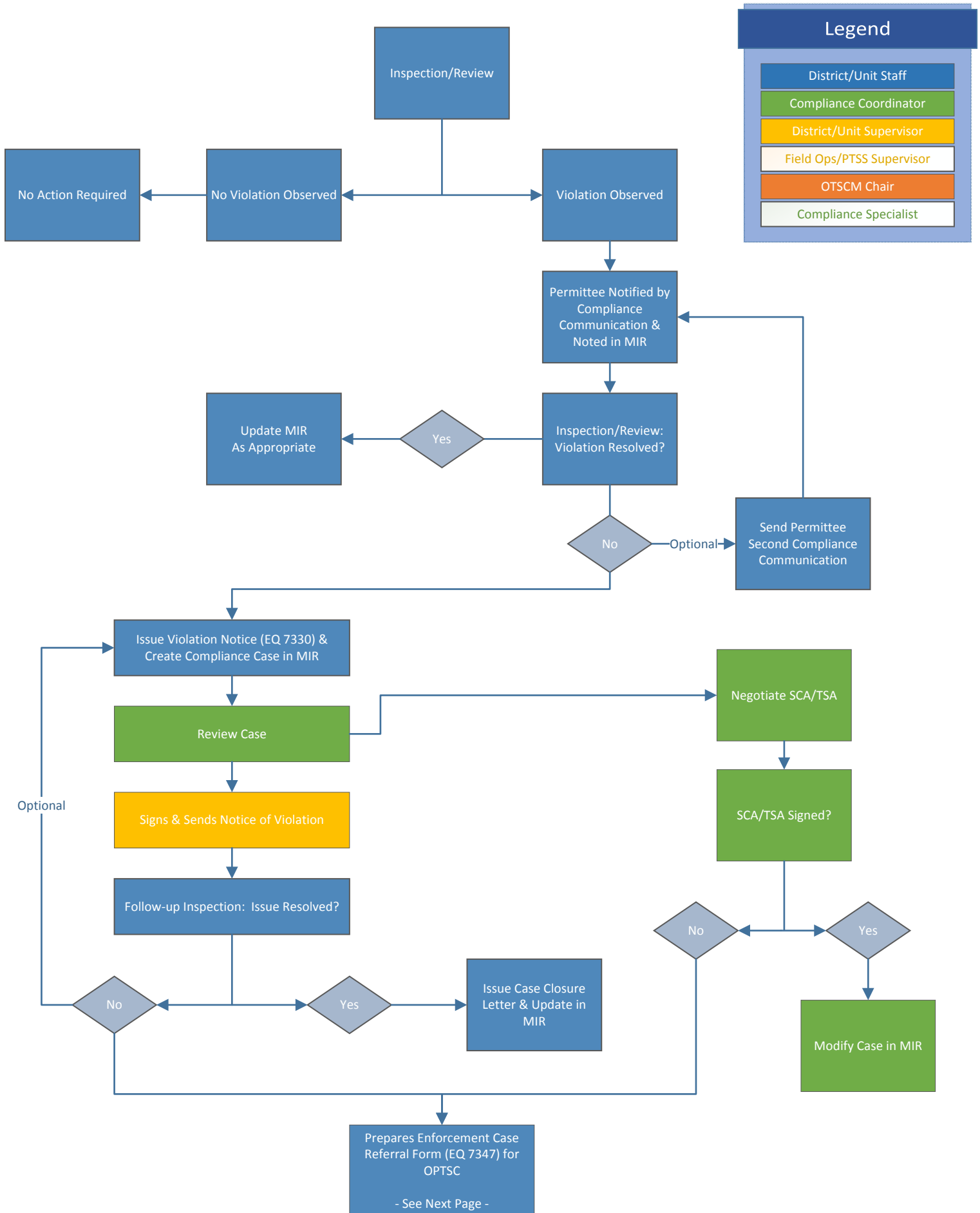
UIC well must pass a Standard Annulus Pressure Test (SAPT) performed under supervision of Area Geologist

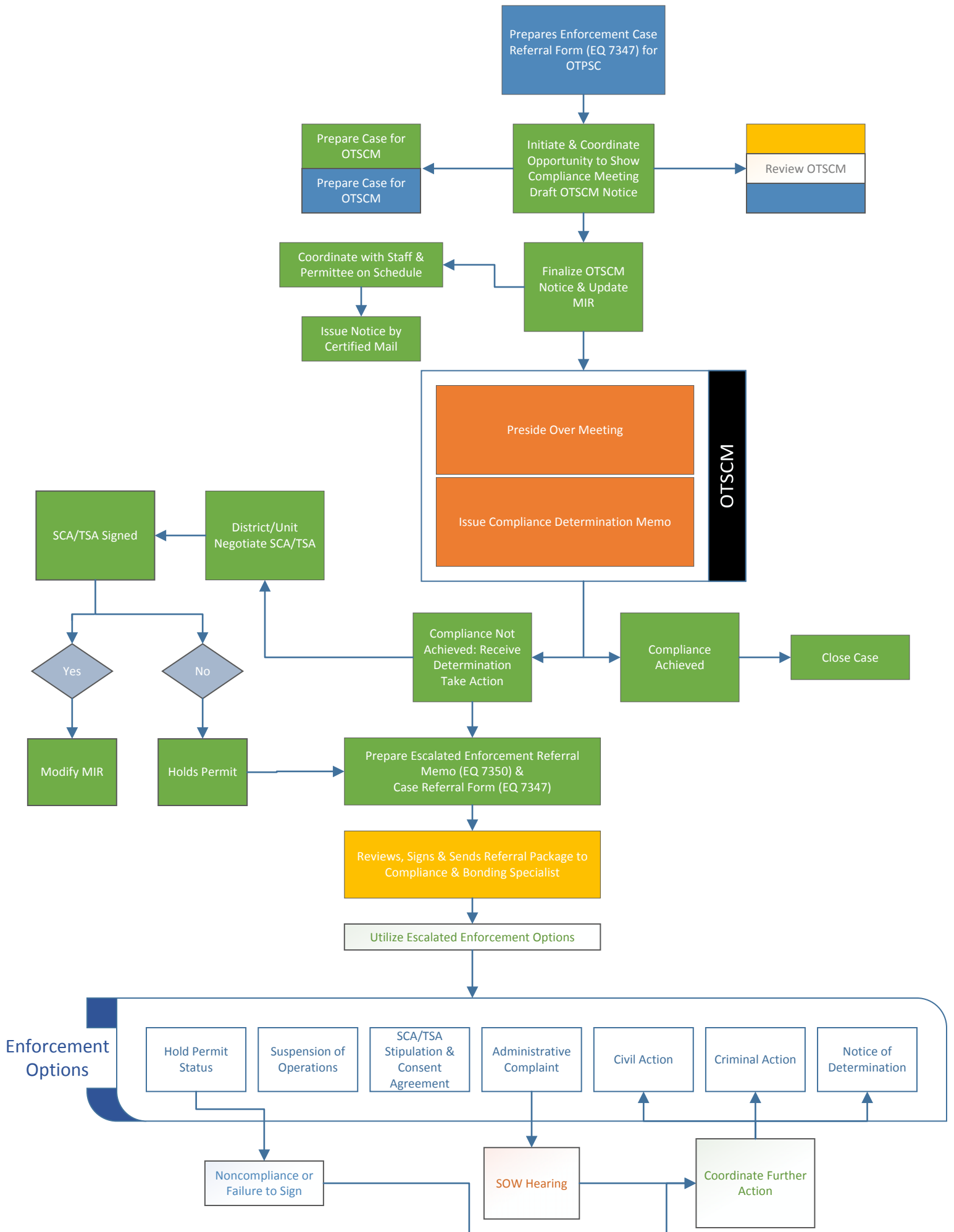
Written Authorization to Inject. Upon completion of all required testing and demonstration of two part Mechanical Integrity. UIC Operations may proceed.

No

Appendix 2: Generalized Compliance and Enforcement Flowchart

Generalized Compliance & Enforcement Flowchart





Prepares Enforcement Case Referral Form (EQ 7347) for OTSC

Prepare Case for OTSC
Prepare Case for OTSC

Initiate & Coordinate Opportunity to Show Compliance Meeting Draft OTSCM Notice

Review OTSCM

Coordinate with Staff & Permittee on Schedule

Finalize OTSCM Notice & Update MIR

Issue Notice by Certified Mail

Preside Over Meeting

Issue Compliance Determination Memo

OTSCM

SCA/TSA Signed

District/Unit Negotiate SCA/TSA

Yes

No

Modify MIR

Hold Permit

Compliance Not Achieved: Receive Determination Take Action

Compliance Achieved

Close Case

Prepare Escalated Enforcement Referral Memo (EQ 7350) & Case Referral Form (EQ 7347)

Reviews, Signs & Sends Referral Package to Compliance & Bonding Specialist

Utilize Escalated Enforcement Options

Enforcement Options

Hold Permit Status

Suspension of Operations

SCA/TSA Stipulation & Consent Agreement

Administrative Complaint

Civil Action

Criminal Action

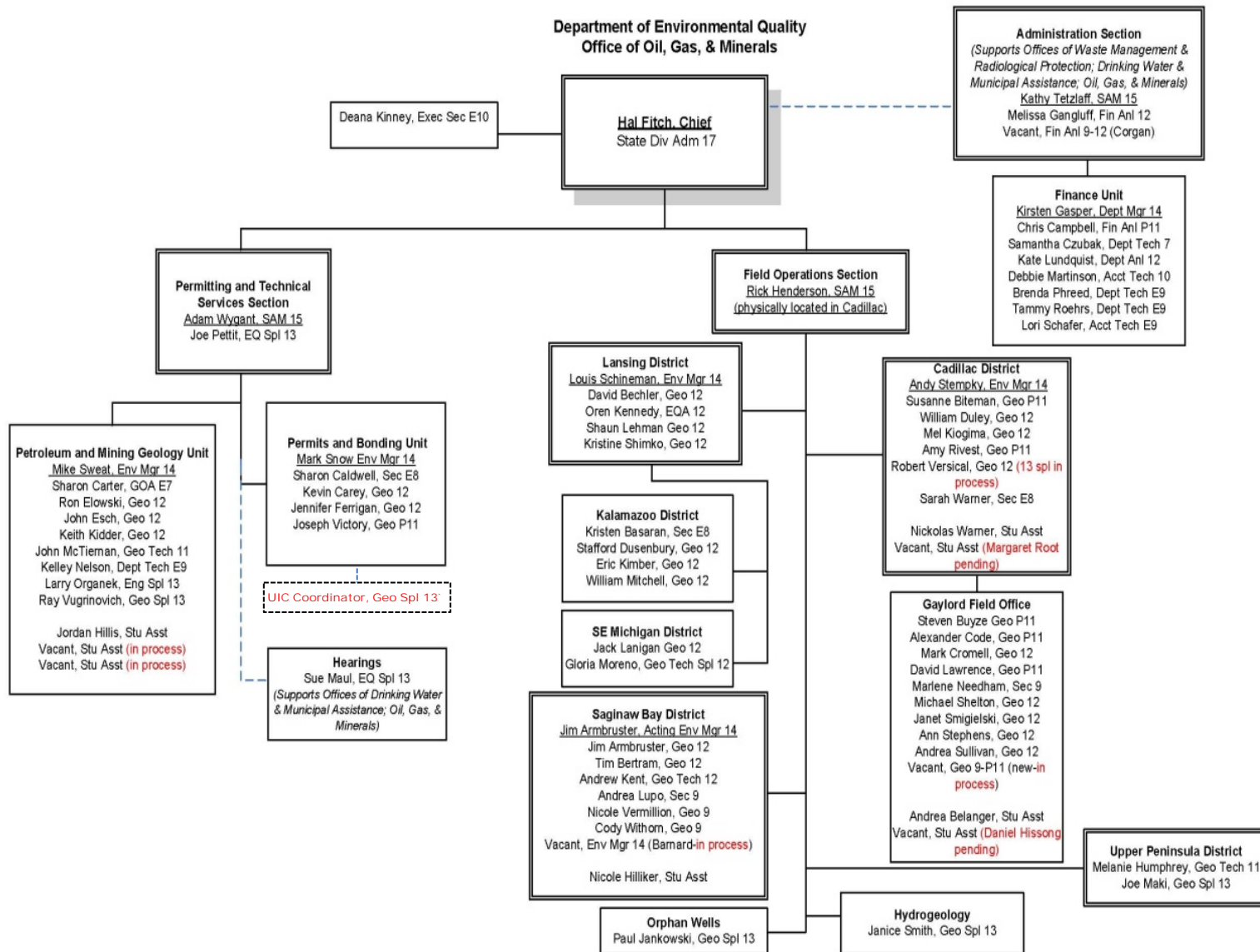
Notice of Determination

Noncompliance or Failure to Sign

SOW Hearing

Coordinate Further Action

**Department of Environmental Quality
Office of Oil, Gas, & Minerals**



To be Inserted with Final Application

Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, PA 451, 1994, as amended, and Administrative Rules 324.101 – 324.1301

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT)
Act 451 of 1994

PART 615
SUPERVISOR OF WELLS

324.61501 Definitions.

Sec. 61501. Unless the context requires a different meaning, the words defined in this section have the following meanings when used in this part:

- (a) "Department" means the department of environmental quality.
- (b) "Field" means an underground reservoir or reservoirs containing oil or gas, or both. Field also includes the same general surface area that is underlaid or appears to be underlaid by at least 1 pool. Field and pool have the same meaning if only 1 underground reservoir is involved. However, field, unlike pool, may relate to 2 or more pools.
- (c) "Fund" means the oil and gas regulatory fund created in section 61525b.
- (d) "Gas" means a mixture of hydrocarbons and varying quantities of nonhydrocarbons in a gaseous state which may or may not be associated with oil, and includes those liquids resulting from condensation.
- (e) "Illegal container" means a receptacle that contains illegal oil or gas or illegal products.
- (f) "Illegal conveyance" means a conveyance by or through which illegal oil or gas or illegal products are being transported.
- (g) "Illegal oil or gas" means oil or gas that has been produced by an owner or producer in violation of this part, a rule promulgated under this part, or an order of the supervisor issued under this part.
- (h) "Illegal product" means a product of oil or gas or any part of a product of oil or gas that was knowingly processed or derived in whole or in part from illegal oil or gas.
- (i) "Market demand" means the actual demand for oil or gas from any particular pool or field for current requirements for current consumption and use within or outside the state, together with the demand for such amounts as are necessary for building up or maintaining reasonable storage reserves of oil or gas or the products of oil or gas.
- (j) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, that are produced at the well in liquid form by ordinary production methods and that are not the result of condensation of gas after it leaves the underground reservoir.
- (k) "Owner" means the person who has the right to drill a well into a pool, to produce from a pool, and to receive and distribute the value of the production from the pool for himself or herself either individually or in combination with others.
- (l) "Pool" means an underground reservoir containing a common accumulation of oil or gas, or both. Pool includes a productive zone of a general structure that is completely separated from any other zone in the structure, or is declared to be a pool by the supervisor of wells.
- (m) "Producer" means the operator, whether owner or not, of a well or wells capable of producing oil or gas or both in paying quantities.
- (n) "Product" means any commodity or thing made or manufactured from oil or gas, and all derivatives of oil or gas, including refined crude oil, crude tops, topped crude, processed crude petroleum, residue treated crude oil, residuum, gas oil, naphtha, distillate, gasoline, casing-head gasoline, natural gas gasoline, kerosene, benzene, wash oil, waste oil, lubricating oil, and blends or mixtures of oil or gas or any derivatives of oil or gas whether enumerated or not.
- (o) "Supervisor" or "supervisor of wells" means the department.
- (p) "Tender" means a permit or certificate of clearance, approved and issued or registered under the authority of the supervisor, for the transportation of oil or gas or products.
- (q) "Waste" in addition to its ordinary meaning includes all of the following:
 - (i) "Underground waste", as those words are generally understood in the oil business, and including all of the following:
 - (A) The inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing of a well or wells in a manner to reduce or tend to reduce the total quantity of oil or gas ultimately recoverable from any pool.
 - (B) Unreasonable damage to underground fresh or mineral waters, natural brines, or other mineral deposits from operations for the discovery, development, and production and handling of oil or gas.
 - (ii) "Surface waste", as those words are generally understood in the oil business, and including all of the following:

(A) The unnecessary or excessive surface loss or destruction without beneficial use, however caused, of gas, oil, or other product, but including the loss or destruction, without beneficial use, resulting from evaporation, seepage, leakage, or fire, especially a loss or destruction incident to or resulting from the manner of spacing, equipping, operating, or producing a well or wells, or incident to or resulting from inefficient storage or handling of oil.

(B) The unnecessary damage to or destruction of the surface; soils; animal, fish, or aquatic life; property; or other environmental values from or by oil and gas operations.

(C) The unnecessary endangerment of public health, safety, or welfare from or by oil and gas operations.

(D) The drilling of unnecessary wells.

(iii) "Market waste", which includes the production of oil or gas in any field or pool in excess of the market demand as defined in this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995;—Am. 1998, Act 115, Imd. Eff. June 9, 1998;—Am. 1998, Act 252, Imd. Eff. July 10, 1998;—Am. 1998, Act 303, Imd. Eff. July 28, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61502 Construction of part.

Sec. 61502. It has long been the declared policy of this state to foster conservation of natural resources so that our citizens may continue to enjoy the fruits and profits of those resources. Failure to adopt such a policy in the pioneer days of the state permitted the unwarranted slaughter and removal of magnificent timber abounding in the state, which resulted in an immeasurable loss and waste. In an effort to replace some of this loss, millions of dollars have been spent in reforestation, which could have been saved had the original timber been removed under proper conditions. In past years extensive deposits of oil and gas have been discovered that have added greatly to the natural wealth of the state and if properly conserved can bring added prosperity for many years in the future to our farmers and landowners, as well as to those engaged in the exploration and development of this great natural resource. The interests of the people demand that exploitation and waste of oil and gas be prevented so that the history of the loss of timber may not be repeated. It is accordingly the declared policy of the state to protect the interests of its citizens and landowners from unwarranted waste of gas and oil and to foster the development of the industry along the most favorable conditions and with a view to the ultimate recovery of the maximum production of these natural products. To that end, this part is to be construed liberally to give effect to sound policies of conservation and the prevention of waste and exploitation.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61503 Supervisor of wells; assistants; commission as appeal board; hearing; compensation and expenses; office.

Sec. 61503. (1) The supervisor of wells shall designate suitable assistants as are required to implement this part.

(2) The commission shall act as an appeal board regarding the issuance, denial, suspension, revocation, annulment, withdrawal, recall, cancellation, or amendment of a permit under this part. When a producer or owner considers an order, action, inaction, or procedure as proposed, initiated, or made by the supervisor to be burdensome, inequitable, unreasonable, or unwarranted, the producer or owner may appeal to the commission or the court for relief from the order, action, inaction, or procedure as provided in this act. The chairperson of the commission shall set a date and place to hear the appeal, which may be at a regular meeting of the commission or a special meeting of the commission called for that purpose.

(3) The supervisor and employees, in addition to their salaries, shall receive their reasonable expenses while away from their homes traveling on business connected with their duties. A member of the commission shall not receive compensation for discharging duties under this part; however, a member is entitled to reasonable expenses while traveling in the performance of a duty imposed by this part. Salaries and expenses authorized in this part shall be paid out of the state treasury in the same manner as the salaries and expenses of other officers and employees of the department are paid.

(4) The department of management and budget shall furnish suitable offices for the use of the supervisor and his or her employees.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61503a Gas lease; duties of lessee; monthly revenue statements and payments; initiation; deferment.

Sec. 61503a. (1) Beginning 12 months after the effective date of this section, a person who has entered into a gas lease as a lessee prior to or after the effective date of this section shall do all of the following:

(a) Starting after production begins, for a well that begins continuous gas production after the effective date of this section, or starting on the effective date of this section for a well that began continuous gas production on or before the effective date of this section, provide the lessor who has an interest in the leased property with monthly revenue statements written in plain English that provide all of the following:

(i) Under the heading “unit price”, the price received by the lessee per 1,000 cubic feet or 1,000,000 BTUs of gas sold. The lessee shall pay to the lessor his or her proper share of the gross proceeds or value, as provided in the lease.

(ii) A statement of the deductions taken from the lessor's royalty, and the purpose of those deductions. The statement of the deductions shall be itemized, except that a lessee may group deductions under general categories if the lessee states that a separate itemized statement of the deductions will be furnished upon written request and states the address to which a written request for an itemized statement should be directed. This section does not prohibit a lessee from making deductions on an estimated basis for a calendar year or other 12-month accounting period if this is disclosed in the monthly revenue statement or the separate itemized statement. If an estimate is used, the lessee shall determine the actual amount and make any necessary adjustments within 180 days after the end of the calendar year or other 12-month accounting period. However, if any costs have not been finally determined, the lessee may reserve an amount which the lessee considers in good faith to be adequate to cover the costs that have not been finally determined and shall make any necessary adjustments when the actual costs have been finally determined.

(b) Starting at the end of the calendar year or other 12-month accounting period after production begins for a well that begins continuous production after the effective date of this section, or starting at the end of the calendar year or other 12-month accounting period when this section becomes effective for a well that began continuous production on or before the effective date of this section, prepare an annual accounting of gas sales from the leased property and any deductions taken from the lessor's royalty during the calendar year or other 12-month accounting period. The lessee shall complete the accounting within 180 days after the end of the calendar year or other 12-month accounting period. However, if any costs have not been finally determined, the lessee may account for these on the basis of a reserve which the lessee considers in good faith to be adequate to cover the costs that have not been finally determined, and shall prepare a supplemental accounting when the actual costs have been finally determined. The lessee shall notify the lessor of the availability of the accounting within 180 days after the end of the calendar year or other 12-month accounting period, and shall furnish a copy of the accounting upon request of the lessor within 30 days of receipt of the request. The notification as to the availability of the accounting may be made on a monthly revenue statement and need not be a separate document.

(2) Subject to section 61503b(4), the monthly revenue statements and payments under subsection (1)(a) shall be initiated promptly after the determination of the divisions of interest of the parties entitled to share in the production, unless a valid agreement between the lessee and the lessor provides otherwise. However, if the entitlement of the lessor to receive payment is in question because of lack of good and marketable record title or because of any circumstance that may expose the lessee to the risk of multiple liability or liability to a third party if the payment is made, the lessee may defer payment to that lessor until the title or other circumstance has been resolved, unless a valid agreement between the lessee and the lessor provides otherwise. If the mailing address of the lessor, or place where payment should be made, is unknown, payment may be deferred until the lessee receives that information. If the total amount of the royalties is less than \$50.00 at the end of any month, payment may be deferred until the total amount reaches at least \$50.00, unless a valid agreement between the lessor and the lessee provides otherwise.

History: Add. 1998, Act 127, Eff. Mar. 28, 2000.

Compiler's note: Enacting section 2 of 1998 PA 127, which provided that 1998 PA 127 would not take effect unless House Bill No. 4259 of the 89th Legislature was enacted into law, was repealed by Enacting section 1 of 1999 PA 246.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61503b Postproduction costs.

Sec. 61503b. (1) A person who enters into a gas lease as a lessee after March 28, 2000 shall not deduct from the lessor's royalty any portion of postproduction costs unless the lease explicitly allows for the deduction of postproduction costs. If a lease explicitly provides for the deduction of postproduction costs, the lessee may only deduct postproduction costs for the following items, unless the lease explicitly and specifically provides for the deduction of other items:

(a) The reasonable costs of removal of carbon dioxide (CO₂), hydrogen sulfide (H₂S), molecular nitrogen (N₂), or other constituents, except water, the removal of which will enhance the value of the gas for the benefit of the lessor and lessee.

(b) Transportation costs after the point of entry into any of the following:

(i) An independent, nonaffiliated, third-party-owned pipeline system.

(ii) A pipeline system owned by a gas distribution company or any subsidiary of the gas distribution company, which is regulated by the Michigan public service commission.

(iii) An affiliated pipeline system, if the rates charged by the pipeline system have been approved by the Michigan public service commission, or if the rates charged are reasonable, as compared to independent pipeline systems, based on the pipeline system's location, distance, cost of service, and other pertinent factors.

(2) A lessee shall not charge postproduction costs incurred on gas produced from 1 drilling unit, pooled or communitized area, or unit area against a lessor's royalty for gas produced from another drilling unit, pooled or communitized area, or unit area. As used in this subsection, "unit area" means the formation or formations that are unitized and surface acreage that is a part of the unitized lands, as described in either of the following:

(a) The plan for unit operations that is the subject of the supervisor's order as provided in section 61706.

(b) An applicable agreement providing for unit operations.

(3) If a person who has entered into a gas lease as a lessee prior to or after March 28, 2000 charges the lessor for any portion of postproduction costs, the lessee shall notify the lessor in writing of the availability of the following information and if the lessor requests in writing to receive this information, the lessee shall provide the lessor, in writing, a specific itemized explanation of all postproduction costs to be assessed.

(4) A division order or other document that includes provisions that stipulate how production proceeds are distributed, received by the lessor from the lessee, shall not alter or define the terms of a lease unless voluntarily and explicitly agreed to by both parties in a signed document or documents in which the parties expressly indicate their intention to amend the lease. A lessee shall not precondition the payment of royalties upon the lessor signing a division order or other document that stipulates how production proceeds are distributed, except as provided in this subsection. As a condition for the payment of royalties under a lease other than a lease granted by the state of Michigan, a lessee or other payor shall be entitled to receive a signed division order from the payee containing only the following provisions, unless other provisions have been voluntarily and explicitly agreed to by both parties in a signed document or documents in which the parties expressly indicate their intention to waive the provisions of this subsection:

(a) The effective date of the division order.

(b) A description of the property from which the oil or gas is being produced and the type of production.

(c) The fractional or decimal interest in production, or both, claimed by the payee, the type of interest, the certification of title to the share of production claimed, and, unless otherwise agreed to by the parties, an agreement to notify the payor at least 1 month in advance of the effective date of any change in the interest in production owned by the payee and an agreement to indemnify the payor and reimburse the payor for payments made if the payee does not have merchantable title to the production sold.

(d) The authorization to suspend payment to the payee for production until the resolution of any title dispute or adverse claim asserted regarding the interest in production claimed by the payee.

(e) The name, address, and taxpayer identification number of the payee.

(f) A statement that the division order does not amend any lease or operating agreement between the interest owner and the lessee or operator or any other contracts for the purchase of oil or gas.

History: Add. 1999, Act 246, Eff. Mar. 28, 2000;—Am. 2000, Act 441, Imd. Eff. Jan. 9, 2001.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61503c Violation of MCL 324.61503a or MCL 324.61503b; penalty; injunction or damages; separate offenses; recovery of postproduction costs and attorney fees; notice.

Sec. 61503c. (1) Notwithstanding section 61522, a person who knowingly violates section 61503a or

61503b is responsible for the payment of a civil fine of not more than \$1,000.00. A default in the payment of a civil fine or costs ordered under this section or an installment of the fine or costs may be remedied by any means authorized under the revised judicature act of 1961, 1961 PA 236, MCL 600.101 to 600.9948.

(2) The attorney general or the lessor of a gas lease with respect to his or her lease may bring an action in circuit court for injunctive relief or damages, or both, against a person who violates section 61503a or 61503b.

(3) If a person who has entered into a gas lease as a lessee violates section 61503a or 61503b, each day the violation continues constitutes a separate offense only for 5 days; thereafter, each day the violation continues does not constitute a separate offense. If a person who has entered into a gas lease as a lessee violates section 61503a or 61503b and such a violation affects more than 1 lessor having an interest in the same well, pooled unit, or unitized area, the violation as to all lessors constitutes only 1 offense.

(4) If a court finds that a lessee deducted postproduction costs from a lessor's royalty contrary to section 61503b(1), the lessor may recover as damages the amount of postproduction costs deducted contrary to section 61503b(1) and may also recover reasonable attorney fees incurred in bringing the action unless the lessee endeavored to cure the alleged violation pursuant to subsection (5) prior to the bringing of the action. In addition, a lessee who prevails in litigation under this subsection may recover reasonable attorney fees incurred in defending an action under this subsection, if the court finds that the position taken by the lessor in the litigation was frivolous.

(5) A person shall not bring an action under this section unless the person has first given the lessee written notice of the alleged violation of section 61503a or 61503b, with reasonably comprehensive details, and allowed a period of at least 30 days for the lessee to cure the alleged violation.

History: Add. 1999, Act 247, Eff. Mar. 28, 2000;—Am. 2000, Act 441, Imd. Eff. Jan. 9, 2001.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61504 Waste prohibited.

Sec. 61504. A person shall not commit waste in the exploration for or in the development, production, handling, or use of oil or gas, or in the handling of any product of oil or gas.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61505 Supervisor of wells; jurisdiction; authority; enforcement of part.

Sec. 61505. The supervisor has jurisdiction and authority over the administration and enforcement of this part and all matters relating to the prevention of waste and to the conservation of oil and gas in this state. The supervisor also has jurisdiction and control of and over all persons and things necessary or proper to enforce effectively this part and all matters relating to the prevention of waste and the conservation of oil and gas.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61505a Drilling permit for well beneath lake bottomlands for exploration or production of oil or gas; condition.

Sec. 61505a. Notwithstanding any other provision of this part or the rules promulgated under this part, beginning on the effective date of this section, the supervisor shall not issue a permit for drilling, or authorize the drilling of, a well beneath the lake bottomlands of the Great Lakes, the connected bays or harbors of the Great Lakes, or the connecting waterways as defined in section 32301, for the exploration or production of oil or gas unless the applicant holds a lease that was in effect prior to the effective date of the amendatory act that added this section that allows the well to be drilled.

History: Add. 2002, Act 148, Imd. Eff. Apr. 5, 2002.

Compiler's note: Enrolled House Bill No. 5118 was not signed by the Governor, but, having been presented to him at 3:44 p.m. on March 22, 2002, and not having been returned by him to the House of Representatives within the 14 days prescribed by Const 1963, art IV, sec 33, became law (2002 PA 148) on April 5, 2002, the Legislature having continued in session.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61506 Supervisor of wells; powers and duties generally.

Sec. 61506. The supervisor shall prevent the waste prohibited by this part. To that end, acting directly or through his or her authorized representatives, the supervisor is specifically empowered to do all of the following:

(a) To promulgate and enforce rules, issue orders and instructions necessary to enforce the rules, and do whatever may be necessary with respect to the subject matter stated in this part to implement this part, whether or not indicated, specified, or enumerated in this or any other section of this part.

(b) To collect data to make inspections, studies, and investigations; to examine properties, leases, papers, books, and records as necessary to the purposes of this part; to examine, check, and test and gauge oil and gas wells and tanks, plants, refineries, and all means and modes of transportation and equipment; to hold hearings; and to provide for the keeping of records and making of reports, and for the checking of the accuracy of the records and reports.

(c) To require the locating, drilling, deepening, redrilling or reopening, casing, sealing, operating, and plugging of wells drilled for oil and gas or for secondary recovery projects, or wells for the disposal of salt water, brine, or other oil field wastes, to be done in such manner and by such means as to prevent the escape of oil or gas out of 1 stratum into another, or of water or brines into oil or gas strata; to prevent pollution of, damage to, or destruction of fresh water supplies, including inland lakes and streams and the Great Lakes and connecting waters, and valuable brines by oil, gas, or other waters, to prevent the escape of oil, gas, or water into workable coal or other mineral deposits; to require the disposal of salt water and brines and oily wastes produced incidental to oil and gas operations in a manner and by methods and means so that unnecessary damage or danger to or destruction of surface or underground resources, to neighboring properties or rights, or to life does not result.

(d) To require reports and maps showing locations of all wells subject to this part, and the keeping and filing of logs, well samples, and drilling, testing, and operating records or reports. All well data and samples furnished to the supervisor as required in this part, upon written request of the owner of the well, shall be held confidential for 90 days after the completion of drilling and shall not be open to public inspection except by written consent of the owner.

(e) To prevent the drowning by water of any stratum or part of the stratum capable of producing oil or gas, or both oil and gas, and to prevent the premature and irregular encroachment of water, or any other kind of water encroachment, that reduces or tends to reduce the total ultimate recovery of oil or gas, or both oil or gas, from any pool.

(f) To prevent fires or explosions.

(g) To prevent blow-outs, seepage, and caving in the sense that the conditions indicated by such terms are generally understood in the oil business.

(h) To regulate the mechanical, physical, and chemical treatment of wells.

(i) To regulate the secondary recovery methods of oil and gas, including pulling or creating a vacuum and the introduction of gas, air, water, and other substances into the producing formations.

(j) To fix the spacing of wells and to regulate the production from the wells.

(k) To require the operation of wells with efficient gas-oil ratios and to establish the ratios.

(l) To require by written notice or citation immediate suspension of any operation or practice and the prompt correction of any condition found to exist that causes or results or threatens to cause or result in waste.

(m) To require, either generally or in or from particular areas, certificates of clearance or tenders in connection with the transportation of oil, gas, or any product of oil or gas.

(n) To require identification of the ownership of oil and gas producing leases, properties, and wells.

(o) To promulgate rules or issue orders for the classifications of wells as oil wells or gas wells; or wells drilled, or to be drilled, for secondary recovery projects, or for the disposal of salt water, brine, or other oil or gas field wastes; or for the development of reservoirs for the storage of liquid or gaseous hydrocarbons, or for other means of development, extraction, or production of hydrocarbons.

(p) To require the filing of an adequate surety, security, or cash bonds of owners, producers, operators, or their authorized representatives in such reasonable form, condition, term, and amount as will ensure compliance with this part and with the rules promulgated or orders issued under this part and to provide for the release of the surety, security, or cash bonds.

(q) To require the immediate suspension of drilling or other well operations if there exists a threat to public health or safety.

(r) To require a person applying for a permit to drill and operate any well regulated by this part to file a

complete and accurate written application on a form prescribed by the supervisor.

(s) To require the posting of safety signs and the installation of fences, gates, or other safety measures if there exists a threat to public health, safety, or property.

(t) To prevent regular or recurring nuisance noise or regular or recurring nuisance odor in the exploration for or development, production or handling of oil and gas.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995;—Am. 1998, Act 303, Imd. Eff. July 28, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

Administrative rules: R 324.101 et seq. of the Michigan Administrative Code.

324.61506a Notice of violation.

Sec. 61506a. Upon completion of an inspection under this part, the supervisor shall notify the owner or operator of the well of any violation of this or any other part of this act that is identified during the inspection.

History: Add. 1998, Act 252, Imd. Eff. July 10, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61506b Conditions prohibiting issuance of permit or authorization to drill oil or gas well; waiver; exception.

Sec. 61506b. (1) Except as provided in subsections (2) and (3), beginning on the effective date of this section, the supervisor shall not issue a permit for or authorize the drilling of an oil or gas well if both of the following apply:

(a) The well is located within 450 feet of a residential building.

(b) The residential building is located in a city or township with a population of 70,000 or more.

(2) The supervisor may grant a waiver from the requirement of subsection (1)(a) if the clerk of the city, village, or township in which the proposed well is located has been notified of the application for a permit for the proposed well and if either of the following conditions is met:

(a) The owner or owners of all residential buildings located within 450 feet of the proposed well give written consent.

(b) The supervisor determines, pursuant to a public hearing held before the waiver is granted, that the proposed well location will not cause waste and there is no reasonable alternative for the location of the well that will allow the oil and gas rights holder to develop the oil and gas.

(3) Subsection (1) does not apply to a well utilized for the injection, withdrawal, and observation of the storage of natural gas pursuant to this part.

History: Add. 1998, Act 303, Imd. Eff. July 28, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61506c Toll-free telephone number; maintenance; use.

Sec. 61506c. The department shall maintain a toll-free telephone number that a person or a representative of a local unit of government may call in order to receive information on department standards, safety requirements and educational information related to oil and gas exploration, drilling, permitting, hydrogen sulfide management, pooling, and other topics related to the extraction of oil and gas.

History: Add. 1998, Act 392, Imd. Eff. Dec. 17, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61507 Prevention of waste; procedure; hearing; rules; orders.

Sec. 61507. Upon the initiative of the supervisor or upon verified complaint of any person interested in the subject matter alleging that waste is taking place or is reasonably imminent, the supervisor shall call a hearing to determine whether or not waste is taking place or is reasonably imminent, and what action should be taken to prevent that waste. If the supervisor determines it appropriate, the supervisor shall hold a hearing and shall promptly make findings and recommendations. The supervisor shall consider those findings and

recommendations and shall promulgate rules or issue orders as he or she considers necessary to prevent waste which he or she finds to exist or to be reasonably imminent.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61508 Rules of order or procedure in hearings or other proceedings; entering in book; copy of rule or order as evidence; availability of writings to public.

Sec. 61508. (1) The supervisor shall prescribe rules of order or procedure in hearings or other proceedings before the supervisor under this part. Rules promulgated or orders issued by the supervisor shall be entered in full in a book to be kept for that purpose by the supervisor. A copy of a rule or order, certified by the supervisor, shall be received in evidence in the courts of this state with the same effect as the original.

(2) A writing prepared, owned, used, in the possession of, or retained by the supervisor in the performance of an official function shall be made available to the public in compliance with the freedom of information act, Act No. 442 of the Public Acts of 1976, being sections 15.231 to 15.246 of the Michigan Compiled Laws.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61509 Hearings; subpoena; witnesses and production of books; incriminating testimony.

Sec. 61509. The supervisor may compel by subpoena the attendance of witnesses and the production of books, papers, records, or articles necessary in any proceeding before the supervisor or the commission. A person shall not be excused from obeying a subpoena issued in a hearing or proceeding brought under this part on the ground or for the reason that the testimony or evidence, documentary or otherwise, may tend to incriminate or subject that person to a penalty or forfeiture. However, this section does not require a person to produce books, papers, or records or to testify in response to any inquiry that is not pertinent to a question lawfully before the supervisor, commission, or court for determination under this part. Incriminating evidence, documentary or otherwise, shall not be used against a witness who testifies as required in this section in a prosecution or action for forfeiture. A person who testifies as required in this section is not exempt from prosecution and punishment for perjury in so testifying.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61510 Failure to comply with subpoena; refusal to testify; attachment; contempt; fees and mileage of witnesses.

Sec. 61510. (1) If a person fails or refuses to comply with a subpoena issued by the supervisor, or if a witness refuses to testify as to any matters regarding which he or she may be lawfully interrogated, any circuit court in this state, or any circuit court judge, on application of the supervisor, may issue an attachment for the person and compel that person to comply with the subpoena and to attend a hearing before the supervisor and produce documents, and testify upon matters, as may be lawfully required, and the court or judge has the power to punish that person for contempt in the same manner as if the person had disobeyed the subpoena of the court or refused to testify in that court.

(2) A witness summoned by subpoena or by written request of the supervisor and attending a hearing called by the supervisor is entitled to the same fees and mileage as are or may be provided by law for attending the circuit court in a civil matter or proceeding. The fees and mileage of witnesses subpoenaed at the instance of the supervisor shall be paid out of the general funds of the state treasury upon proper voucher approved by the supervisor. The fees and mileage of witnesses subpoenaed at the instance of any other interested party shall be paid by that party.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61511 False swearing as perjury; penalty.

Sec. 61511. If a person who is required to give an oath under this part, or by any rule promulgated or order issued by the supervisor, willfully swears falsely in regard to any matter or thing respecting which the oath is required, or willfully makes any false affidavit required or authorized by this part, or by any rule promulgated or order issued by the supervisor, that person is guilty of perjury, punishable by imprisonment for not more than 5 years or less than 6 months.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61512 Allocation or distribution of allowable production in well, field, or pool; basis.

Sec. 61512. If, to prevent waste, the supervisor limits the amount of oil or gas to be produced from any well, pool, or field in this state, the supervisor shall allocate or distribute the allowable production in the field or pool. The supervisor shall make such a determination or distribution in the field or pool on a reasonable basis, giving, if reasonable, under all circumstances, to each small well of settled production in the pool or field an allowable production that will prevent a general or premature abandonment of the wells in the pool or field.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61513 Proration or distribution of allowable production among wells; basis; drilling unit; unnecessary wells; pooling of properties; location of well; exceptions; minimum allowable production; allowable production pursuant to rules or orders.

Sec. 61513. (1) When, to prevent waste, the total allowable production for any oil or gas field or pool in the state is fixed in an amount less than that which the field or pool could produce if no restriction were imposed, the supervisor shall prorate or distribute on a reasonable basis the allowable production among the producing wells in the field or pool, to prevent or minimize reasonably avoidable drainage from each developed area which is not equalized by counter drainage. The rules or orders of the supervisor, so far as it is practicable to do so, shall afford the owner of each property in a pool the opportunity to produce his or her just and equitable share of the oil or gas in the pool, being an amount, so far as can be practicably determined and obtained without waste, and without reducing the bottom hole pressure materially below the average for the pool, substantially in the proportion that the quantity of the recoverable oil or gas under the property bears to the total recoverable oil or gas in the pool, and for this purpose to use his or her just and equitable share of the reservoir energy. A well in a pool producing from an average depth of 1,000 feet or less, on the basis of a full drilling unit as may be established under this section, shall be given a base allowable production of at least 100 barrels of oil per well per week; for a well in a pool producing from an average depth greater than 1,000 feet, the base allowable production shall be increased 10 barrels per well per week for each addition 100 feet of depth greater than 1,000 feet, if the allowable production is or can be made without surface or underground waste.

(2) To prevent the drilling of unnecessary wells, the supervisor may establish a drilling unit for each pool. A drilling unit, as described in this subsection, is the maximum area that may be efficiently and economically drained by 1 well. A drilling unit constitutes a developed area if a well is located on the drilling unit that is capable of producing the economically recoverable oil or gas under the unit. Each well permitted to be drilled upon any drilling unit shall be located in the approximate center of the drilling unit, or at such other location on the drilling unit as may be necessary to conform to a uniform well spacing pattern as adopted and promulgated by the supervisor after due notice and public hearing, as provided in this part.

(3) The drilling of unnecessary wells is hereby declared waste because unnecessary wells create fire and other hazards conducive to waste, and unnecessarily increase the production cost of oil and gas to the operator, and therefore also unnecessarily increase the cost of the products to the ultimate consumer.

(4) The pooling of properties or parts of properties is permitted, and, if not agreed upon, the supervisor may require pooling of properties or parts of properties in any case when and to the extent that the smallness or shape of a separately owned tract or tracts would, under the enforcement of a uniform spacing plan or proration or drilling unit, otherwise deprive or tend to deprive the owner of such a tract of the opportunity to recover or receive his or her just and equitable share of the oil or gas and gas energy in the pool. The owner of

any tract that is smaller than the drilling unit established for the field shall not be deprived of the right to drill on and produce from that tract, if the drilling and production can be done without waste. In this case, the allowable production from that tract, as compared with the allowable production if that tract were a full unit, shall be in the ratio of the area of the tract to the area of a full unit, except as a smaller ratio may be required to maintain average bottom hole pressures in the pool, to reduce the production of salt water, or to reduce an excessive gas-oil ratio. All orders requiring pooling described in this subsection shall be upon terms and conditions that are just and reasonable, and will afford to the owner of each tract in the pooling plan the opportunity to recover or receive his or her just and equitable share of the oil or gas and gas energy in the pool as provided in this subsection, and without unnecessary expense, and will prevent or minimize reasonably avoidable drainage from each developed tract that is not equalized by counter drainage. The portion of the production allocated to the owner of each tract included in a drilling unit formed by voluntary agreement or by a pooling order shall be considered as if it had been produced from the tract by a well drilled on the tract.

(5) Each well permitted to be drilled upon a drilling unit or tract shall be drilled at a location that conforms to the uniform well spacing pattern, except as may be reasonably necessary where after notice and hearing the supervisor finds any of the following:

(a) That the unit is partly outside the pool or that, for some other reason, a well at the location would be unproductive.

(b) That the owner or owners of a tract or tracts covering that part of the drilling unit or tract on which the well would be located if it conformed to the uniform well spacing pattern refuses to permit drilling at the regular location.

(c) That topographical or other conditions are such as to make drilling at the regular location unduly burdensome or imminently threatening to water or other natural resources, to property, or to life.

(6) If an exception under subsection (5) is granted, the supervisor shall take such action as will offset any advantage that the person securing the exception may have over other producers in the pool by reason of the drilling of the well as an exception, and so that drainage from the developed areas to the tract with respect to the exception granted will be prevented or minimized and the producer of the well drilled as an exception will be allowed to produce no more than his or her just and equitable share of the oil or gas in the pool as the share is set forth in this part, and to that end the rules and orders of the supervisor shall be such as will prevent or minimize reasonably avoidable drainage from each developed area that is not equalized by counter drainage and will give to each producer the opportunity to use his or her just and equitable share of the reservoir energy.

(7) Minimum allowable production for some wells and pools may be advisable from time to time, especially with respect to wells and pools already drilled on May 3, 1939, when former Act No. 61 of the Public Acts of 1939 took effect, so that the production will repay reasonable lifting costs and thus prevent premature abandonment of wells and resulting wastes.

(8) After the effective date of any rule promulgated or order issued by the supervisor as provided in this part establishing the allowable production, a person shall not produce more than the allowable production applicable to that person, his or her wells, leases, or properties, and the allowable production shall be produced pursuant to the applicable rules or orders.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61513a Pooling of properties not required.

Sec. 61513a. The supervisor shall not require the pooling of state owned properties or parts of properties under section 61513 if the state provides for the orderly development of state owned hydrocarbon resources through an oil and gas leasing program and the supervisor determines the owner of each tract is afforded the opportunity to recover and receive his or her just and equitable share of the hydrocarbon resources in the pool.

History: Add. 1998, Act 303, Imd. Eff. July 28, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61514 Certificates of clearance or tenders; issuance.

Sec. 61514. The supervisor may issue certificates of clearance or tenders if required to implement this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61515 Handling or disposition of illegal oil or gas; penalty.

Sec. 61515. A person shall not sell, purchase, acquire, transport, refine, process, or otherwise handle or dispose of any illegal oil or gas or any illegal product of oil or gas. A penalty or forfeiture shall not be imposed as a result of an act described in this section until certificates of clearance or tenders are required by the supervisor as provided in section 61514.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61516 Rule or order; public hearings required; emergency rules or orders without public hearing; requirements for public hearings held pertaining to pooling of properties.

Sec. 61516. (1) A rule or order shall not be made, promulgated, put into effect, revoked, changed, renewed, or extended, except emergency orders, unless public hearings are held. Except as provided in subsection (2), public hearings shall be held at such time, place, and manner and upon such notice, not less than 10 days, as shall be prescribed by general order and rules adopted in conformity with this part. The supervisor may promulgate emergency rules or issue orders without a public hearing as may be necessary to implement this part. The emergency rules and orders shall remain in force and effect for no longer than 21 days, except as otherwise provided for rules under the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328.

(2) A public hearing held pursuant to this section pertaining to the pooling of properties or parts of properties under section 61513(4) shall be held at a place as determined by this subsection. At the time that the supervisor provides for notice of the public hearing, the supervisor shall provide notice of the right to request a change in location of the public hearing. A public hearing shall be held in the county in which the oil and gas rights are located if the majority of the owners of oil or gas rights that are subject to being pooled file with the supervisor a written request to hold the hearing in that county.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995;—Am. 1998, Act 115, Imd. Eff. June 9, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61517 Actions against department or commission; jurisdiction of Ingham county circuit court; injunction or restraining order; actions pertaining to pooling of properties.

Sec. 61517. (1) Except as provided in subsection (2), the circuit court of Ingham county has exclusive jurisdiction over all suits brought against the department, the supervisor, or any agent or employee of the department or supervisor, by or on account of any matter or thing arising under this part. A temporary restraining order or injunction shall not be granted in any suit described in this section except after due notice and for good cause shown.

(2) A suit brought against the supervisor pertaining to an order of the supervisor requiring the pooling of properties or parts of properties under section 61513(4) may be brought in the circuit court for the county in which the oil or gas rights are located or in the circuit court of Ingham county. A suit brought in the circuit court of Ingham county against the supervisor pertaining to an order of the supervisor requiring the pooling of properties or parts of properties under section 61513(4) may be removed to the circuit court for the county in which the oil or gas rights are located upon petition by a majority of the owners of the oil and gas rights who are subject to the order. Additionally, if all of the owners of the oil and gas interests being pooled reside in a county in Michigan other than the county in which the oil and gas rights are located, the suit may be brought in, or removed to, the circuit court for the county in which the owners reside. A petition for removal under this subsection shall be filed within 28 days after filing and service of the complaint in circuit court.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995;—Am. 1998, Act 115, Imd. Eff. June 9, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61518 Enforcement of part and rules; representation by attorney general; complaint; proceedings; powers of supervisor; exception.

Sec. 61518. (1) The supervisor may proceed at law or for the enforcement of this part and a rule promulgated under this part or for the prevention of the violation of this part or a rule promulgated under this part, and the attorney general shall represent the supervisor in an action brought under this part. The supervisor or an assistant appointed by the supervisor may file a complaint and cause proceedings to be commenced against a person for a violation of this part without the sanction of the prosecuting attorney of the county in which the proceeding is commenced. The supervisor or an assistant of the supervisor may appear for the people in a court of competent jurisdiction in a case for a violation of this part or a rule promulgated under this part, and prosecute the violation in the same manner and with the same authority as the prosecuting attorney of a county in which the proceeding is commenced, and may sign vouchers for the payment of fees and do all other things required in the same manner and with the same authority as the prosecuting attorney.

(2) Subsection (1) does not apply to a violation of this part that is subject to the penalty prescribed pursuant to section 61522(3) or (4).

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61519 Failure of owner or operator to obtain permit or to construct, operate, maintain, case, plug, or repair well; notice of determination; liability; claims.

Sec. 61519. If the supervisor determines that the owner or operator of a well subject to this part has failed or neglected to properly obtain a permit, construct, operate, maintain, case, plug, or repair the well in accordance with this part or the rules promulgated under this part, the supervisor shall give notice of this determination, in writing, to the owner and operator and to the surety executing the bond filed with the supervisor by the owner or operator in connection with the issuance of the permit authorizing the drilling of a well. This notice of determination may be served upon the owner or operator and surety in person or by registered mail. If the owner or operator cannot be found in the state, the mailing of the notice of determination to the owner or operator at his or her last known post office address by registered mail constitutes service of the notice of determination. If the owner or operator, or surety, fails or neglects to properly case, plug, or repair the well described in the notice of determination within 30 days of the date of service or mailing of the notice, the supervisor may enter into and upon any private or public property on which the well is located and upon and across any private or public property necessary to reach the well, and case, plug, or repair the well, and the owner or operator and surety are jointly and severally liable for all expenses incurred by the supervisor. The supervisor, acting for and in behalf of the state, shall certify in writing to the owner or operator and surety the claim of the state in the same manner provided in this section for the service of the notice of determination, and shall list thereon the items of expense incurred in casing, plugging, or repairing the well. The claim shall be paid by the owner or operator, or surety, within 30 days, and if not paid within that time the supervisor, acting for and in behalf of the state, may bring suit against the owner or operator, or surety, jointly or severally, for the collection of the claim in any court of competent jurisdiction in the county of Ingham.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61520 Abandoning well without properly plugging; violation of part or rule; penalty; liability of owner; “owner” and “operator” defined.

Sec. 61520. (1) A person who abandons a well without properly plugging the well as provided in this part or the rules promulgated under this part, or, except as provided in section 61522(3) or (4), who violates this part or a rule promulgated under this part, whether as principal, agent, servant, or employee, is guilty of a misdemeanor, punishable by imprisonment for not more than 90 days, or a fine of not more than \$1,000.00 and costs of prosecution, or both. This section does not impose liability upon the owner of land upon which a well is located, unless the property owner is the owner or part owner of the well.

(2) The words “owner” and “operator”, as used in this section and section 61519 mean a person who, by the terms of this part and the rules promulgated under this part, is responsible for the plugging of a well.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61521 Unlawful acts; penalties.

Sec. 61521. (1) A person who, for the purpose of evading this part or of evading a rule promulgated or an order issued under this part, intentionally makes or causes to be made false entry or statement of fact in a report required by this part or by a rule promulgated or an order issued under this part, or who, for that purpose, makes or causes to be made false entry in an account, record, or memorandum kept by a person in connection with this part, or of a rule promulgated or an order issued under this part; or who, for that purpose, omits to make, or causes to be omitted, full, true, and correct entries in the accounts, records, or memoranda, of all facts and transactions pertaining to the interest or activities in the petroleum industry of that person as may be required by the supervisor under authority given in this part or by any rule promulgated or any order issued under this part; is guilty of a felony, punishable by imprisonment for not more than 3 years, or a fine of not more than \$3,000.00, or both.

(2) A person who for the purpose of evading this part or a rule promulgated or an order issued under this part removes from the jurisdiction of the state, or mutilates, alters, or by other means falsifies a book, record, or other paper pertaining to transactions regulated by this part is subject to the penalties prescribed in the freedom of information act, Act No. 442 of the Public Acts of 1976, being sections 15.231 to 15.246 of the Michigan Compiled Laws.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61522 Violations of part, rule, or order; penalties.

Sec. 61522. (1) Unless a penalty is otherwise provided for in this part, a person who violates this part or a rule or order promulgated or issued under this part is subject to a penalty of not more than \$1,000.00. Each day the violation continues constitutes a separate offense. The penalty shall be recovered by an action brought by the supervisor.

(2) A person aiding in the violation of this part or a rule or order promulgated or issued under this part is subject to the same penalties as are prescribed in this section for the person who committed the violation.

(3) If the supervisor arbitrarily and capriciously violates section 61508(2), the supervisor is subject to the penalties prescribed in the freedom of information act, Act No. 442 of the Public Acts of 1976, being sections 15.231 to 15.246 of the Michigan Compiled Laws.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61523 Confiscation of illegal oil or gas, oil or gas products, conveyances, and containers; notice; seizure; sale; intervention.

Sec. 61523. All illegal oil or gas, products derived from illegal oil or gas, conveyances used in the transportation of illegal oil or gas or oil or gas products, and containers used in their storage, except railroad tank cars and pipelines, are subject to confiscation, and the supervisor may seize such illegal oil or gas, oil or gas products, conveyances, and containers. The supervisor shall immediately upon such seizure institute a proceeding in rem to confiscate the oil or gas, oil or gas products, conveyances, and containers in the circuit court of the county in which the seizure was made or in the circuit court of Ingham county. Upon commencement of these proceedings, notice shall be given to all known interested persons in the manner as directed by the court. The court, upon finding that the oil or gas, oil or gas products, conveyances, or containers seized are illegal, shall order those items to be sold under the terms and conditions as it directs. Any person claiming an interest in any oil or gas, oil or gas product, conveyance, or container that is seized has the right to intervene in the proceedings, and the rights of that person shall be determined by the court as justice may require.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61524 Fee for monitoring, surveillance, enforcement, and administration of part.

Sec. 61524. (1) For the purposes of monitoring, surveillance, enforcement, and administration of this part, a fee not in excess of 1%, based upon the gross cash market value, is levied upon oil and gas produced in this state. The fee shall be collected by the revenue division of the department of treasury in the same manner, at the same time, and subject to the provisions of the tax levied by 1929 PA 48, MCL 205.301 to 205.317.

(2) The fee shall be computed as follows:

(a) The director of the department of management and budget, on or before November 1, shall certify to the department of treasury the amount appropriated for the fiscal year for the purposes of monitoring, surveillance, enforcement, and administration of this part.

(b) The department shall estimate the total production and gross cash market value of all oil and gas that will be produced in this state during the fiscal year ending September 30, and shall certify its estimate to the department of treasury on or before November 1.

(c) Within 30 days after the effective date of the 1998 amendments to this section and on or before December 1 of each succeeding year, the department of treasury shall determine the fee as follows:

(i) If the fund balance is less than \$7,000,000.00 as of the end of the fiscal year immediately prior to November 1, the fee shall be 1% of the gross cash market value of oil and gas produced, or an amount calculated to cause the fund to accumulate to \$7,000,000.00 at the end of the current fiscal year, whichever is less.

(ii) If the fund balance is equal to or exceeds \$7,000,000.00 as of the end of the fiscal year immediately prior to November 1, the fee shall be the ratio, to the nearest 1/100 of 1%, that the appropriation bears to the total gross cash market value of the oil and gas that will be produced in this state as estimated by the department as provided in subdivision (b).

(iii) Any money accumulated in the fund in excess of \$7,000,000.00 as of the end of the fiscal year shall be deducted from the following year's appropriation in determining an amount to be certified by the director of the department of management and budget to the department of treasury for computing the annual fee provided for in this section.

(d) The percentage determined pursuant to subdivision (c) shall not exceed 1% and shall be the fee beginning the first of the following month and will continue to be the fee for the next 12 months and until a different fee is determined. However, the fee shall be 1% beginning the first day of the second month after the effective date of the 1998 amendments to this section and will continue to be the fee for the remainder of that calendar year.

(3) The proceeds of the fee provided for in this section shall be forwarded to the state treasurer for deposit into the fund.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995;—Am. 1998, Act 252, Imd. Eff. July 10, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61525 Permit to drill well; application; bond; posting; fee; issuance; disposition of fees; availability of information pertaining to applications; information provided to city, village, or township.

Sec. 61525. (1) A person shall not drill or begin the drilling of any well for oil or gas, for secondary recovery, or a well for the disposal of salt water, or brine produced in association with oil or gas operations or other oil field wastes, or wells for the development of reservoirs for the storage of liquid or gaseous hydrocarbons, except as authorized by a permit to drill and operate the well issued by the supervisor of wells pursuant to part 13 and unless the person files with the supervisor a bond as provided in section 61506. The permittee shall post the permit in a conspicuous place at the location of the well as provided in the rules and requirements or orders issued or promulgated by the supervisor. An application for a permit shall be accompanied by a fee of \$300.00. A permit to drill and operate shall not be issued to an owner or his or her authorized representative who does not comply with the rules and requirements or orders issued or promulgated by the supervisor. A permit shall not be issued to an owner or his or her authorized representative who has not complied with or is in violation of this part or any of the rules, requirements, or orders issued or promulgated by the supervisor or the department.

(2) The supervisor shall forward all fees received under this section to the state treasurer for deposit in the fund.

(3) The supervisor shall make available to any person, upon request, not less often than weekly, the

following information pertaining to applications for permits to drill and operate:

- (a) Name and address of the applicant.
- (b) Location of proposed well.
- (c) Well name and number.
- (d) Proposed depth of the well.
- (e) Proposed formation.
- (f) Surface owner.
- (g) Whether hydrogen sulfide gas is expected.

(4) The supervisor shall provide the information under subsection (3) to the county in which an oil or gas well is proposed to be located and to the city, village, or township in which the oil or gas well is proposed to be located if that city, village, or township has a population of 70,000 or more. A city, village, township, or county in which an oil or gas well is proposed to be located may provide written comments and recommendations to the supervisor pertaining to applications for permits to drill and operate. The supervisor shall consider all such comments and recommendations in reviewing the application.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995;—Am. 1998, Act 252, Imd. Eff. July 10, 1998;—Am. 1998, Act 303, Imd. Eff. July 28, 1998;—Am. 2004, Act 325, Imd. Eff. Sept. 10, 2004.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61525a Annual well regulatory fee; report.

Sec. 61525a. The owner or operator of a well used for injection, withdrawal, or observation related to the storage of natural gas or liquefied petroleum gas that has been used for its permitted purpose at any time during the calendar year immediately prior to the time the fee is due is subject to a \$20.00 annual well regulatory fee. The owner or operator of a well described in this section shall file an annual report by January 31 of each year stating the number of wells used for injection, withdrawal, or observation related to the storage of natural gas or liquefied petroleum gas that has been utilized for its permitted purpose during the previous calendar year. The report shall include a list of wells identified by permit number, permit name, and gas storage field name on a form provided by the supervisor, or such other form which may be acceptable to the supervisor. The annual well regulatory fee described in this section is due not more than 30 days after the supervisor sends notice to the owner or operator of the amount due. The supervisor shall forward all fees collected under this section to the state treasurer for deposit into the fund.

History: Add. 1998, Act 252, Imd. Eff. July 10, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61525b Oil and gas regulatory fund; creation; disposition of money or other assets; lapse; expenditures; annual report.

Sec. 61525b. (1) The oil and gas regulatory fund is created within the state treasury.

(2) The state treasurer may receive money or other assets from any source for deposit into the fund. The state treasurer shall direct the investment of the fund. The state treasurer shall credit to the fund interest and earnings from fund investments.

(3) Money in the fund at the close of the fiscal year shall remain in the fund and shall not lapse to the general fund.

(4) The department shall expend money from the fund, upon appropriation, only for monitoring, surveillance, enforcement, and administration of this part.

(5) The department shall annually submit a report to the legislature that itemizes the expenditure of money in the fund. The report shall include, at a minimum, all of the following:

- (a) The amount of money received and the amount of money expended.
- (b) The number of full-time equivalent positions funded with money in the fund.
- (c) The number of on-site inspections conducted by the department in implementing this part.
- (d) The number of violations identified in enforcing this part, their locations, and a description of the nature of the violations.

History: Add. 1998, Act 252, Imd. Eff. July 10, 1998.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61526 Part cumulative; conflicting provisions repealed; exception.

Sec. 61526. This part is cumulative of all existing laws on the subject matter, but, in case of conflict, this part shall control and shall repeal the conflicting provisions, except for the authority given the public service commission in sections 7 and 8 of Act No. 9 of the Public Acts of 1929, being sections 483.107 and 483.108 of the Michigan Compiled Laws, as authorized by law.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

324.61527 Applicability of part.

Sec. 61527. This part does not apply to drill holes for the exploration for and the extraction of iron, copper, or brine; to water wells; to mine and quarry drill and blast holes; to coal test holes; or to seismograph or other geophysical exploration test holes.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

Popular name: Supervisor of Wells

DEPARTMENT OF ENVIRONMENTAL QUALITY
GEOLOGICAL AND LAND MANAGEMENT DIVISION

OIL AND GAS OPERATIONS

(By authority conferred on the supervisor of wells and the director of the department of environmental quality by section 61506 of 1994 PA 451, MCL 324.61506, sections 9 and 251 of 1965 PA 380, MCL 16.109 AND 16.351, and Executive Reorganization Order No. 1991-22, MCL 299.13).

PART 1. GENERAL PROVISIONS

R 324.101 Application of rules.

Rule 101. These rules govern oil and gas operations in the state of Michigan and supersede all rules and regulations issued under the authority of Act No. 61 of the Public Acts of 1939, as amended, being §319.1 et seq. of the Michigan Compiled Laws, except for special well spacing and proration orders and determinations that have application to specifically designated areas throughout Michigan.

History: 1996 AACCS.

R 324.102 Definitions; A to M.

Rule 102. As used in these rules:

(a) "Act" means 1994 PA 451, MCL 324.101 et seq.

(b) "ANSI" means the American national standards institute.

(c) "API" means the American petroleum institute.

(d) "Authorized representative of the supervisor" means a department of environmental quality employee who is charged with the responsibility for implementation of the act or these rules.

(e) "Blowout prevention equipment" means a casinghead control device designed to control the flow of fluids from the well bore by closing around the drill pipe or production tubing or completely sealing the hole in the absence of drill pipe or production tubing.

(f) "Brine" means all nonpotable water resulting, obtained, or produced from the exploration, drilling, or production of oil or gas, or both.

(g) "Central production facility" means production equipment which has been consolidated at a central location that provides for the commingling of oil or gas production, or both, from 2 or more wells or production units of diverse ownership or from 2 or more prorated wells or production units.

(h) "Conformance bond" means a surety bond that has been executed by a surety company authorized to do business in the state of Michigan, cash, certificates of deposit, letters of credit, or other securities that are filed by a person and accepted by the supervisor to ensure compliance with the act, these rules, permit

conditions, instructions, orders of the supervisor, or an order of the department of environmental quality.

(i) "Development well" means a well which has as its objective an oil or gas pool known to be, or have been, productive through the discovery well of the oil or gas pool and which is located either within a 2-mile radius of the discovery well or on the same structure as the discovery well.

(j) "Directionally drilled well" means a well purposely deviated from the vertical using controlled angles to reach an objective location.

(k) "Discovery well" means a well that discovers a new and previously untapped oil or gas pool. A discovery well may open up a new field or it may locate a previously unknown oil or gas pool in an old field.

(l) "Drilling completion" means the time when a well has reached its permitted depth or the supervisor has determined drilling has ceased.

(m) "Drilling operations" means all of the physical and mechanical aspects of constructing a well for the exploration or production of oil or gas, or both, for injection of fluids associated with the production of oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas, and includes all of the following:

(i) Moving drilling equipment onto the drill site.

(ii) Penetration of the ground by the drill bit and drilling of the well bore.

(iii) Casing and sealing of the well bore.

(iv) Construction of well sites and access roads.

(n) "Drilling unit" means the area prescribed by an applicable well spacing rule or order for the granting of a permit for the drilling and operation of an oil or gas well, or both.

(o) "Facility piping" means piping that connects any of the following:

(i) Compressors.

(ii) Flares.

(iii) Loadouts.

(iv) Separators.

(v) Storage tanks.

(vi) Transfer pumps.

(vii) Treatment equipment.

(viii) Vents.

(p) "Fence" means a structure which is designed to deter access and which consists of not less than 2 strands of barbed wire, 1 strand being approximately 18 inches above the ground and the other strand being approximately 42 inches above the ground, secured to supporting posts or means an equivalent structure that deters access.

(q) "Final completion" means the time when locating, drilling, deepening, converting, operating, producing, reworking, plugging, and proper site restoration have been performed on a well in a manner approved by the supervisor, including the filing of the mandatory records, and when the conformance bond has been released.

(r) "Flow line" means piping that connects a well or wells to a surface facility.

(s) "Fresh water" means water which is free of contamination in concentrations that may cause disease or harmful physiological effects and which is safe for human consumption.

(t) "Gas storage" means the use of a depleted oil or gas pool, salt cavern, or other porous strata utilized for the purpose of injecting and withdrawing gas from the depleted oil or gas pool, salt cavern, or other porous strata.

(u) "Gathering line" means a pipeline that transports natural gas from a surface facility to a transmission pipeline.

(v) "Geologist" means a person who is certified as a geologist by a credible geological professional association or who, by reason of his or her knowledge of the natural sciences, mathematics, and the principles of geology acquired by professional education and practical experience, is qualified to engage in the practice of the science of geology.

(w) "Groundwater" means water below the land surface in the zone of saturation.

(x) "Injection well" means a well used to dispose of, into underground strata, waste fluids produced incidental to oil and gas operations or a well used to inject water, gas, air, brine, or other fluids for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir or for the storage of hydrocarbons.

(y) "Instruction" means a written statement of general applicability which is issued by the supervisor, which conforms with the act and rules promulgated under the act, and which clarifies or explains the applicability of the act or rules to commonly recurring facts or circumstances.

(z) "Multiple zone completion" means a well constructed and operated to separately produce oil or gas, or both, from more than 1 reservoir through 1 well bore.

History: 1996 AACS; 2001 AACS; 2002 AACS.

R 324.103 Definitions; N to Z.

Rule 103. As used in these rules:

(a) "Nuisance odor" means an emission of any gas, vapor, fume, or mist, or combination thereof, from a well or its associated surface facilities, in whatever quantities, that causes, either alone or in reaction with other air contaminants, injurious effects to human health or safety; unreasonable injurious effects to animal life, plant life of significant value, or property; or unreasonable interference with the comfortable enjoyment of life or property.

(b) "Oil and gas operations" means permitting activities required under R 324.201, drilling operations, well completion operations, operation of oil and gas wells, plugging operations, and site restoration.

(c) "Operation of oil and gas wells" means the process of producing oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas, including all of the following:

(i) Production, pumping, and flowing.

(ii) Processing.

(iii) Gathering.

(iv) Compressing.

- (v) Treating.
- (vi) Transporting.
- (vii) Conditioning.
- (viii) Brine removal and disposal.
- (ix) Separating.
- (x) Storing.
- (xi) Injecting.
- (xii) Testing.
- (xiii) Reporting.
- (xiv) Maintenance and use of surface facilities.
- (xv) Secondary recovery.

(d) "Organization report" means a listing of all corporate officers, directors, incorporators, partners, or shareholders who have the authority to make, or are responsible for making, operational decisions, including the siting, drilling, operating, producing, reworking, and plugging of wells.

(e) "Permit" means a permit to drill and operate an oil or gas well, or both, or an injection well, including associated surface facilities and flow lines.

(f) "Plugging operations" means the sealing of the fluids in the strata penetrated by an oil or gas well, or both, upon abandonment of the well or a portion of the well bore, so that the fluid from one stratum will not escape into another or to the surface.

(g) "Ppm" means parts per million by volume.

(h) "Psi" means pounds per square inch.

(i) "Psig" means pounds per square inch gauge.

(j) "Secondary recovery" means the introduction or utilization of fluid or energy into or within a pool for the purpose of increasing the ultimate recovery of hydrocarbons from the pool.

(k) "Shut-in" means an action by a permittee to close down a producing well, a well capable of producing, or an injection well temporarily for any of the following reasons:

- (i) Repair.
- (ii) Cleaning out.
- (iii) Building up reservoir pressure.
- (iv) Planning for secondary recovery.
- (v) Other injection projects.
- (vi) While awaiting connection of a sales line.
- (vii) Lack of a market.

(l) "Site restoration" means all of the following:

- (i) The filling and leveling of all cellars, pits, and excavations.
- (ii) The removal or elimination of all debris.
- (iii) The elimination of all conditions that may create a fire or pollution hazard.
- (iv) The minimization of erosion.

(v) The restoration of the well site as nearly as practicable to the original land contour or to a condition approved by the supervisor.

(m) "Structure used for public or private occupancy" means a residential dwelling or place of business, place of worship, school, hospital, government building, or other building where people are usually present at least 4 hours per day.

(n) "Supervisor" means the director of the department of environmental quality or his or her assistants as approved by the director of the department of environmental quality.

(o) "Surface casing" means the casing string or strings used primarily for protecting fresh water or mineralized water resources from potential contamination during the drilling and operation of an oil or gas well, or both.

(p) "Surface facility" means a facility used in the injection of fluids or in the production, processing, or treatment of oil or gas, or both, including any of the following:

- (i) Pumping equipment.
- (ii) Fluid disposal equipment.
- (iii) Facility piping.
- (iv) Load outs.
- (v) Separators.
- (vi) Storage tanks.
- (vii) Treatment equipment.
- (viii) Compressors.

(q) "Surface water" means a body of water, and the associated sediments, which has a top surface that is exposed to the atmosphere and which is not solely for wastewater conveyance, treatment, or control. Surface water may be any of the following:

- (i) A Great Lake or its connecting waters.
- (ii) An inland lake or pond.
- (iii) A river or stream, including intermittent streams.
- (iv) An impoundment.
- (v) An open drain.
- (vi) A wetland.

(r) "Well completion" means the time when a well has been tested and found to be incapable of producing hydrocarbons in commercial quantities and has been plugged or has been found capable of producing commercial quantities of hydrocarbons or when the well has been equipped to perform the service for which it was intended.

(s) "Well completion operations" means work performed in an oil or gas well, or both, after the well has been drilled to its permitted depth and the production string of casing has been set, including perforating, artificial stimulation, and production testing.

(t) "Well location" means the surface location of a well.

(u) "Zoned residential" means a geographic area that was zoned by a local unit of government before January 8, 1993, as an area designated principally for permanent or recreational residences.

History: 1996 AACS; 2002 AACS.

R 324.104 Terms defined in act.

Rule 104. Unless the context requires a different meaning, the trade words and other words defined in the act have the same meanings when used in these rules.

History: 1996 AACCS.

R 324.199 Rescission.

Rule 199. (1) R 299.251 to R 299.258 of the Michigan Administrative Code, appearing on pages 1415 to 1417 of the 1979 Michigan Administrative Code, are rescinded.

(2) R 299.1101 to R 299.1807, R 299.1809, R 299.1810, and R 299.1901 to R 299.2101 of the Michigan Administrative Code, appearing on pages 1466 to 1495 of the 1979 Michigan Administrative Code, and pages 206 to 217 of the 1987 Annual Supplement to the Code, are rescinded.

History: 1996 AACCS.

PART 2. PERMITS TO DRILL AND OPERATE

R 324.201 Application for permit to drill and operate requirements; issuance of permit.

Rule 201. (1) Until a person has complied with the requirements of subrule (2) of this rule, a person shall not begin the drilling or operation of a well for any of the following:

- (a) Oil or gas, or both.
- (b) Injection for secondary recovery.
- (c) Injection for the disposal of brine, oil or gas field waste, or other fluids incidental to the drilling, producing, or treating of wells for oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas.
- (d) Injection or withdrawal for the storage of natural dry gas or oil well gas.
- (e) Injection or withdrawal for the storage of liquid hydrocarbons or liquefied petroleum gas.

(2) A permit applicant shall comply with all of the following permit application requirements:

(a) The exact well location shall be surveyed by a surveyor licensed in the state of Michigan, a readily visible stake or marker shall be set at the well location, and a flagged route shall be established to the well location.

(b) The survey required by subdivision (a) of this subrule shall include a plat that shows all of the following:

- (i) The correct well location and bottom hole location description.
- (ii) A flagged route or explanation of how the well location may be reached.
- (iii) Footages from the nearest section, quarter section, and drilling unit lines.
- (iv) Information relative to the approximate distances and directions from the stake or marker to special hazards or conditions, including all of the following:

(A) Surface waters and other environmentally sensitive areas within 1,320 feet of the proposed well. Environmentally sensitive areas are identified by the department pursuant to applicable state and federal laws and regulations.

(B) Floodplains associated with surface waters within 1,320 feet of the proposed well.

(C) Wetlands, as identified by the provisions of sections 30301 to 30323 of the act, within 1,320 feet of the proposed well.

(D) Natural rivers, as identified by the provisions of sections 30501 to 30515 of the act, within 1,320 feet of the proposed well.

(E) Critical dune areas, as designated by the provisions of sections 35301 to 35326 of the act, within 1,320 feet of the proposed well.

(F) Threatened or endangered species, as identified by the provisions of sections 36501 to 36507 of the act, within 1,320 feet of the proposed well.

(G) All buildings, recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption, public roads, pipelines, and power lines that lie within 600 feet of the proposed well location.

(H) All public water supply wells identified as type I and IIa that lie within 2,000 feet of the proposed well location and type IIb and III that lie within 800 feet of the proposed well location, as defined in Act No.399 of the Public Acts of 1976, as amended, being §325.1001 et seq. of the Michigan Compiled Laws.

(I) Identification of the existing local zoning designation of the surface location of the well.

(c) One signed and sealed copy of the survey, on a form prescribed by the supervisor, shall be filed with an application for a permit to drill and operate.

(d) A person applying to drill and operate a well shall completely and accurately fill out, sign, and file a written application for a permit to drill on a form prescribed by the supervisor. The application shall be submitted to the supervisor at the offices of the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, and a copy of the first page of the permit application shall be mailed to the clerk of the county and the surface owner of record of the land on which the well is to be located within 7 days of submitting the permit application by first-class United States mail addressed to the surface owner's last known address as evidenced by the current property tax roll records.

(e) When the proposed well is located in or adjacent to any areas described in subdivision(b)(iv)(A) or (B) of this subrule, a person shall file for and obtain all applicable permits from the department of environmental quality before developing the well site or access to the well site or before drilling of the well. The person shall also file for and obtain any additional permits that may be required before the installation of flow lines or production equipment or before operating the well.

(f) A person shall file an environmental impact assessment as instructed by the supervisor.

(g) A person shall file an organization report if a current organization report is not on file with the supervisor.

(h) A person shall file a conformance bond or statement of financial responsibility pursuant to R 324.210.

(i) A person shall pay the fee as specified by statute. A fee filed with an application shall not be applied to a subsequent application. The fee shall be returned if a permit is not issued.

(j) All of the following additional information is required to be submitted with an application for a permit to drill and operate an injection well or to convert a previously drilled well to an injection well:

(i) A plat which shows the location and total depth of the proposed injection well, shows each abandoned, producing, or drilling well and dry hole within 1,320 feet of the proposed injection well location, and which identifies the surface owner of the land on which the proposed injection well is to be located and each operator of a producing leasehold within 1,320 feet of the proposed injection well.

(ii) If a well is proposed to be converted to an injection well, a copy of the completion report, together with the written geologic description log or record filed pursuant to R 324.418(a) and borehole and stratum evaluation logs filed pursuant to R 324.419(1). The permittee shall also file an application for change of well status pursuant to R 324.511.

(iii) Plugging records of all abandoned wells and casing, sealing, and completion records of all other wells within 1,320 feet of the proposed injection well location. An applicant shall also submit a plan reflecting the steps or modifications believed necessary to prevent proposed injected fluids from migrating up, into, or through inadequately plugged, sealed, or completed wells.

(iv) A schematic diagram of the proposed injection well that shows all of the following information:

(A) The total depth or plug-back depth of the proposed injection well.

(B) The true vertical depth and thickness of the disposal or injection interval.

(C) The geological name of the disposal interval.

(D) The geological name and the top and bottom depths of all fresh water strata to be penetrated.

(E) The depths of the top and bottom of the casing or casings and cement to be used in the proposed injection well.

(F) The size of the casing and tubing and the depth of the packer.

(v) Information confirming that injection of liquids into the proposed zone will not exceed the fracture pressure gradient or, information showing that injection into the proposed geological strata will not initiate fractures through the overlying strata.

(vi) Proposed operating data, excluding injection wells utilized for gas storage, including all of the following data:

(A) The daily injection rates and pressures.

(B) The types of fluids to be injected.

(C) A qualitative and quantitative analysis of a representative sample of fluids to be injected. A chemical analysis shall be prepared for each type of fluid to be injected showing specific conductance as an indication of the dissolved solids and a determination of the concentration of the following parameters for chemical balance and indicators for comparison of water quality:

Cations

Anions

Calcium

Chloride

Sodium

Sulfate

Magnesium

Bicarbonate

Potassium However, if the fluid to be injected is fresh water, then an analysis is not required.

(D) The geological name of the injection strata and the vertical distance separating the top of the injection strata from the base of the lowest fresh water strata.

(E) A plan for conducting 5-year mechanical integrity tests of casing pursuant to R 324.805.

(vii) For a proposed injection well to dispose of oil or gas field waste, or both, into a zone that would likely constitute a producing oil or gas pool, a list of all offset operators and certification that the person making application for an injection well has notified all offset operators of the person's intention by certified mail. If within 21 days after the mailing date a substantive objection is filed with the supervisor by an offset operator, then the application shall not be granted without a hearing pursuant to part 12 of these rules. A hearing may also be scheduled by the supervisor to determine the need or desirability of granting permission for the proposed injection well.

(viii) A proposed plugging and abandonment plan.

(k) A person shall receive and post the permit in a conspicuous place at the well location. The permit shall remain posted at the well location until well completion.

(3) A person who desires to directionally drill a well shall apply for and obtain a permit to drill and operate as provided in this rule. The application to drill a directionally drilled well shall include, in addition to the information specified in subrule (2) of this rule, all of the following information:

(a) The depth at which deviation from vertical is planned.

(b) The angle and path of each deviation.

(c) The proposed horizontal distance and direction from the well location to the bottom hole.

(d) The well's measured and true vertical depths.

(4) The application for a well shall be processed pursuant to this rule and the supervisor shall issue or deny a permit to drill and operate pursuant to section 61525 of the act. Upon receipt of an application for a permit, the supervisor or authorized representative of the supervisor shall have up to 60 days to review the application to determine if the application is accurate and complete. If the application is determined to be inaccurate or incomplete, then the supervisor or authorized representative of the supervisor shall provide the person making the application for a permit, within the 60-day period, with a notice that the application is inaccurate or incomplete and what changes or additional information shall be submitted. Upon receipt of the requested information, the supervisor or authorized representative of the supervisor shall have up to an additional 30 days to review the information to determine if the application is accurate and complete. Upon completion of the review process, the supervisor or authorized representative of the supervisor shall issue or deny the permit application within 10 business days, as provided in section 61525 of the act. A determination of administrative completeness shall not be construed to mean that additional information may not be required from the applicant as a result of new circumstances that come to the attention of the supervisor. Pursuant to R 324.205, the supervisor shall not issue a permit to a person or an authorized representative of a person if the person is not eligible for a permit.

History: 1996 AACCS.

R 324.202 Directional redrilling.

Rule 202. (1) A permittee of a well who desires to directionally redrill an existing well to a different bottom hole location shall file an application for a new permit. The application shall set forth, in detail, the new bottom hole location and identify the plug-back depth of the existing well and shall be filed under R 324.201(3). The directional redrilling shall not be commenced until the application has been approved by the supervisor or authorized representative of the supervisor, except as provided in subrule (2) of this rule. A new permit and an additional fee shall be required.

(2) A permittee of a well who desires to directionally redrill an existing permitted drilling well to a different bottom hole location with the drilling rig then on location shall obtain approval from the supervisor or authorized representative of the supervisor. Approval to redrill shall be obtained by contacting the authorized representative of the supervisor in person or by telephone and providing pertinent details of the proposed directional redrilling. Approval may be granted immediately if all of the following provisions are complied with:

(a) The existing drilled hole is plugged back before starting the new directional hole under the provisions of these rules.

(b) The new bottom hole location conforms to applicable spacing.

(c) The well has adequate bonding or a statement of financial responsibility has been filed under R 324.210.

(3) If approval to directionally redrill is granted, a permittee of a well shall obtain a new permit and pay an additional fee. The application for a new permit and additional fee shall be filed within 10 days at the offices of the Michigan Department of Environmental Quality, Geological and Land Management Division, P.O. Box 30256, Lansing, Michigan 48909. In addition to other enforcement actions, failure to comply with this subrule shall be cause for immediate suspension of any or all components of the oil and gas operations on the well.

(4) A well log and plugging record shall be filed on the plugged-back hole under these rules.

History: 1996 AACCS; 2002 AACCS.

R 324.203 Lost holes.

Rule 203. (1) A permittee of a well shall obtain approval to skid a rig or move to start a new hole when a hole has been lost. A new permit or additional fee is not required if the new location for the well is within 165 feet of the lost hole and the drilling unit is not changed.

(2) A permittee of a well may obtain approval for skidding a rig or moving to a new location for the well because of a lost hole from the authorized representative of the supervisor in person or by telephone. Approval may be granted immediately if all of the following provisions are complied with:

(a) The lost hole shall be plugged before starting the replacement hole under the provisions of these rules.

(b) The new location for the well shall be made at a safe distance from the lost hole.

(c) The new bottom hole location shall conform to applicable spacing.

(d) The new location for the well shall not create surface waste.

(e) An amended application with corrected attachments and supplements shall be filed within 5 business days at the offices of the Michigan Department of Environmental Quality, Geological and Land Management Division, P.O. Box 30256, Lansing, Michigan 48909. In addition to other enforcement actions, failure to comply with this subrule shall be cause for suspension of any or all components of the oil and gas operations on the well.

(f) A well log and well plugging record shall be filed on all lost holes under the provisions of these rules.

History: 1996 AACCS; 2002 AACCS.

R 324.204 Permits for oil and gas storage by conversion of operation.

Rule 204. If a well or underground operation developed for a non-oil and gas use is converted for the storage of oil or gas or any of the natural hydrocarbons produced from oil or gas, then the well or underground operation shall be classified as an oil or gas storage operation and shall be subject to the provisions of these rules.

History: 1996 AACCS.

R 324.205 Eligibility for permit.

Rule 205. The supervisor shall not issue or transfer a permit, other than as provided by R 324.206(7) and (8), to a person who has been determined to be in violation of any of the following:

(a) The act.

(b) These rules.

(c) Permit conditions.

(d) Instructions.

(e) Orders of the supervisor.

(f) An order of the department of environmental quality.

History: 1996 AACCS.

R 324.206 Modification of permits; deepening permits; change of ownership.

Rule 206. (1) A permit shall not be transferred to a location outside of the drilling unit.

(2) A permittee of a well who has not initiated drilling of a well shall not do either of the following:

(a) Change the well location within the drilling unit without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval, a permittee shall return the permit to the Lansing office of the supervisor together with a revised application with corrected attachments and supplements. If the permittee requests a change in the well location, then a new permit and an additional fee are

required. Drilling shall not begin until the new permit or revised permit has been issued by the supervisor or authorized representative of the supervisor and posted at the drilling site.

(b) Change the method of drilling, casing and sealing programs, or other conditions of the permit without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval, the permittee shall return the permit to the Lansing office of the supervisor

together with a revised application with corrected attachments and supplements. If the permittee only requests a modification of the existing permit conditions, then an additional fee is not required. Drilling shall not begin until the revised permit has been approved by the supervisor or authorized representative of the supervisor and posted at the drilling site.

(3) A permittee of a well who begins the drilling of a well and encounters drilling problems or other drilling conditions that necessitate a change shall not do either of the following:

(a) Change the well location within the drilling unit, other than as provided by R 324.203, without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval to change the well location, the permittee shall return the permit to the Lansing office of the supervisor together with a revised application with corrected attachments and supplements. Drilling shall not begin at the new location until the new permit has been issued by the supervisor or authorized representative of the supervisor. A new permit and an additional fee are required.

(b) Change the method of drilling, casing and sealing programs, or other conditions of the permit without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval to modify an existing permit condition only, the permittee shall contact the supervisor or authorized representative of the supervisor by letter, telephone, or visit and explain the drilling circumstances and request the necessary changes to the permit. The supervisor or authorized representative of the supervisor may give verbal approval to modify the permit with conditions for additional reporting requirements by the permittee. If approval to modify an existing permit is granted, then the revised permit and corrected attachments and supplements shall be filed, within 10 days, at the offices of the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909. An additional permit fee is not required.

(4) A permittee of a well who desires to deepen a well below the permitted stratigraphic or producing horizon where well completion has occurred shall file an application for a deepening permit. The application shall set forth, in detail, the new proposed total depth and the plan for casing and sealing off the oil, gas, brine, or fresh water strata to be found, or expected to be found, in the deepening operation. The deepening operation shall not be commenced until the application has been approved by the supervisor or authorized representative of the supervisor. A deepening permit and an additional fee are required.

(5) A permittee of a well who desires to continue the drilling of a well below the permitted depth, but within the permitted stratigraphic or producing horizon where drilling completion or well completion has occurred, shall file an application for change of well status pursuant to R 324.511. The application shall set forth, in detail, the new

proposed total depth and the plan for casing and sealing off the oil, gas, brine, or fresh water strata found, or expected to be found, when drilling is continued. The approval of the change of well status shall serve to revise the permit to reflect the new permitted depth. The continuation of drilling shall not be commenced until the application for change of well status has been approved by the supervisor or authorized representative of the supervisor. To obtain approval to continue the drilling below the permitted depth, but within the permitted stratigraphic or producing horizon with the drilling rig then on location, the permittee shall contact the supervisor or authorized representative of the supervisor by letter, telephone, or visit and explain the circumstances for the request to continue the drilling. The supervisor or authorized representative may give verbal approval to continue the drilling below the permitted depth, but within the permitted stratigraphic or producing horizon. If approval to continue the drilling is granted, then the permittee shall file the application for change of well status pursuant to R 324.511, within 10 days of approval, at the offices of the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909. An additional permit fee is not required.

(6) If a permittee of a well conveys his or her rights as an owner of a well to another person, or ceases to be the authorized representative of the owner of a well, before final completion, then a request for the transfer of the permit to the acquiring person shall be submitted by the acquiring person to the supervisor at the offices of the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, on forms as prescribed by the supervisor. The transfer of the permit may be approved upon receipt of a properly completed request, including the signatures of the permittee of record and the acquiring person, and upon the filing by the acquiring person of the conformance bond or a statement of financial responsibility as required by R 324.210. Pending the transfer of the existing permit, the acquiring person shall not operate the well. The acquiring person shall be required to file an organization report pursuant to R 324.201(2)(g).

(7) A permit for a well shall not be transferred to a person who has been determined to be in violation of any of the following until the permittee has corrected the violation or the supervisor has accepted a compliance schedule and a written agreement has been reached to correct the violations:

- (a) The act.
- (b) These rules.
- (c) Permit conditions.
- (d) Instructions.
- (e) Orders of the supervisor.
- (f) An order of the department of environmental quality.

An additional conformance bond covering the period of the compliance schedule may be required. The conformance bond shall be in addition to the conformance bonds filed pursuant to R 324.212(a) or (b).

(8) If the permittee of a well is under notice because of unsatisfactory conditions at the well site involved in the transfer, then the permit for a well shall not be transferred to a person until the permittee has completed the necessary corrective actions or the acquiring person has entered into a written agreement to correct all of the unsatisfactory conditions.

History: 1996 AACS.

R 324.207 Suspension of oil and gas operations due to failure to transfer permit.

Rule 207. If a permittee of a well conveys his or her rights as an owner of a well to another person, or ceases to be the authorized representative of the owner of a well, and a request for transfer of the permit under R 324.206(6) has not been approved, then, in addition to other enforcement actions, failure to comply shall be cause for immediate suspension of any or all components of the oil and gas operations on the well, including the removal or sale of oil, gas, or brine.

History: 1996 AACS; 2002 AACS.

R 324.208 Termination of permit.

Rule 208. (1) A permit issued pursuant to R 324.201(4), or transferred pursuant to R 324.206(6) or rules that were in effect before the effective date of these rules, shall terminate 2 years after the date of issuance, unless the drilling operation has reached a depth of not less than 100 feet below the ground surface elevation and the drilling operation is diligently proceeding or the well is otherwise being used for its permitted purpose.

(2) Terminated permits may not be reactivated or transferred and the permit fee shall not be refunded.

History: 1996 AACS.

R 324.209 Temporary abandonment status.

Rule 209. (1) A permittee of a well that has not been used for its permitted purpose during 12 consecutive months shall plug the well, unless the well is granted temporary abandonment status. Temporary abandonment status shall be allowed only upon written application to, and approval of, the supervisor or authorized representative of the supervisor.

(2) The term of the initial temporary abandonment status shall not be more than 12 months, unless the well is shut-in awaiting the connection of a sales line. For a well that is shut-in awaiting connection of a sales line, the term of the initial temporary abandonment status shall be up to and including 60 months.

(3) Extensions for temporary abandonment status beyond the initial term provided in subrule (2) of this rule may be granted by the supervisor if, after application by the permittee, the supervisor determines that waste shall be prevented. When approving the extensions, the supervisor may require special actions and monitoring by the permittee to ensure the prevention of waste.

History: 1996 AACS.

R 324.210 Conformance bond or statement of financial responsibility requirements.

Rule 210. (1) A person who files an application for a permit to drill and operate a well under R 324.201, or who acquires a well under R 324.206(6), shall file a conformance bond with the supervisor on a form prescribed by the supervisor or shall submit a statement of financial responsibility under subrule (2) of this rule.

(2) A statement of financial responsibility shall consist of all of the following:

(a) A written statement which is signed by the person, which lists data that show that the person meets the criteria specified in subrule (3) of this rule, and which states that the data are derived from an independently audited year-end financial statement.

(b) A copy of an independent certified public accountant's report on examination of the person's financial statements for the latest completed fiscal year.

(c) A special report from the person's independent certified public accountant stating that the accountant has compared the data listed in the statement provided under subdivision (a) of this subrule with the amounts in the corresponding year-end financial statement and that nothing came to the attention of the accountant which caused the accountant to believe that the financial records should be adjusted.

(3) When a person submits a statement of financial responsibility instead of a conformance bond, a person shall meet the criteria of either subdivision (a) or (b) of this subrule, as follows:

(a) A person required to file the statement of financial responsibility shall have all of the following:

(i) Two of the following 3 ratios:

(A) ratio of total liabilities to net worth of less than 2.0.

(B) A ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities of more than 0.1.

(C) A ratio of current assets to current liabilities of more than 1.5. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.

(ii) Net working capital and tangible net worth each of which is not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond.

(iii) Total assets in Michigan that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.

(iv) A written statement from a certified public accountant which states that no matter came to the attention of the accountant which caused him or her to believe that the financial records should be adjusted.

(b) A person required to file a statement of financial responsibility shall have all of the following:

(i) A current rating for his or her most recent bond issuance of Aaa, Aa, A, or Bbb as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's.

(ii) A tangible net worth of not less than \$2,000,000.00.

(iii) Total assets in Michigan that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.

(4) A person shall submit a statement of financial responsibility to the supervisor not less than 60 days before the date the financial assurance is scheduled to take effect.

(5) After the initial submission of a statement of financial responsibility, the person shall send an updated statement of financial responsibility to the supervisor within 90 days after the close of each succeeding fiscal year.

(6) If a person no longer meets the requirements of subrule (3) of this rule, he or she shall send notice to the supervisor of the intent to establish alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule. The notice shall be sent, by certified mail, within 90 days after the end of the fiscal year for which the year-end review of the financial records shows that the person no longer meets the requirements. The person shall provide the alternate financial assurance within 120 days after the end of the fiscal year.

(7) The supervisor may, based on a reasonable belief that the person no longer meets the requirements of subrule (3) of this rule, require a report at any time from the person in addition to the information required by subrule (3) of this rule. If the supervisor finds, on the basis of a review of the report or other information, that the person no longer meets the requirements of subrule (3) of this rule, then the supervisor or authorized representative of the supervisor shall notify and inform the person. Within 30 days of the notification, the person shall provide alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule or shall bring the well to final completion. Failure to comply with this subrule shall be cause for immediate suspension of any or all components of the oil and gas operations on the well.

(8) The supervisor may require additional conformance bonds to ensure compliance with orders of the supervisor, excluding proration, compulsory pooling, or spacing orders. The conformance bond shall be in addition to the conformance bonds filed under R 324.212(a), (b), or (c) and shall be required only if the supervisor determines that the existing conformance bond is not adequate to cover the estimated cost of plugging the well and conducting site restoration or other obligations of the permittee under the order. A person is not required to file additional conformance bonds under this subrule if the person has filed a blanket conformance bond or bonds in an aggregate amount of \$250,000.00 or more, under R 324.212(d). Subject to the provisions of R 324.213, the additional conformance bond shall be released when the permittee has complied with all provisions of the orders of the supervisor.

(9) Conformance bonds that were in effect before the effective date of these rules shall remain in effect under the conditions upon which they were filed and accepted by the supervisor. However, in place of conformance bonds that were in effect before the effective date of these rules, a permittee may file conformance bonds or submit a

statement of financial responsibility under these rules for wells permitted under the act before the effective date of these rules.

History: 1996 AACCS; 2002 AACCS.

R 324.211 Liability on conformance bond.

Rule 211. (1) The liability on the conformance bond is conditioned upon compliance with the act, these rules, permit conditions, instructions, or orders of the supervisor. Subject to the provisions in R 324.213, liability shall cover all oil and gas operations of the permittee as follows:

- (a) Through transfer of the permit for the subject well under R 324.206(6).
- (b) Through final completion approved by the supervisor of the subject well.
- (c) Otherwise as approved by the supervisor.

(2) The supervisor shall look to the conformance bond for immediate compliance with, and fulfillment of, the full conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor. All expenses incurred by the supervisor in achieving compliance with, and fulfillment of, all conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor shall be paid by the permittee or the surety or from cash or securities on deposit. The claim shall be paid within 30 days of notification to the permittee or surety that expenses have been incurred by the supervisor. If the claim is not paid within 30 days, the supervisor, acting for and on behalf of the state, may bring suit for the payment of the claim.

History: 1996 AACCS; 2002 AACCS.

R 324.212 Conformance bond amounts.

Rule 212. A person who drills or operates a well shall file a conformance bond with the supervisor for the following amounts, as applicable:

(a) Single well conformance bonds shall be filed in the following amounts, as applicable:

- (i) \$10,000.00 for wells up to and including 2,000 feet deep, true vertical depth.
- (ii) \$20,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.
- (iii) \$25,000.00 for wells deeper than 4,000 feet, but not deeper than 7,500 feet, true vertical depth.
- (iv) \$30,000.00 for wells deeper than 7,500 feet, true vertical depth.

(b) A person may file single well conformance bonds in an amount equal to 1/2 of the amount specified in subdivision (a) of this rule for wells where well completion operations have not commenced. A person may not file single well conformance bonds under this subdivision for more than 5 wells. A person shall file single well conformance bonds in the full amount specified in subdivision (a) of this rule or file a blanket conformance bond as specified in subdivision (c) of this rule or submit a

statement of financial responsibility pursuant to R 324.210 before the commencement of well completion operations on any well.

(c) Blanket conformance bonds may be filed as an alternative to single well conformance bonds. If a blanket conformance bond is utilized, then the permittee shall provide the supervisor with a list of wells covered by the blanket conformance bond. A maximum of 100 wells may be covered by a blanket conformance bond. If the permittee has more than 100 wells in a category, then the additional wells may be covered by single well conformance bonds or additional blanket conformance bonds. Blanket conformance bonds shall be filed in the following amounts, as applicable:

(i) \$100,000.00 for wells up to and including 2,000 feet deep, true vertical depth.

(ii) \$200,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.

(iii) \$250,000.00 for wells deeper than 4,000 feet, true vertical depth.

(d) A person shall not be required to file a blanket conformance bond or bonds in an aggregate amount of more than \$250,000.00. When the aggregate amount of the conformance bonds is \$250,000.00, the permittee may file 1 blanket conformance bond of \$250,000.00 to cover all of his or her wells.

History: 1996 AACS.

R 324.213 Cancellation of conformance bonds issued by a surety.

Rule 213. (1) A surety company may cancel a conformance bond acquired under these rules upon 90 days' notice to the supervisor of the effective date of cancellation. However, the surety company shall retain liability for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred during the time the conformance bond was in effect.

(2) Forty days before the effective date of cancellation, as provided in subrule (1) of this rule, a permittee shall secure a conformance bond from another surety company authorized to do business in the state of Michigan, deposit cash or other securities, or bring the well to final completion. Failure to comply with this subrule shall be cause for the immediate suspension of any or all components of the oil and gas operations on the well.

(3) A surety company shall remain liable until the violations have been corrected and the corrections are accepted by the supervisor for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred at the well during the time the conformance bond was in effect before the effective date of cancellation.

History: 1996 AACS; 2002 AACS.

R 324.214 Limitation of additional liability of blanket conformance bonds.

Rule 214. A surety company may refuse to accept liability for additional wells under a blanket conformance bond by giving 10 days' notice by registered mail to the supervisor. Subject to the provisions of R 324.213, the blanket conformance bond

shall continue in full force and effect as to all other wells covered by the blanket conformance bond for which permits were granted or transferred to the permittee before the effective date of the notice.

History: 1996 AACCS.

R 324.215 Release of conformance bonds; release of well from blanket conformance bond.

Rule 215. (1) A conformance bond shall be released or a well shall be released from a blanket conformance bond, subject to the provisions of R 324.213, by the supervisor or authorized representative of the supervisor if a permittee disposes of the well and the permit for the well has been transferred to a new person pursuant to R 324.206(6) or if the well has been plugged and proper site restoration has been performed pursuant to R 324.1003, including the filing of the mandatory records.

(2) The release of the conformance bond or the release of a well from a blanket conformance bond does not release a permittee from liability for any violations of the act, these rules, permit conditions, instructions, or orders of the supervisor which occurred during the time the conformance bond was in effect and which have not been corrected and accepted by the supervisor.

(3) A conformance bond filed to comply with a permit that has become terminated shall be released if there is final completion.

History: 1996 AACCS.

R 324.216 Notice of release of conformance bond or release of well from blanket conformance bond.

Rule 216. (1) The supervisor or authorized representative of the supervisor shall advise the surety company and the permittee when the conformance bond has been released or a well has been released from a blanket conformance bond.

(2) The supervisor or authorized representative of the supervisor shall return cash to the permittee or securities to the institution that provided the bonding instrument when the conformance bond has been released.

History: 1996 AACCS.

PART 3. SPACING AND LOCATION OF WELLS

R 324.301 Drilling unit; well location; exceptions.

Rule 301. (1) The following provisions specify requirements for the location and spacing of wells to be drilled for oil or gas, except for injection wells and wells to be drilled in gas storage reservoirs, liquid petroleum gas storage reservoirs, unitized areas, and other specifically designated areas or geological formations where special spacing orders, rules, or determinations are in effect:

(a) The drilling unit for wells to be drilled for oil or gas shall be a legal subdivision of 40 acres, more or less, defined as a governmental surveyed quarter-quarter section of land. The drilling unit shall conform to 1 of the quarter-quarters of a governmental surveyed section of land, with allowances being made for the differences in the size and shape of sections as indicated by official governmental survey plats.

(b) The prescribed well location shall be in compliance with all of the following requirements, as applicable:

(i) A permit may be granted for the drilling of an exploratory well for oil or gas if the bottom hole location is not less than 330 feet from the drilling unit boundary.

(ii) The bottom hole location of development wells shall be located in a pattern at the same relative position in each drilling unit as that of the discovery well if the discovery well is located not less than 330 feet from the unit boundary. Exceptions for environmental reasons may be granted by the supervisor or authorized representative of the supervisor without a hearing if the bottom hole location is not more than 495 feet from the unit boundary. The uniform spacing of wells specified in this subdivision shall be followed until a special spacing order is adopted after a hearing pursuant to R 324.302 and part 12 of these rules.

(iii) If the bottom hole location of the discovery well is located more than 495 feet from the unit boundary, then a permit shall not be issued for the drilling of a development well until a hearing has been held to determine the need or desirability of adopting a special spacing order pursuant to R 324.302.

(iv) An off-pattern development well completed in a pool previously spaced pursuant to subrule (2) of this rule, a special spacing order adopted pursuant to R 324.302, or an existing special spacing order or rules that were in effect before the effective date of these rules shall not produce from that pool until a hearing pursuant to part 12 of these rules has been held to determine the need or desirability of granting an exception to these rules or orders.

(v) The well surface location and associated surface facilities for wells drilled and constructed after the effective date of these rules shall be located not less than 300 feet from existing recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and existing structures used for public or private occupancy.

(vi) The well separators, storage tanks, and treatment equipment installed or constructed after the effective date of these rules shall be located not less than 2,000 feet from type I and IIa public water supply wells and not less than 800 feet from type IIb and III public water supply wells, as defined in Act No. 399 of the Public Acts of 1976, as amended, being §325.1001 et seq. of the Michigan Compiled Laws.

(2) Exceptions to the location and spacing of wells may be granted in the following instances:

(a) The supervisor or authorized representative of the supervisor issues a permit for an off-pattern or nonconforming drilling unit well after a hearing to determine the need or desirability of issuing the permit. The wells shall be subject to the restricted or adjusted allowables that the supervisor considers necessary to ensure that the owners shall be afforded the opportunity to produce their just and equitable share of the oil and gas from the reservoir and to prevent waste.

(b) The supervisor or authorized representative of the supervisor issues a permit for a well where the surface location is closer than 300 feet from all existing recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and existing structures used for public or private occupancy upon presentation, to the supervisor, of written consent signed by the owner or owners of all existing fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and existing structures used for public or private occupancy.

(c) The supervisor determines the well surface location or location of associated surface facilities will prevent waste, protect environmental values, and not compromise public safety after a hearing pursuant to part 12 of these rules.

(d) The supervisor approves an application to pool or communitize tracts or mineral interests pursuant to R 324.303(2).

History: 1996 AACS.

R 324.302 Adoption of special spacing orders.

Rule 302. The development of an oil or gas field after the completion of a discovery well may warrant the adoption of a drilling unit and well spacing pattern other than as specified in R 324.301. An interested person may request, or the supervisor may schedule, a hearing pursuant to part 12 of these rules to consider the need or desirability of adopting a special spacing order to apply to a designated area, field, pool, or geological strata. The drilling unit established by the special spacing order may be smaller or larger than the basic 40-acre unit pursuant to R 324.301(1)(a).

History: 1996 AACS.

R 324.303 Voluntary pooling.

Rule 303. (1) The lessees or lessors, or both, of separate tracts or mineral interests that lie partially or wholly within an established drilling unit or larger area may pool or communitize the tracts or interests to form full drilling units or multiples of full drilling units and to develop the units pursuant to the provisions of these rules and the applicable orders of the supervisor.

(2) Persons who pool or communitize the tracts or interests may submit an application to the supervisor to abrogate spacing within the pooled or communitized area. The application shall include a certified copy of the pooling or communitization agreement and the plans for exploration or development. The supervisor may approve the application if all of the following conditions are satisfied:

(a) Waste is prevented.

(b) The drilling of unnecessary wells is prevented.

(c) A well is not located closer than 330 feet from the pooled or communitized area boundary or closer than 660 feet from adjacent wells.

(d) The distance between wells prevents interference.

(3) The lessees and lessors of separate tracts or mineral interests that lie partially or wholly within an area encompassing 2 or more full drilling units may voluntarily pool the tracts or interests to form a development unit for the purpose of receiving a permit for

a well as an exception to R 324.301 or special spacing orders adopted pursuant to R 324.302, if the bottom hole location of the well is found by the supervisor to ensure each producer is afforded the opportunity to use his or her just and equitable share of the reservoir energy and to prevent waste, including the drilling of unnecessary wells.

History: 1996 AACCS.

R 324.304 Compulsory pooling.

Rule 304. The supervisor may require the pooling of tracts or mineral interests within a drilling unit when the owners of the tracts or mineral interests have not agreed, or do not agree, upon the pooling of the interests to form full drilling units pursuant to these rules and the applicable spacing orders. The compulsory pooling shall be done on a basis which ensures that each owner of an interest within a drilling unit is afforded the opportunity to receive his or her just and equitable share of the production from the unit. Compulsory pooling shall be adopted by the supervisor only after a hearing pursuant to part 12 of these rules.

History: 1996 AACCS.

PART 4. DRILLING AND WELL CONSTRUCTION

R 324.401 Preventing waste.

Rule 401. A person who drills a well or wells as described in R 324.201(1) shall use every reasonable precaution to prevent waste.

History: 1996 AACCS.

R 324.402 Drilling notification.

Rule 402. Not less than 5 days before preparing the location and not less than 48 hours before moving drilling equipment on location, the permittee shall notify the supervisor or authorized representative of the supervisor and the surface owner when well construction is to begin. Notice may be given verbally or by first-class United States mail.

History: 1996 AACCS.

R 324.403 Construction of water wells used for drilling or surface facilities.

Rule 403. (1) A water well that is drilled and used for drinking water purposes during the drilling of the well or retained after drilling completion or final completion shall be drilled pursuant to rules promulgated under part 127 of Act No. 368 of the Public Acts of 1978, as amended, being §333.12701 et seq. of the Michigan Compiled Laws.

(2) A water well that is not to be retained after drilling completion or final completion shall be completed and abandoned as instructed by the supervisor and shall meet all of the following minimum requirements:

(a) Be located not less than 50 feet from drilling mud pits, pipe racks, salt and mud mixing sites, and the wellhead.

(b) Be drilled with chlorinated fresh water.

(c) Be grouted pursuant to the well construction and grouting rules contained in the well construction code promulgated under part 127 of Act No.368 of the Public Acts of 1978, as amended, being §333.12701 et seq. of the Michigan Compiled Laws.

(d) Geologic records shall be filed with the supervisor on a form prescribed by the supervisor.

(e) The wellhead, including annulus, shall be sealed and a check valve shall be installed in the surface discharge line to prevent contaminants from entering the well.

(f) The well shall be abandoned and plugged pursuant to the plugging and abandonment rules contained in the well construction code promulgated under part 127 of Act No. 368 of the Public Acts of 1978, as amended, being §333.12701 et seq. of the Michigan Compiled Laws.

History: 1996 AACCS.

R 324.404 Use of surface water for drilling prohibited; exception.

Rule 404. Surface water shall not be used for drilling fluid, except for emergency situations to protect the public health and safety.

History: 1996 AACCS.

R 324.405 Drilling fluids generally.

Rule 405. The drilling fluid used for drilling wells described in R 324.201(1) shall be capable of sealing off and protecting each oil, gas, brine, or fresh water stratum above the stratigraphic or producing horizon and controlling subsurface pressures. The water or brines used in the drilling fluid shall be from a source approved by the supervisor or authorized representative of the supervisor, used pursuant to approved safe drilling practice, and tested as instructed by the supervisor, except that only fresh water shall be used in the drilling of the hole for the surface casing.

History: 1996 AACCS.

R 324.406 Blowout prevention equipment.

Rule 406. (1) All wells shall be equipped with the following equipment:

(a) A double ram blowout preventer, including pipe and blind rams, and an annular-type blowout preventer or other equivalent control system as approved by the supervisor or authorized representative of the supervisor.

(b) Accessible controls both on the rig floor and at a safe remote location.

- (c) A kelly valve.
- (d) A drill pipe safety valve.
- (e) A flow line of the proper size and working pressure.
- (f) Blowout prevention equipment that has a rated working pressure which equals or exceeds the maximum anticipated surface pressure of the well.

(2) The blowout preventers shall be installed above ground level. The entire control equipment shall be in good working condition at all times. All outlets, fittings, and connections on the casing, blowout preventers, choke manifold, and auxiliary wellhead equipment that may be subjected to wellhead pressure shall be of a material and construction that will withstand the anticipated pressure. The lines from outlets on or below the blowout preventers shall be securely installed, anchored, and protected from damage.

(3) Blowout preventers, accumulators, and pumps shall be certified as operable under the product manufacturer's minimum operational specifications.

Certification shall include the proper operation of the closing unit valving, the pressure gauges, and the manufacturer's recommended accumulator fluids. Certification shall be obtained through an independent company that tests blowout preventers, stacks, and casings. Certification shall be required annually and shall be posted on the rig floor. In addition to the primary closing system, including an accumulator system, the blowout preventers shall have a secondary system. A combination of any 2 of the following secondary closing systems is acceptable:

- (a) Electric-operated pump.
- (b) Air-operated pump.
- (c) Hand-operated pump.
- (d) Nitrogen-operated pump.

Extensions that have hand wheels are not mandatory. Blowout preventer rams shall be of a proper size for the drill pipe being used or production casing being run in the well or shall be variable-type rams that are of the proper size range.

(4) Blowout prevention equipment shall be tested to a pressure commensurate with the expected formation pressure, but not less than 1,000 psig at surface for not less than 20 minutes, before drilling the plug on the surface casing, intermediate casing, and the production casing and before encountering all high-pressure formations and at other intervals as approved or requested by the supervisor. When requested, an authorized representative of the supervisor shall be notified before the commencement of a test. A record of each test, including test pressures, times, failures, and each mechanical test of the casings, blowout preventers, surface connections, surface fittings, and auxiliary wellhead equipment shall be entered in the logbook, signed by the driller, and kept available for inspection by the supervisor or authorized representative of the supervisor.

(5) A trip tank, or an accurate drilling fluid monitoring system, and a gas buster and flare system shall be in place when penetrating the A2 carbonate or any known or suspected overpressurized formations. Permission to change or modify the requirements specified in this subrule may be granted by submitting a written request to the supervisor or authorized representative of the supervisor. The requirements

may be changed or modified only after submission of a written request and receipt of written approval from the supervisor or authorized representative of the supervisor.

(6) An exception to all or part of this rule may be granted by the supervisor or authorized representative of the supervisor when drilling in shallow low-pressure formations. The supervisor or authorized representative of the supervisor may grant an exception upon receipt of an application for a permit that is accompanied by a written request and supportive data.

History: 1996 AACCS.

R 324.407 Drilling mud pits.

Rule 407. (1) The supervisor shall prohibit the use of a drilling mud pit if it is determined that the mud pit causes waste.

(2) Drill cuttings, muds, and fluids shall be confined by a pit, tank, or container which is of proper size and construction and which is located as approved by the supervisor or authorized representative of the supervisor.

(3) Only tanks shall be utilized while drilling a well that is located in an area zoned residential before January 8, 1993. The supervisor may grant an exception if the applicant or permittee makes a request for an exception as part of the written application for a permit. The supervisor may grant an exception if an applicant or permittee satisfactorily demonstrates that a municipal water system is utilized or required to be utilized.

(4) Drilling mud pits shall be located and plotted as instructed by the supervisor. Before construction of the mud pit, a permittee shall demonstrate to the supervisor or authorized representative of the supervisor that there is not less than 4 feet of vertical isolation between the bottom of the pit and the uppermost groundwater level. The bottom of the liner shall not be installed within the observed groundwater level as determined while excavating the pit. If groundwater is encountered during or before construction of the pit, then the permittee shall select 1 of the following options and obtain the approval for the option from the supervisor or authorized representative of the supervisor:

(a) The pit shall be designed and constructed so the bottom of the pit is not less than 4 feet above the groundwater level.

(b) The pit shall be designed and constructed so the bottom of the pit is above the groundwater level, but less than 4 feet above the groundwater level, and during encapsulation the pit contents shall be solidified using a method approved by the supervisor.

(c) The pit shall be relocated at the well site as approved by the supervisor or authorized representative of the supervisor.

(d) Tanks shall be used, and drilling muds disposed of, at an approved off-site location.

(5) Drilling mud pits shall be constructed as instructed by the supervisor and shall be in compliance with both of the following minimum requirements:

(a) Pits shall be constructed with rounded corners and side slopes of not less than 20 degrees measured from the vertical.

(b) The bottom and sides of the pit shall be free of objects that could penetrate the liner.

(6) Drilling mud pits shall be lined as instructed by the supervisor and shall be in compliance with all of the following minimum requirements:

(a) Pits shall be lined with 20-mil virgin polyvinyl chloride liners as approved by the supervisor or with other liners that meet or exceed the 20- mil virgin polyvinyl chloride liner requirement.

(b) Ample liner material shall be installed in a manner to allow for sags and material loading to reduce stress on the liner and allow for a minimum 10-foot flat apron on all sides, including enough liner material to underlay the drilling mud tank, salt washer, and shale shaker.

(c) The bottom of the lined pit shall be weighted with earthen material or water before anchoring the ends of the liner on the surface or placing drilling muds in the pit.

(d) Ripping, tearing, puncturing, or other destruction of a liner that may cause loss of fluids is prohibited.

(e) Liner field seams are prohibited, except for liner field seams that result from failures in the liner due to abrasion or accidental perforation, which shall be immediately repaired in the field using the manufacturer's recommended procedures.

(7) Drilling mud pits shall be utilized as instructed by the supervisor and shall be in compliance with all of the following minimum requirements:

(a) Solid salt cuttings shall not be released to inground drilling mud pits. Solid salt cuttings obtained while drilling below the base of the Detroit River Anhydrite to the top of the Amherstburg formation and while drilling through the formations in the Salina Group shall be collected in a

container at the shale shaker and either diverted to a device that will result in the dissolving of the solid salt cuttings and the proper disposal of the resultant brine pursuant to R 324.703 or removed from the drilling site to a licensed disposal facility.

(b) Twenty-four months after the effective date of these rules, only the following may be placed in a lined pit:

(i) Water-based drilling muds generated or utilized while drilling above the base of the Detroit River Anhydrite.

(ii) Drilling fluids generated or utilized while drilling above the base of the Detroit River Anhydrite.

(iii) Cuttings obtained while drilling above the base of the Detroit River Anhydrite.

(iv) Cuttings and the solid fraction of drilling muds generated or utilized while drilling below the base of the Detroit River Anhydrite, other than drill cuttings prohibited by subdivision (a) of this subrule, if the cuttings and the solid fraction of drilling muds do not contain free liquids as determined by the United States environmental protection agency, paint filter liquids test, method 9095, September 1986 edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained without charge as of the time of adoption of these rules from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, or from the United States Environmental Protection Agency, Office of Research and Development, 26 West Martin Luther King Boulevard, Cincinnati, Ohio 45268. A permittee shall provide the

necessary equipment at the site of the drilling rig to perform the paint filter liquids test.

(v) Water-based drilling muds and entrained cuttings, other than drill cuttings prohibited by subdivision (a) of this subrule, which are generated or utilized while drilling below the base of the Detroit River Anhydrite, which contain weighting materials or lost circulation materials, and which cannot reasonably be treated to eliminate free liquids as determined by the paint filter liquids test identified in paragraph (iv) of this subdivision, if approved by the supervisor or authorized representative of the supervisor.

(vi) Native soils.

(vii) Cementing materials.

(viii) Stiffening or solidification materials approved by the supervisor.

(c) During the initial 24 months after the effective date of these rules, only the following may be placed in a lined pit:

(i) Water-based drilling muds.

(ii) Drilling fluids.

(iii) Cuttings that are not prohibited by subdivision (a) of this subrule.

(iv) Native soils.

(v) Cementing materials.

(vi) Stiffening or solidification materials approved by the supervisor.

(d) Machine oil, refuse, completion and test fluids, liquid hydrocarbons, or other materials may not be placed in a lined pit.

(e) A permittee of a well shall, before encapsulation, test the fluids and cuttings remaining in the pit to determine the concentrations of benzene, ethylbenzene, toluene, and xylene and provide certification to the supervisor or authorized representative of the supervisor of the test results, except that a permittee is not required to test the fluids and cuttings remaining in the pit for benzene, ethylbenzene, toluene, and xylene if the well was drilled with water from a source approved by the supervisor and if, during the drilling operation, liquid hydrocarbons were not encountered.

(8) If a drilling mud pit is not closed immediately after reaching drilling completion, then a permittee of a well shall fence the perimeter of the drilling mud pit as soon as practical after drilling completion, but not later than 30 days after drilling completion, to prevent public access.

(9) A permittee of a well shall close a drilling mud pit as instructed by the supervisor and be in compliance with all of the following minimum requirements:

(a) All free liquids above the solids in the pit shall be removed to the maximum extent practical and disposed of in an approved disposal well or used in a manner approved by the supervisor.

(b) All drilling mud pits shall be stiffened before encapsulation, except as provided in subrule (4)(b) of this rule. Earthen materials shall be mixed with the pit contents to stiffen the pit contents sufficiently to provide physical stability and support for the pit cover. An alternative pit stiffening process approved by the supervisor may be used at the option of a permittee or if required by the supervisor.

(c) The drilling mud pit shall be carefully encapsulated and buried as soon as practical after drilling completion, but not more than 6 months after drilling completion.

(d) Apron edges of the liner shall be folded over the pit proper.

(e) The drilling mud pit shall be totally covered with a separate piece of material that meets or exceeds the specifications of a 20-mil virgin polyvinyl chloride cover as approved by the supervisor. The cover shall extend beyond the outer edges of the pit to cover and entirely encapsulate the pit and shall be sloped to provide surface drainage away from the pit.

(f) The drilling mud pit shall be buried not less than 4 feet below the original ground grade level.

History: 1996 AACS.

R 324.408 Surface casing.

Rule 408. (1) Surface casing shall be set a minimum of 100 feet below the base of the glacial drift into competent bedrock and 100 feet below all fresh water strata.

(2) Surface casing shall be cemented pursuant to R 324.411 and shall be circulated to the surface. If the cement falls back or fails to circulate to the surface, then the open annulus space shall be sealed with cement or other equivalent materials approved by the supervisor or authorized representative of the supervisor before resuming drilling.

History: 1996 AACS.

R 324.409 Wells drilled with cable tools.

Rule 409. Wells drilled with cable tools shall have the innermost string of casing equipped with a high-pressure master gate valve, flow line assembly, control head with oil saver, bottle with hydraulic lubricator, or other combination of equipment approved by the supervisor or authorized representative of the supervisor. All of the equipment shall be anchored to the surface casing or another casing string before drilling into or through a stratum known to contain or likely to contain oil or gas. The wellhead

equipment and casing to be installed to keep a well under control shall be pressure-tested commensurate to formation pressures, shall be in good working order when installed, shall be maintained in good working order throughout its use on the well, and shall be capable of being equipped with a bottle or lubricator, or both, when this method of control is necessary. The annulus shall be sealed with a bradenhead or other approved equipment that has a connection and valve for monitoring.

History: 1996 AACS.

R 324.410 Casing other than surface casing.

Rule 410. (1) A person who drills a well or causes a well to be drilled pursuant to R 324.201 or rules that were in effect before the effective date of these rules shall case the well in a manner approved by the supervisor to prevent waste.

(2) In addition to the surface casing, the supervisor may require or order a string of casing to be run to seal off any of the following:

- (a) A potentially productive oil or gas zone, or both.
- (b) A lost circulation zone.
- (c) A utilized natural brine or mineral zone.
- (d) A storage field.
- (e) A high-pressure zone.
- (f) A reservoir undergoing secondary recovery.

(3) All casing, except for casing set pursuant to R 324.413, shall be of sufficient weight, grade, and condition to have a designed minimum internal yield of 1.2 times the greatest expected well bore pressure to be encountered.

(4) For the purpose of proper sealing of wells and the prevention of waste, the minimum hole size for a given casing shall be as shown in table 410:

| Casing size outside diameter (O.D.)-inches | Minimum hole size inches | Minimum hole outside diameter - |
|---|--------------------------------|------------------------------------|
| Up to 7 O.D. | 1 1/2 | Casing O.D. + |
| More than 7 O.D. | 2 | Casing O.D. + |
| More than 10 3/4 O.D. | 3 | Casing O.D. + |

An exception to the minimum hole size as shown in table 410 may be granted by the supervisor or authorized representative of the supervisor, upon a written request by the permittee or applicant, if it is determined that the proposal provides proper sealing of the well. The supervisor or authorized representative of the supervisor may require a larger hole size for the surface hole than the size shown in table 410 in order to prevent waste.

History: 1996 AACCS.

R 324.411 Cementing.

Rule 411. Well casing shall be cemented by the pump and plug method or by a method approved by the supervisor and allowed to set undisturbed at static balance with the casing in tension, with surface pressure released, and with no backflow until the tail-in slurry reaches 500 psi compressive strength, but for not less than 12 hours; however, if backflow occurs, then the surface pressure shall not be released. The cement mixture shall be of a composition and volume approved by the supervisor or authorized representative of the supervisor. The casing shall be pressure-tested before the cement plugs are drilled or the casing perforated. The pressure at the top of the cement shall be equal to the expected operating pressure of the well; however, the test pressure shall not exceed the API specification for hydrostatic test pressure for new casing, API specification 5CT, specification for casing and tubing, April 1995, fifth edition, which is

adopted by reference in these rules. Copies are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$42.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$42.00 each.

History: 1996 AACCS.

R 324.412 Stripping of casing.

Rule 412. (1) A permittee of a well shall not pull or strip a string of casing from a well, except under the following circumstances:

(a) When provision is made for the removal of casing in the casing and sealing program specified in the application for permission to drill and operate.

(b) When casing is pulled and reset in the same stratum to obtain a satisfactory casing seat.

(c) When a well is being plugged back or is being plugged to the surface under the change of well status provided in R 324.511 or the plugging instructions set forth in R 324.902.

(2) A permittee of a well shall seal the annular space left open and the stratum exposed by the approved pulling and stripping of casing in a manner approved by the supervisor or authorized representative of the supervisor.

History: 1996 AACCS.

R 324.413 Drilling to strata beneath gas storage reservoirs.

Rule 413. Except when special orders have been adopted for specific reservoirs, areas, or practices, all of the following provisions about drilling to strata beneath gas storage reservoirs shall apply:

(a) The applicant shall send a copy of the entire drilling permit application and all revisions to the gas storage operator when the application and revisions are submitted to the supervisor. The gas storage operator shall have 10 business days to provide written comments to the supervisor.

(b) Drilling operations shall proceed through gas storage zones only when the gas storage reservoir pressure exerts a pressure gradient of not more than 0.50 psig per foot of true vertical depth to the top of the gas storage zone.

(c) Drilling rigs for wells drilled through gas storage reservoirs shall use rotary tools and shall have blowout prevention equipment pursuant to R 324.406. Complete operational checks of the well control appliances shall be made every 8 hours, with the well control system initially checked by pressure testing and checked again before drilling into the gas storage reservoir. The 8-hour checks shall be recorded in the daily driller's log.

(d) Surface casing and any other protective casing string required above the gas storage reservoir shall be new casing manufactured in compliance with the API

specifications for casing and tubing as adopted by reference in R 324.411, the properties and design of which have been approved by the supervisor or authorized representative of the supervisor. Surface casing and any other protective casing string shall be designed to withstand the required test pressures as set forth in R 324.410(3). Surface casing shall be set pursuant to R 324.408. Surface casing shall be cemented to the

surface and not disturbed for a period of 18 hours after completion of cementing. Cement shall attain a minimum compressive strength of 500 psi before disturbing the casing or resuming drilling. Surface casing, other protective casing strings, and blowout preventers shall be tested pursuant to R 324.406(4) before drilling out the cement, unless otherwise specified by the supervisor or authorized representative of the supervisor.

(e) Drilling fluid shall be circulated and conditioned at a point not less than 100 feet above the gas storage reservoir and shall be maintained with the following characteristics until the gas storage reservoir is cased off:

(i) Drilling fluid density shall be sufficient to provide a hydrostatic pressure of not less than 100 psig above the anticipated bottom hole pressure of the gas storage reservoir.

(ii) When drilling through the storage reservoir, the drilling fluid shall have a maximum fluid loss of 15 cubic centimeters or less as specified by the API standard procedure for testing drilling fluids, API RP 13B-1, entitled "Recommended Practice Standard Procedure for Field Testing Water- Based Drilling Fluids," June 1, 1990, first edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$30.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$30.00 each.

(f) Hole size shall be large enough to allow the running of a separate intermediate casing, which shall be set through each gas storage reservoir. The casing shall be new and conform to the API specification and performance properties for casing, tubing, and drill pipe, API BULL 5C2, entitled "Bulletin on Performance Properties of Casing, Tubing and Drill Pipe, May 31, 1987," twelfth edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$35.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$35.00 each. The gas storage operator shall be allowed to review the intermediate casing design and cementing program before implementation. Intermediate casing shall be set in competent stratum approximately 100 feet below the base of the gas storage reservoir or set as required by the supervisor or authorized representative of the supervisor. Intermediate casing shall be designed for the maximum gas storage reservoir operating pressure using a minimum collapse design factor of 1.125, a minimum burst design factor of 1.25, and a minimum tension design safety factor of 1.6. The minimum

hole size for a given size casing shall be pursuant to R 324.410(4). The hole shall be properly conditioned before running casing by circulating the drilling fluid at a rate equal to the

drilling circulating rate and by utilizing a circulating time equivalent of not less than twice the hole displacement. Casing shall be equipped with a sufficient number of centralizers and scratchers to ensure good cement distribution and shall include centralizers above and below the gas storage reservoir. All centralizers shall conform to the API for casing centralizers, API specification 10D, entitled "Specification for Bow-Spring Casing Centralizers," January 1, 1995, fifth edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$27.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$27.00 each. Casing shall include float equipment that will prevent movement after the cementing operation is completed. If conditions allow, casing shall be rotated or reciprocated slowly during cementing. The mill varnish shall be removed from the casing shoe to a point 100 feet above the storage reservoir. An acceptable spacer that is at least as dense as the drilling fluid shall precede the cement to aid in removing the drilling fluid. Cement mix water shall be tested before the cementing

operation to ensure compatibility with the cement. The casing shall be cemented using a sufficient cement volume to circulate cement to the surface. Multistage cementing operations and external casing packers may be used only with the approval of the supervisor or authorized representative of the supervisor. Cemented casing shall not be disturbed for a period of 18 hours. Cement shall also attain a minimum compressive strength of 500 psi based on cement tables before disturbing the casing or resuming drilling. Absent backflow, the internal casing pressure shall be relieved after the cementing operation. Intermediate casing and the blowout preventers shall be tested to a pressure of not less than 1,500 psig at the surface or as otherwise specified by the supervisor or authorized representative of the supervisor, and the pressure shall be held for not less than 20 minutes before drilling out the cement.

(g) When additional intermediate casing is run inside the innermost storage zone casing, below the base of the Detroit river group, the intermediate casing string and cementing shall be pursuant to these rules and the orders and instructions issued by the supervisor.

(h) A centralized cement bond evaluation log or equivalent test approved by the supervisor shall be performed on the storage zone casing before running subsequent casing or plugging the hole, but not sooner than 48 hours after cementing the storage zone intermediate casing. A description of problems occurring while running or cementing casing shall be recorded in the daily driller's log. If unsatisfactory conditions are indicated, including unsatisfactory cement bonding, gas to the surface in the cellar area, or gas pressure on the surface or intermediate casing string annulus, and additional testing does not provide sufficient proof the unsatisfactory condition does not exist, then the permittee shall initiate remedial action before additional casing is installed.

(i) Wellhead equipment and assemblies shall conform to the API specification for wellhead equipment, and shall include slip and seal assemblies for all casings, unless an exception is approved by the supervisor or authorized representative of the supervisor. The API specification for wellhead equipment is specification 6A, entitled "Specification for Wellhead and Christmas Tree Equipment," February 1, 1996, seventeenth edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$55.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$55.00 each. The wellhead shall be assembled to allow the monitoring of the pressure of each annulus at the surface.

(j) The permittee shall notify the gas storage operator before moving personnel or equipment, or both, onto the well location to ensure all of the following:

(i) That the proposed well location does not endanger gas storage facilities or storage operations.

(ii) That the movement of drilling rigs, related trucks, and equipment does not endanger gas storage facilities or storage operations.

(iii) That the gas storage operator is allowed to witness drilling operations that impact the gas storage reservoir.

History: 1996 AACS.

R 324.414 Requests for exceptions to R 324.406 through R 324.413.

Rule 414. If a permittee of a well demonstrates alternative methods that are in compliance with the requirements of these rules, then the request for an exception to the provisions of R 324.406 through R 324.413 and the rationale for the alternate methods shall be included in the application for permission to drill or shall be submitted in writing to the supervisor.

History: 1996 AACS.

R 324.415 Elevations; well depth measurements.

Rule 415. (1) Drilling reference elevations of the kelly bushing or rig floor and a described point on the production casing shall be measured, recorded, and filed pursuant to R 324.418.

(2) The depth of the top of key geologic strata shall be accurately determined and shall be entered in the drilling log book and become a part of the record and log of the well. Additional requirements for directional drilled wells are contained in R 324.421.

History: 1996 AACS.

R 324.416 Well records; service company records; confidentiality.

Rule 416. (1) A person who drills, deepens, changes well status, or completes a well under R 324.201, R 324.420, R 324.511, or rules that were in effect before the effective date of these rules shall keep and preserve at the well, during drilling, deepening, changes in well status, or completion operations, accurate records recording all geologic strata penetrated, casing and cement used, and other information as may be required by the supervisor in connection with the drilling of the well.

(2) When requested by the supervisor or authorized representative of the supervisor, a permittee of a well shall file a copy of service company records, including records of all of the following:

- (a) udding, cementing, and squeeze operations.
- (b) Acidizing.
- (c) erforating.
- (d) Fracturing.
- (e) hooting.
- (f) Temperature surveys.
- (g) Bond logs.
- (h) Caliper surveys.
- (i) Wireline borehole and strata evaluation logs.

The supervisor may request the records directly from the service company.

(3) A permittee of a well shall make all records and information available to the supervisor or authorized representative of the supervisor at all times. A permittee shall protect the records from damage or destruction due to a preventable cause. All well data and samples provided to the supervisor or authorized representative of the supervisor as required by these rules shall be held confidential commencing with the receipt of a written request of the permittee and shall remain confidential for 90 days after drilling completion. Information on volumes, concentrations, and times of releases, spills, or leaks of gas, brine, crude oil, oil or gas field waste, or products and chemicals used in association with oil and gas exploration, production, disposal, or development is not subject to confidentiality.

History: 1996 AACCS; 2001 AACCS.

R 324.417 Samples of drill cuttings and cores.

Rule 417. (1) A person who drills a well pursuant to R 324.201 or rules that were in effect before the effective date of these rules shall take and preserve, for the duration of the drilling, properly identified samples of the drill cuttings taken from the base of the drift to the total depth.

(2) A permittee of a well shall take and preserve drift samples when specifically requested by the supervisor or authorized representative of the supervisor. The samples shall be available to the supervisor upon request.

(3) When requested before the commencement of drilling, a permittee of a well shall deliver 1 complete set of drill cutting samples, washed and dried, to the supervisor within 90 days after drilling completion. Samples not requested may be disposed of in a manner approved by the supervisor upon drilling completion.

(4) When a permittee of a well obtains whole cores or core samples during the drilling of a well, the permittee shall provide the supervisor with a minimum of 90 days' notification of his or her intention to dispose of or destroy the whole cores or core samples. When requested by the supervisor, pursuant to the notification, the permittee shall deliver the whole cores or core samples to the supervisor within 90 days of the request.

History: 1996 AACCS.

R 324.418 Filing of well records.

Rule 418. A permittee of a well who drills a well shall file all of the following records with the supervisor:

(a) Within 60 days after drilling completion, a complete written geologic description log or record of the well, certified by the permittee, on forms prescribed by the supervisor, including all of the following information:

(i) Elevations pursuant to R 324.415.

(ii) Depth to, and thickness of, water-bearing sands and gravels in the glacial drift as determined by a geologist, including fill-up and volumes of the water, if available.

(iii) The measured and true vertical depth to geologic strata penetrated, and accurate and complete lithologic descriptions, including color, hardness, and the character of the rock as determined by a geologist.

(iv) A record of all shows of oil or gas, or both, encountered.

(v) A record of all lost circulation zones encountered.

(vi) A record of all hole sizes, casings, and liners used, including the size, weight, grade, amount, and depth set for each casing string.

(vii) The amount of cement used and the calculated elevation of the top of the cement, unless the supervisor or authorized representative of the supervisor requests the elevation to be measured.

(viii) Data on all drill stem tests. The minimum education and experience requirements for a geologist to determine the information required in this subrule are graduation from a university or college that has an accredited 4-year curriculum in a geological science, receipt of a 4-year degree in a geological science, and 2 years of practical experience providing geological services, including consultation, investigation, evaluation, planning, or responsible supervision of geological activities requiring the application of geologic principles and techniques.

(b) Within 60 days after well completion operations, data on all perforating, acidizing, fracturing, shooting, and testing.

(c) Within 60 days of plugging the well, all of the following information:

(i) Accurate and complete descriptions of cores.

(ii) Data on all bridge plugs set, make and type of plug, depth set, whether left in place or removed, and details of plug-back operations below the bridge plug.

(iii) The amount of casing stripped from the well.

History: 1996 AACCS.

R 324.419 Borehole and strata evaluation logging.

Rule 419. (1) A permittee of a well shall file a copy of all borehole and geologic strata evaluation logs or other logs with the supervisor within 30 days after conducting the logging run.

(2) Upon the request of the supervisor or authorized representative of the supervisor, a logging service company shall provide a listing of all borehole and geologic strata evaluation logs or other logs run.

History: 1996 AACCS.

R 324.420 Continuation of drilling; deepening operations.

Rule 420. (1) A permittee of a well who desires to continue the drilling of a well below the permitted depth, but within the permitted stratigraphic or producing horizon where drilling completion has occurred, shall file an application for change of well status pursuant to R 324.511.

(2) A permittee of a well who desires to deepen a well below the permitted stratigraphic or producing horizon where well completion has occurred shall file an application for a deepening permit pursuant to R 324.206(4).

(3) A permittee of a well shall save samples of the drill cuttings and cores during the continuation of drilling or deepening operations pursuant to R 324.417.

(4) A permittee of a well shall file records of the continuation of drilling or deepening operations with the supervisor pursuant to R 324.418, R 324.419, and R 324.511.

History: 1996 AACCS.

R 324.421 Survey of directionally drilled well.

Rule 421. A permittee of a well shall conduct a directional well survey on each directionally drilled well, with actual survey points taken at a maximum of 100-foot intervals from the point of deviation to total depth and including the end point of the borehole or at an interval as approved by the supervisor or authorized representative of the supervisor. However, for a well that is to be plugged and abandoned immediately upon drilling completion, the supervisor shall approve survey points at more than 100-foot intervals, but not more than 500-foot intervals. All information obtained during and after the survey shall be available to the supervisor or

authorized representative of the supervisor. A permittee shall file a certified copy of the survey with the supervisor within 30 days after drilling completion. A well shall not be produced until the survey has been filed with the supervisor.

History: 1996 AACCS.

R 324.422 Sealing of cellars and rat and mouse holes.

Rule 422. (1) A permittee of a well shall seal and set into the earth rat and mouse hole casings and cellars in a manner to prevent the migration of the drilling fluid and other foreign fluids into the groundwater.

(2) Immediately after drilling completion, a permittee of a well shall fill rat and mouse holes on all rotary-drilled wells solidly from bottom to top with cement or other suitable material approved by the supervisor.

History: 1996 AACS.

PART 5. COMPLETION AND OPERATION

R 324.501 Responsibility for oil and gas operations.

Rule 501. A permittee of a well is responsible for the oil and gas operations of his or her well.

History: 1996 AACS; 2002 AACS.

R 324.502 Oil, brine, or associated oil or gas field waste; storage.

Rule 502. A permittee of a well shall not store or retain oil, brine, or associated oil or gas field waste in earthen reservoirs or open receptacles.

History: 1996 AACS.

R 324.503 Well completion operations.

Rule 503. (1) A permittee of a well shall use proper well control measures to avoid an uncontrolled flowing of the well. All fluids, including acid, load water, chemicals, and associated hydrocarbons, shall be produced or swabbed back to approved containers. A permittee of a well shall not use earthen pits or reservoirs to contain fluids produced from the well.

(2) A permittee shall notify the supervisor or authorized representative of the supervisor when a well completion operation starts.

History: 1996 AACS.

R 324.504 Well sites and surface facilities.

Rule 504. (1) A person shall use every reasonable precaution to stop and prevent waste. All wells, surface facilities, gathering lines, and flow lines shall be constructed and operated so that the materials contained in the facilities do not cause waste. An oil and gas operation shall not be commenced or continued at a location where it is likely that a substance may escape in a quantity sufficient to pollute the air, soil, surface waters, or groundwaters or to cause unnecessary endangerment of public health, safety,

or welfare until the permittee has complied with the methods and means to prevent pollution or eliminate the unnecessary endangerment of public health, safety, or welfare as specified by the supervisor.

(2) The surface facilities shall be located not less than 300 feet from all of the following:

(a) Existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption.

(b) Existing structures used for public or private occupancy.

(c) Existing areas maintained for public recreation.

(d) The edge of the traveled portion of an existing interstate, United States, or state highway. Pump jacks are exempt from this requirement.

(3) Surface facilities may be located closer than 300 feet from existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption and existing structures used for public or private occupancy under either of the following conditions:

(a) Upon presentation to the supervisor of a written consent signed by the owner or owners of all existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption and existing structures used for public or private occupancy.

(b) After a hearing under part 12 of these rules, the supervisor determines that the surface facility location will prevent waste, protect environmental values, and not compromise public safety.

(4) A permittee of a well shall not begin the installation of a surface facility or flow line without approval of the supervisor or authorized representative of the supervisor. A permittee shall make a written request for approval to construct and operate or to substantially reconstruct and operate a surface facility or flow line and shall file the request with the supervisor. The request may be filed with the application for a permit to drill and operate a well. The request shall have a detailed description and plan of the proposed facility, which shall include all of the following information:

(a) An environmental impact assessment if the surface facility is located more than 300 feet from the well or wells it serves.

(b) The location of the proposed surface facility or flow line.

(c) Identification of the well or wells to be connected to the surface facility or flow line.

(d) Reasonable and necessary measures to protect environmental values associated with existing adjacent land uses, including berming, screening, and access road location.

(e) Information relative to the approximate distances and directions from the surface facility or flow line to special hazards or conditions identified in R 324.201(2)(b)(iv).

(5) Upon receipt of a written request for approval to construct and operate or to substantially reconstruct and operate a surface facility or flow line under subrule (4) of this rule, other than a request to construct and operate a surface facility or flow line made as part of an application for permit to drill and operate a well, the supervisor or authorized representative of the supervisor shall have up to 30 days to review the request to determine if the request is accurate and complete. If the request is determined to

be inaccurate or incomplete, the supervisor or authorized representative of the supervisor shall provide, within the 30-day period, to the person making the request, a notice that the request is inaccurate or incomplete and what changes or additional information shall be submitted. Upon receipt of the requested information, the supervisor or authorized representative of the supervisor shall have up to an additional 15 days to review the information to determine if the request is accurate and complete. Upon completion of the review process, the supervisor or authorized representative of the supervisor shall approve or deny the request within 10 business days. A request shall be approved if the supervisor determines that construction and operation of the proposed surface facility or flow line will prevent waste, protect environmental values, and not compromise public safety. Upon approval by the supervisor or authorized representative of the supervisor, a request made under this rule shall become part of, and subject to, the provisions of the permit to drill and operate the well or wells served by the surface facility.

(6) A person or permittee of a well shall not install a gathering line, carrying gas with more than 300 ppm hydrogen sulfide or a flow line or facility piping carrying gas from a class I H₂S well and that is subject to a maximum working pressure of more than 125 psig that does not meet the construction requirements in R 324.1130.

(7) Surface facilities constructed after November 15, 1989, shall have secondary containment under R 324.1002.

(8) If discharges to the air, surface waters, or groundwater of the state are likely to occur at a surface facility, then a permittee shall apply for and obtain all necessary state and federal discharge permits before operating the surface facility.

History: 1996 AACCS; 2001 AACCS; 2002 AACCS.

R 324.505 Pump jacks in residential areas.

Rule 505. In areas zoned residential before January 8, 1993, if pumps or pump jacks are installed after the effective date of these rules, then a permittee of a well shall comply with the following conditions:

(a) Electrically driven pumps shall be utilized or, if judged impractical by the supervisor, pumps may be driven by other power sources that have hospital-type mufflers or the equivalent.

(b) Pump jacks within 600 feet of structures used for public or private occupancy shall be fenced to prevent public access.

History: 1996 AACCS.

R 324.506 Flare stacks and surface facilities in residential areas.

Rule 506. (1) In areas zoned residential before January 8, 1993, a permittee of an oil or gas well, or both, which contains 300 ppm or more of hydrogen sulfide and which reaches drilling completion after March 1, 1987, shall not locate surface facilities and associated flare stacks within a residentially zoned area, unless either of the following provisions is satisfied:

(a) The supervisor receives written notice from the local government that has zoning jurisdiction that the local government does not object to the location of the facility within the residentially zoned area.

(b) The applicant or permittee is granted a variance from the supervisor pursuant to a hearing before the supervisor. The petitioner shall notify the local governmental body of the hearing and has the burden of demonstrating to the supervisor that the planned surface facility and associated flare stacks would have minimum impacts upon existing or proposed structures used for public or private occupancy.

(2) The supervisor may grant an exception to permit flaring in a residentially zoned area for testing the production characteristics of a well for a period of not more than 15 days, unless a longer period is authorized by the supervisor. The permittee shall submit a written application to the supervisor for the exception detailing the time period of, and the equipment to be used for, the testing.

(3) If the oil or gas well, or both, reached drilling completion between March 1, 1987, and January 8, 1993, and the area was not zoned residential at the time the well reached drilling completion, the well is not subject to this rule.

History: 1996 AACCS.

R 324.507 Tubing.

Rule 507. A permittee of a well shall tube a producible oil and gas well. A permittee of a well shall test and produce all oil through the tubing. Injection wells utilized for gas storage are exempt from this rule.

History: 1996 AACCS.

R 324.508 Multiple zone completions.

Rule 508. The supervisor or authorized representative of the supervisor may allow multiple zone completions upon written application to, and approval by, the supervisor.

History: 1996 AACCS.

R 324.509 Commingling of oil and gas.

Rule 509. The supervisor or authorized representative of the supervisor may allow commingling in the well bore of oil and gas from 2 or more pools upon written application to, and approval by, the supervisor.

History: 1996 AACCS.

R 324.510 Central production facility.

Rule 510. (1) A permittee of a well shall not begin the operation of a central production facility without the approval of the supervisor or authorized representative of the supervisor. A permittee of a well shall make a written request for

approval to operate a central production facility and shall file the request with the supervisor. The supervisor or authorized representative of the supervisor shall approve or deny the request within 30 days of receipt. The request shall have a detailed description and plan of the proposed facility, which shall include all of the following information:

- (a) The location of the proposed central production facility.
 - (b) Identification of the wells or production units to be connected to the central production facility.
 - (c) Identification of the fluid streams that will be commingled.
 - (d) A schematic of the flow schemes, including the location of all of the following:
 - (i) Individual gas, oil, condensate, and water meters.
 - (ii) Facility and sales gas, oil, condensate, and water meters.
 - (iii) Fuel use and artificial lift meters.
 - (iv) On-site surface equipment.
 - (e) The method proposed for measurement or allocation of fluid volumes, if individual and facility meters are not used. The method proposed for measurement may include allocation of production to each well using a molal balance scheme.
 - (f) Identification of the type and model of the gas, oil, condensate, and water meters that are proposed.
 - (g) Quality assurance procedures, including calibration and proofing, that will be implemented to maintain the accuracy of the meters.
 - (h) The procedure or method proposed for allocation of each commingled fluid stream.
 - (i) If production from production units or unitized areas is included in the central production facility, a copy of the pooling or communitization agreement filed pursuant to R 324.303(2) or the unitization agreement developed pursuant to sections 61701 to 61738 of the act.
- (2) A permittee of a well shall obtain the approval of the supervisor or authorized representative of the supervisor before implementing a subsequent addition, alteration, or change to the central production facility that affects flow measurement or reporting methods.
- (3) A permittee of a well shall submit monthly reports of meter readings, metered production, and allocated production on forms approved by the supervisor.

History: 1996 AACCS.

R 324.511 Change of well status.

Rule 511. (1) A permittee of a well who desires to change the status of a well by an oil and gas operation, including temporary abandonment, except as allowed by R 324.704, and additional acid or other stimulation treatment, shall file an application for change of well status with the supervisor. The application shall set forth, in detail, the kind of oil and gas operation to be accomplished and the plan for protecting all oil, gas, brine, or fresh water strata the well has penetrated. A permittee shall not begin the oil and gas operation until he or she has received approval from the supervisor or authorized representative of the supervisor and provided notification to the supervisor or authorized representative of the supervisor of the date the oil and gas operation will commence.

(2) A permittee of a well who changes the status of a well shall file, with the supervisor, within 60 days, a complete change of well status record on forms prescribed by the supervisor, except that a record shall not be filed when the change of well status operation is for temporary abandonment purposes.

History: 1996 AACS; 2002 AACS.

PART 6. PRODUCTION AND PRORATION

R 324.601 Proration of oil and gas wells and fields.

Rule 601. (1) The supervisor may prorate production from wells or fields, or both, to conserve reservoir energy, to maximize oil and gas recovery, to ensure that the owners shall be afforded the opportunity to produce their just and equitable share of the oil and gas from the reservoir, and to prevent waste by setting allowable production rates. The prorated allowables shall be established by order of the supervisor after a hearing pursuant to part 12 of these rules.

(2) The proration order shall specify the maximum amount of oil or gas, or both, that may be produced in a 24-hour day.

History: 1996 AACS.

R 324.602 Tolerance from regularly calculated production.

Rule 602. (1) A permittee of a well shall be allowed to make up underproduction of oil and gas if the underproduction is not more than 3 days' allowable production from each well for a calendar month. The underproduction of oil and gas from each well shall be adjusted by the permittee during the next calendar month.

(2) If in a reservoir under multiple ownership an emergency condition arises which is beyond the control of the permittee of the well and which prevents the permittee from producing his or her regularly scheduled allowable production or prevents the purchaser from running his or her regularly scheduled amounts of oil or gas during a calendar month and the underproduction is more than 3 days' allowable production, then the permittee may apply in writing to the supervisor for permission to make up the underages. The supervisor or authorized representative of the supervisor may grant the request if reservoir waste does not occur.

(3) In a well that has produced over its daily oil allowable by more than 3 days or its daily gas allowable by more than 30 days, the permittee of the well shall cease producing the well or further limit the oil or gas production as approved by the supervisor or authorized representative of the supervisor until the overage is made up.

History: 1996 AACS.

R 324.603 Transfer of allowables between wells prohibited.

Rule 603. A permittee of a well shall not produce oil or gas from a well

above the allowables pursuant to R 324.602 to make up for the failure of another well or wells to produce a full allowable or allowables.

History: 1996 AACS.

R 324.604 Well hookups to tanks or separators, or both, for prorated wells.

Rule 604. A permittee of a well shall ensure that well is hooked up or connected to separators or stock tanks, or both, so that the well's oil, gas, and brine production entrained in the oil or gas may be segregated from all other wells and so that individual measurements of daily oil, gas, and brine production of each well may be made. Exceptions to this rule may be granted if the supervisor or authorized representative of the supervisor approves an alternative measurement and allocation method pursuant to R 324.510.

History: 1996 AACS.

R 324.605 Capacity tests for prorated wells.

Rule 605. (1) The supervisor or authorized representative of the supervisor may require capacity tests, including test requirements and reporting on wells subject to proration. The supervisor may amend or abrogate a previously adopted test requirement, or set up new test requirements, when necessary to adapt to changing field conditions.

(2) A wide open capacity test of a well shall not be made if the test will create waste or result in the coning of gas or water. All gauges and tests shall be made by methods and at times that will result in a determination of the true productive capacity of the wells under normal operating conditions. Reports submitted to the supervisor or authorized representative of the supervisor shall be certified by the permittee or an authorized representative of the permittee.

History: 1996 AACS.

R 324.606 Production tests for newly completed or change of status wells subject to proration.

Rule 606. A permittee of a well shall conduct production tests, not to exceed the prorated allowable, on a newly completed well. On a previously tested well, when a change of well status or the stimulation of the well may have resulted in changes in producing capacity, the tests shall be commenced within 10 days after well completion, change of well status, or production stimulation treatments. A permittee shall report the results of all production tests to the supervisor or authorized representative of the supervisor within 30 days after completion of the tests and shall certify the results on forms prescribed by the supervisor.

History: 1996 AACS.

R 324.607 Special capacity tests.

Rule 607. (1) The supervisor or authorized representative of the supervisor may, at any time, require the permittee of a well, either with or without previous notice, to perform a special producing capacity test or supply production data for a well or wells. The supervisor or authorized representative of the supervisor may witness, direct, or make measurements during the test, subject to proper safety supervision by the permittee.

(2) A producer who wishes to gather data to determine the maximum efficiency rate of a well may conduct tests as approved by the supervisor or authorized representative of the supervisor.

History: 1996 AACS.

R 324.608 Responsibility for regulating production.

Rule 608. A permittee of a well shall be responsible for controlling production from wells so that an individual well does not produce more oil or gas than allowed.

History: 1996 AACS.

R 324.609 Reservoir evaluation tests.

Rule 609. The supervisor or authorized representative of the supervisor may require that subsurface pressures, gas-oil ratios, and other tests on wells be conducted and submitted at least once per year so that reservoir data may be maintained.

History: 1996 AACS.

R 324.610 Reports of oil and gas produced, purchased, or transported.

Rule 610. A person who is producing, purchasing, or transporting oil or gas in a field shall be required by the supervisor or authorized representative of the supervisor to report, within 45 days after the end of the month of production, the amount of oil or gas, or both, produced, purchased, or transported during the calendar month of production, unless an extension of time or an exemption from monthly reporting is granted by the supervisor. The reports shall be certified by the person who is producing, purchasing, or transporting oil or gas in a field on forms prescribed by, or acceptable to, the supervisor or authorized representative of the supervisor.

History: 1996 AACS.

R 324.611 Petition for change in field allowables.

Rule 611. A permittee of a well who believes proration allowables have ceased to prevent waste may petition the supervisor for a change in field allowables. The petition shall include all of the information specified in part 12 of these rules. The

supervisor shall schedule a meeting to consider the petition. The permittee shall furnish a copy of the notice of the meeting to all owners of record, operators, lessees, and lessors of the oil and gas mineral interests underlying the lands directly affected by the proposed action. If the proposed action is contested by an interested party, then a hearing is required pursuant to part 12 of these rules. After a review and evaluation of the data presented, either administratively or by hearing, the supervisor shall issue an order of determination.

History: 1996 AACCS.

R 324.612 Secondary oil recovery projects; hearings; records.

Rule 612. (1) A person desiring to inject water, gas, or other fluid into a producing formation or use other technology for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir shall file a petition for hearing pursuant to part 12 of these rules.

(2) The operator of a secondary recovery project shall keep accurate records of all oil, gas, and brine produced, volumes of fluids injected, and injection pressures. The operator shall file reports of the data and other data as may be required with the supervisor at regular intervals, as specified.

History: 1996 AACCS.

R 324.613 Production from directionally drilled wells.

Rule 613. (1) An allowable production rate shall not be assigned or production permitted from a directionally drilled well until a certified well survey has been furnished by the permittee of a well to the supervisor. Directionally drilled wells completed at a point in the objective formation that is contrary to the established well spacing pattern shall be limited or restricted in the same manner as provided for regularly drilled wells located contrary to spacing.

(2) The production from directionally drilled wells that can be produced contrary to the established well spacing pattern shall be limited or restricted in the same manner pursuant to R 324.301(2) for regularly drilled wells located contrary to the applicable spacing pattern. A permittee of a well shall not conduct production testing from a directionally drilled well until a certified well survey has been furnished to, and approved by, the supervisor or authorized representative of the supervisor pursuant to R 324.421. Injection wells utilized for gas storage are exempt from this subrule.

History: 1996 AACCS.

PART 7. DISPOSAL OF OIL OR GAS FIELD WASTE, OR BOTH

R 324.701 Prevention of pollution, contamination, or damage.

Rule 701. The storage, transportation, or disposal of brine, crude oil, or oil or gas field waste that results in, or that the supervisor determines may result in, pollution is

prohibited. A permittee of a well shall ensure that wastes are stored, transported, and disposed of in a manner approved by the supervisor and consistent with all applicable state and federal laws and regulations.

History: 1996 AACS.

R 324.702 Pit disposal prohibited; exception.

Rule 702. Except as provided in R 324.407(2), a permittee of a well shall not dispose of oil or gas field waste, or both, in earthen pits.

History: 1996 AACS.

R 324.703 Disposal of oil or gas field fluid wastes, or both.

Rule 703. A permittee of a well shall inject oil or gas field fluid wastes, or both, into an approved underground formation in a manner that prevents waste. The disposal formation shall be isolated from fresh water strata by an impervious confining formation.

History: 1996 AACS.

R 324.704 Use of annular space for disposal prohibited; temporary exception.

Rule 704. A permittee of a well shall not dispose of fluid wastes in the annular space between strings of casing. The supervisor may grant a temporary exception to the prohibition if the supervisor determines that annular disposal will not damage underground fresh water, oil, gas, or other minerals.

History: 1996 AACS.

R 324.705 Disposition of brine.

Rule 705. (1) A permittee of a well is responsible for the proper disposal of all brines produced in association with oil or gas production, or both, or brines accumulated in drilling mud pits or tanks and shall ensure that waste, as defined in section 61501(p) of the act, will not occur. A permittee may convey or transfer brines for other purposes if the brines are in compliance with the conditions provided in subrule (3) of this rule. A permittee shall be required to maintain records on the disposition of all brines pursuant to subrule (4) of this rule, and a permittee shall not have continuing liability relative to the transport or application of the brines after the brines are properly conveyed or transferred.

(2) Upon the effective date of these rules, a permittee of a well shall not use brines produced in association with drilling for oil and gas, or both, and accumulated in drilling mud pits for ice or dust control purposes.

(3) Twelve months after the effective date of these rules, a permittee shall dispose of all brines as provided in R 324.703 or shall use the brines in a manner approved by the supervisor; however, some brines may be conveyed or transferred and used for ice and dust control and road stabilization if all of the following conditions are satisfied:

(a) Brines shall not be used for ice and dust control and road stabilization if the brines are obtained from wells containing more than 20 ppm hydrogen sulfide in the gas stream, unless it can be shown that there is less than a 500-ppm-hydrogen sulfide concentration present in the brine.

(b) The brines shall contain a 20,000-milligrams-per-liter or more concentration of calcium.

(c) The brines shall contain less than a 1,000-micrograms-per-liter concentration of each of the following aromatic hydrocarbons:

(i) Benzene.

(ii) Ethylbenzene.

(iii) Toluene.

(iv) Xylene.

(d) Only brines that have been approved by the supervisor or authorized representative of the supervisor may be exempt from the disposal requirements of R 324.703. For a permittee to obtain approval to exempt brine from the disposal requirements of R 324.703, all of the following conditions shall be satisfied:

(i) The brine shall be tested annually within 90 days of January 1 of each year by the person seeking authorization to utilize the brine for other purposes. The brine shall be tested using any of the following procedures:

(A) Method 200.7 ICP-AES, entitled "Method for Trace Element Analysis of Water and Wastes, Methods for Chemical Analysis of Water and Wastes," March 1983 edition.

(B) Method 6010A, entitled "Inductively Coupled Plasma, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 1984 edition 3.

(C) Method 602, entitled "Purgeable Aromatics, Guidelines Establishing Test Procedures for the Analysis of Pollutants," 40 C.F.R. part 136, appendix A, revised July 1990.

(D) Method 8020A, "Aromatic Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 1984 edition 3.

(E) Method 8240A, entitled "Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry: Packed Column Technique, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 1984 edition 3.

(F) Method 8260A, entitled "Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry: Capillary Column Technique," 1984 edition 3.

(G) Method 325.3, entitled "Chloride (Colorimetric, Automated Ferricyanide), Guidelines Establishing Test Procedures for the Analysis of Pollutants," 40 C.F.R. part 136, appendix A, revised July 1990.

(H) Method 4500-CLE, entitled "Chloride, Methods for the Determination of Organic Compounds in Drinking Water" and supplement I, December 1988 and July 1990 editions. The testing methods are adopted by reference in these rules and copies are available for inspection at the Lansing office of the geological survey division

of the department of environmental quality. Copies may be obtained without charge from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, or from the United States Environmental Protection Agency, Office of Research and Development, 26 West Martin Luther King Boulevard, Cincinnati, Ohio 45268.

(ii) The sample of brine used for analysis shall be obtained from the point of loading of the storage tank where the brine is first separated from the production stream.

(iii) A chemical analysis of each brine source showing the concentrations of all of the following shall be submitted to the supervisor or authorized representative of the supervisor within 30 days of the completion of the analysis:

(A) Chloride.

(B) Hydrogen sulfide.

(C) Calcium.

(D) Benzene.

(E) Ethylbenzene.

(F) Toluene.

(G) Xylene.

(iv) The chemical analysis shall include all of the following information:

(A) The well name.

(B) Permit number.

(C) Permittee.

(D) Location of the individual well.

(E) If the brine is obtained from a tank battery or central production facility, the name, number, permittee, and location of the tank battery or central production facility.

(4) A permittee of a well shall maintain records for 2 years on the disposition of all brines produced in association with oil or gas production, or both. The records shall indicate dates, volumes, recipient, transporter, destination, and proof of delivery. If the person authorized to utilize the brine for other purposes receives the brine at an unattended loading site, then the person shall provide the permittee with a signed record describing the date, volume, time, destination, and proof of delivery. A permittee of a

well shall make the records available for inspection by the supervisor or authorized representative of the supervisor at all times. A permittee of a well shall protect the records from damage or destruction due to preventable cause.

(5) A permittee of a well shall ensure that brine which is in compliance with the conditions listed in subrule (3) of this rule is also in compliance with all applicable state and federal laws and regulations.

History: 1996 AACs.

PART 8. INJECTION WELLS

R 324.801 Use of tubing, packer, and fluid.

Rule 801. (1) A permittee of a well shall ensure that the injection of fluid into a well is through adequate tubing and packer. During injection operations, the tubing to casing annulus shall be filled with a noncorrosive liquid. Injection wells utilized for gas storage are exempt from this rule.

(2) A permittee of a well shall ensure that surface access to all casing annulii is provided.

(3) A permittee of a well shall ensure that an injection well is constructed and operated so that the injection of fluids is confined to strata approved by the supervisor or authorized representative of the supervisor.

History: 1996 AACS.

R 324.802 Temporary authority to inject.

Rule 802. The supervisor may grant a permittee of a well temporary authorization, for a period of not more than 30 days, to inject fluid for the limited purpose of running injectivity tests. Injection wells utilized for gas storage are exempt from this rule.

History: 1996 AACS.

R 324.803 Testing before operation of injection wells.

Rule 803. (1) Before injecting fluid into a newly drilled injection well, or into a previously existing well that has been newly converted to an injection well, a permittee of a well shall provide for a test of the annulus between the innermost casing and the tubing above the packer. The test shall be conducted by a qualified person and the test shall be at a pressure of not less than 300 psig. The difference in pressure between the testing pressure and the tubing pressure shall be not less than 100 psig at the time of the

test. A satisfactory test shall have a bleed off of not more than 5% over a period of 30 minutes.

(2) Before the test, a permittee of a well shall notify the supervisor or authorized representative of the supervisor of the date and time of the test. A certified copy of the test procedure and results shall be filed with the supervisor by the qualified person making the test. The supervisor or authorized representative of the supervisor, after evaluating the test results and determining the mechanical integrity of the packer and casing string immediately outside the tubing, may approve injection operations to begin.

(3) Injection wells utilized for gas storage are exempt from this rule.

History: 1996 AACS.

R 324.804 Maximum injection pressure.

Rule 804. During disposal operations, a permittee shall ensure that the surface injection pressure does not exceed a pressure determined by the following equation:

$$P_m = (fpg - 0.433 \text{ sg})d \text{ where}$$

P_m = surface injection pressure

fpg = fracture pressure gradient (if unknown, assume 0.800)

sg = specific gravity of the injection liquid (if unknown, assume 1.2)
d = injection depth in feet (true vertical depth).

History: 1996 AACCS.

R 324.805 Operational testing requirements.

Rule 805. (1) A permittee of an injection well, except for an injection well utilized for gas storage, shall provide for a pressure test that meets the requirement of subrule (2) of this rule, by a qualified person, to determine the mechanical integrity of the tubing, casing, and packer.

(2) The annulus between the innermost casing and the tubing above the packer shall be tested at least once each 5 years at a pressure of not less than 300 psig. A satisfactory test shall have a bleed off of not more than 5% over a 30-minute period. The difference in pressure between the testing pressure and the tubing pressure shall not be less than 100 psig at the time of the test. Before the test, the permittee shall notify the supervisor or authorized representative of the supervisor of the date and time of the test.

The supervisor or authorized representative of the supervisor may request that a certified copy of the test procedure and results be filed with the supervisor by the qualified person making the test.

(3) Before injecting fluid into a newly drilled well or previously existing well newly converted to an injection well to be utilized for gas storage, a permittee of an injection well shall provide for a test of the mechanical integrity of the casing, by a qualified person, utilizing either a pressure test at a bottom hole pressure of not less than the maximum expected operating pressure of the gas storage field or an equivalent test approved by the supervisor.

History: 1996 AACCS.

R 324.806 Monitoring and filing records and reports.

Rule 806. (1) A permittee of a brine disposal injection well shall, on a weekly basis, monitor and record the injection pressure, injection rate, and cumulative volume of the fluid injected. A permittee of a secondary recovery injection well shall, on a monthly basis, monitor and record the injection pressure, injection rate, and cumulative volume of the fluid injected. A permittee of a secondary recovery injection well may conduct the monitoring and recording, required by this rule, on a field or project basis by manifold monitoring, rather than on an individual well basis, if more than 1 secondary recovery injection well operates with a single manifold, and if the permittee demonstrates that manifold monitoring is comparable to individual well monitoring. A permittee of a brine disposal injection well shall report the data monthly to the supervisor, unless the supervisor requires a lesser frequency, on forms prescribed by the supervisor. A permittee of a secondary recovery injection well shall report the data annually to the supervisor, on forms prescribed by the supervisor. Injection wells utilized for gas storage are exempt from this rule.

(2) A permittee of an injection well shall file an annual monitoring report, on a form provided by the supervisor, summarizing the data of the monitoring required in subrule (1) of this rule. A permittee shall not operate an injection well unless the annual monitoring report is filed by March 1 of each year for the previous calendar year. If the report is not filed by March 1, then a permittee may not continue injection until the required report is submitted and written approval is received from the supervisor or authorized representative of the supervisor.

(3) All records pertaining to an injection well shall be retained by the permittee for a period of 3 years.

History: 1996 AACCS.

R 324.807 Loss of mechanical integrity.

Rule 807. (1) A permittee of an injection well shall verbally notify the supervisor or authorized representative of the supervisor of any pressure test failure, significant pressure changes, or other evidence of a leak in an injection well, within 24 hours of the test failure, pressure change, or evidence of a leak. If there is evidence that indicates an injection well is not, or may not be, directing the injected fluid into the permitted injection strata, a permittee of an injection well shall immediately cease injection.

(2) A permittee shall submit written notice of the pressure test failure or other evidence of a leak to the supervisor or authorized representative of the supervisor within 5 days of the occurrence. If injection has ceased pursuant to subrule (1) of this rule, then a permittee shall not resume injection until the permittee has tested or repaired the well, or both. If the repair requires a change of well status pursuant to R 324.511, then a plan shall be submitted to, and approved by, the supervisor or authorized representative of the supervisor.

History: 1996 AACCS.

R 324.808 Cessation of injection wells; request for temporary abandonment status.

Rule 808. If an injection well ceases operating for the purpose for which it was intended for 1 year, then a permittee shall request temporary abandonment status for the well. If temporary abandonment status is not granted, then the permittee of the injection well shall plug the well.

History: 1996 AACCS.

PART 9. PLUGGING

R 324.901 Notification of intention to abandon and plug well.

Rule 901. A person shall not begin the plugging of a well until the permittee of a well has notified the supervisor or authorized representative of the supervisor of his or her intention to abandon the well and has received instructions for the plugging

operation. The notification shall provide all of the information requested by the supervisor or authorized representative of the supervisor required to issue plugging instructions. The notification may also include any of the following information:

- (a) The present condition of the well.
- (b) Casing and sealing information.
- (c) The sizes and lengths of all casing strings.
- (d) The depths of the top of all principal formations.
- (e) The depths where oil, gas, and water were encountered.
- (f) The method to be used to tag plugs.
- (g) The proposed method for handling unusual or hazardous conditions.
- (h) The date of the last production or operation.

History: 1996 AACCS.

R 324.902 Plugging instructions; methods and materials.

Rule 902. (1) The supervisor or authorized representative of the supervisor shall issue plugging instructions after receipt of notification pursuant to R 324.901. The plugging instructions shall specify all of the following information:

- (a) The type and amount of plugging material to be used.
- (b) The depths at which bridges are to be set.
- (c) The depths and lengths of cement plugs.
- (d) The amount of casing to be pulled.
- (e) Other requirements the supervisor determines are necessary for the proper plugging of the well.

(2) A permittee of a well shall ensure that all oil, gas, brine, and fresh water is confined to the strata in which the oil, gas, brine, and fresh water occur by using cement plugs or other plugs approved by the supervisor. A permittee of a well shall ensure that the well is plugged under static hole conditions at all times, unless otherwise approved by the supervisor or authorized representative of the supervisor.

(3) A permittee of a well shall ensure that each cement plug, except for the bottom hole plug required by subrule (5) of this rule, the plug to be set at the base of the surface casing required by subrule (6) of this rule, and the surface plug required by subrule (7) of this rule, is a minimum of 200 feet in length or contains 50 sacks of cement, whichever is the greater volume of cement, unless otherwise approved by the supervisor or authorized representative of the supervisor.

(4) A permittee of a well shall ensure that each cement plug, except for the bottom hole plug required by subrule (5) of this rule and the plug to be set at the base of the surface casing required by subrule (6) of this rule, is allowed to set undisturbed for a minimum of 1 hour and that the fluid level in the casing is continuously observed. If the observed fluid level in the casing drops during the hour, then the cement plug shall be tagged to ensure that the plug is still in place before setting the next plug uphole. If the plug is found not to be in place, then the plug shall be reset.

(5) A permittee of a well shall ensure that the bottom hole cement plug is either:

- (a) A minimum of 200 feet in length, is allowed to set undisturbed for a minimum of 4 hours, has reached a compressive strength of 100 psi or more, and is tagged to ensure that it is still in place before setting the next plug uphole; however, if the

bottom hole cement plug in a dry hole drilled by rotary methods is a minimum of 400 feet in length and the fluid level in the hole is observed to remain static, then the bottom hole plug is not required to be tagged.

(b) A mechanical bridge plug or other approved bridge has been set and a minimum of 50 feet of cement has been placed on the bridge before setting the next plug uphole.

(6) A permittee of a well shall set the plug at the base of the surface casing using either of the following methods as approved by the supervisor or authorized representative of the supervisor:

(a) In static hole conditions, a cement plug shall be set at a minimum of 100 feet below the surface casing and shall extend a minimum of 100 feet into the surface casing. The cement plug shall be allowed to set undisturbed a minimum of 4 hours, shall have reached a compressive strength of 100 psi or more, and shall be tagged to ensure that it is still in place before setting the next plug uphole. If the plug is found not to be in place, then the plug shall be reset.

(b) A mechanical open hole bridge plug or other approved bridge shall be set a minimum of 100 feet below the surface casing. A cement plug shall then be placed on the mechanical open hole bridge plug or other approved bridge. The cement plug shall extend a minimum of 100 feet into the surface casing,

unless otherwise approved by the supervisor or authorized representative of the supervisor.

(7) A permittee of a well shall set a cement surface plug a minimum of 30 feet below the surface and within 5 feet of the surface, unless otherwise approved by the supervisor or authorized representative of the supervisor.

(8) If surface casing is not present, a permittee of a well shall set a mechanical open hole bridge plug or other approved bridge a minimum of 100 feet below the base of the glacial drift or 100 feet below the deepest fresh water stratum, whichever is the greater depth, and shall circulate cement to within 5 feet of the surface.

(9) A permittee of a well shall ensure that the surface pipe or conductor pipe abandoned with the hole is cut off at a point not less than 4 feet below grade, a 1/2-inch steel welded plate or another type of seal approved by the supervisor or authorized representative of the supervisor is placed across the top of the pipe or pipes, and the permit number of the well is permanently affixed to the plate or approved seal at the top of the well.

(10) A permittee shall file, within 60 days after plugging, the final plugging forms and certified copies of the service company records, which shall include all of the following information:

(a) The type of cement and number of sacks used, including the additives and percentages of the additives for each cement bridge plug.

(b) The type and volume of plugging material used if other than cement.

(c) The number of bridge plugs set in the hole and the depth and length of each plug.

(d) Other materials left in the hole.

(e) Service companies' records of cementing operations if requested by the supervisor or authorized representative of the supervisor.

(f) All available graphics, if requested by the supervisor or authorized representative of the supervisor, showing the all of following information:

- (i) Pumping.
- (ii) Placement of cement.
- (iii) Weights.
- (iv) Times.
- (v) Pump rates.
- (vi) Other pertinent data dealing with the plugging operations.
- (g) The amounts and type of mix water used for each sack of cement.
- (h) The volume and types of spacers and flushes used.
- (i) The operator's daily plugging records.

(11) At a permittee's option, the well bore may be plugged from bottom to top with a material approved by the supervisor if the hydrostatic pressure of the material used is not allowed to exceed the fracturing pressure of the strata.

History: 1996 AACS.

R 324.903 Commencement of plugging operations.

Rule 903. (1) A permittee of a well shall commence plugging operations within 90 days after drilling completion or well completion as a dry hole, when the well has not economically produced or has not been utilized for its permitted use for more than 12 consecutive months, when a change of well status has not been granted, or when the permitted use has been suspended for more than 12 consecutive months. The supervisor may require, or a permittee may submit, proof that is necessary to determine if the well is being economically produced.

(2) After receiving a written request showing just cause why the well should not be plugged, the supervisor or authorized representative of the supervisor may grant temporary abandonment status pursuant to R 324.209 or require completion of the plugging operations.

(3) A permittee may petition the supervisor for a hearing to show cause why the well should not be plugged.

History: 1996 AACS.

R 324.904 Pulling of surface pipe and conductor pipe.

Rule 904. A permittee of a well shall ensure that surface pipe or conductor pipe is not pulled at a location, unless it is required by the supervisor.

History: 1996 AACS.

PART 10. WELL SITES AND SURFACE FACILITIES; PREVENTION OF FIRES, POLLUTION, AND DANGER TO, OR DESTRUCTION OF, PROPERTY OR LIFE

R 324.1001 Well sites and surface facilities; flammable and combustible material.

Rule 1001. A permittee of a well shall ensure that the area around the well and surface facilities is kept clear of flammable and combustible material stored within a radius of 75 feet, or as approved by the supervisor, using the well or dike wall as the point of measurement. The supervisor, if conditions warrant, may also require construction of a fire line around the outer edge of the cleared area. A permittee of a well shall ensure that the disposal of material resulting from the clearing operations is consistent with all applicable state and federal laws and regulations.

History: 1996 AACCS.

R 324.1002 Secondary containment requirements and construction standards.

Rule 1002. (1) All wellheads and pump jacks installed after the effective date of these rules and surface facilities constructed for hydrocarbon, gas, brine injection, or brine handling or surface facilities converted to brine injection or handling after November 15, 1989, shall provide for secondary containment pursuant to the requirements of this rule. A permittee of a well shall maintain all existing dikes or fire walls approved before November 15, 1989, in a manner to form a reservoir that has a capacity of 1 1/2 times the capacity of the enclosed tank or tank battery and shall keep the reservoir free of oil, emulsions, tank bottoms, brine, water, vegetation, debris, or any flammable or combustible material. The supervisor or authorized representative may require surface facilities for hydrocarbon, gas, brine injection, or brine handling constructed before November 15, 1989, to be upgraded to meet the requirements of this rule if the facility is substantially reconstructed.

(2) A permittee of a well shall submit secondary containment plans to the supervisor or authorized representative of the supervisor for approval before construction of the facility. The secondary containment plans shall consist of a plot plan of the proposed facility and cross sections showing construction details of the sidewalls and floor or floors of all secondary containment areas, including the proposed overall dimensions of the facility. The supervisor or authorized representative of the supervisor shall approve or disapprove the secondary containment plans within 30 days of receipt of the plans.

(3) A permittee of a well shall comply with all of the following minimum construction standards to meet the secondary containment requirements of this rule:

(a) A permittee shall be required to prepare a hydrogeological investigation of the facility area to establish local background groundwater quality. The hydrogeological investigation shall include all of the following:

(i) Water quality sampling pursuant to the parameters established in R 324.201(2)(j)(vi).

(ii) A determination of the direction of groundwater flow and depth to the groundwater in the uppermost aquifer.

(iii) A chemical analysis showing the concentrations of benzene, ethylbenzene, toluene, and xylene.

(iv) A geologic description of earth materials, both horizontally and vertically, in the immediate vicinity of the proposed facility.

(b) Each facility shall be required to have 1 of the following monitoring systems to detect leakage from hydrocarbon or brine storage secondary containment areas:

(i) A minimum of 1 groundwater monitoring well downgradient which is in close proximity to all hydrocarbon or brine storage secondary containment areas.

(ii) Tertiary containment underlying the secondary containment, which shall be constructed and sealed in a manner to capture any hydrocarbons or brine that may leak or seep through the secondary containment. A layer of permeable material and a monitoring tube shall be placed between the secondary and tertiary containment to allow monitoring to determine the presence of any leakage or seepage through the secondary containment.

(c) A vessel that contains hydrocarbons or brine, or both, shall be elevated and placed on impervious pads or constructed so that any leakage can be easily detected. A vessel that is to be used on-site for 30 days or less shall, at a minimum, be placed on leak-resistant material.

(d) A hydrocarbon and brine storage vessel, including oil heating and treating equipment, shall be located in a secondary containment area and the containment volume shall be in compliance with the following minimum requirements, as applicable:

(i) Containment areas that have only brine storage vessels shall be constructed to contain 150% of the largest storage vessel.

(ii) Containment areas with only hydrocarbon storage vessels shall be constructed pursuant to R 29.2301 et seq.

(iii) Containment areas where both hydrocarbon and brine storage vessels are located shall be in compliance with the volume requirements for the largest storage vessels.

(iv) Precipitation shall be taken into consideration in the design of the secondary containment area.

(e) The sidewalls and floor of the secondary containment and spill containment areas shall be constructed and sealed in a manner to prevent the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater.

(f) A hydrocarbon and brine storage vessel shall not be erected, enclosed, or maintained closer than 200 feet from any drilling or producing well.

(g) Oil heating or treating equipment shall not be erected, enclosed, or maintained closer than 75 feet from any drilling or producing well or oil storage tank or tank battery.

(h) Dikes shall be maintained and the enclosure kept free of all of the following:

(i) Oil.

(ii) Emulsions.

(iii) Tank bottoms.

(iv) Brine.

(v) Water.

(vi) Vegetation.

(vii) Debris.

(viii) Any flammable or combustible material.

(i) The hydrocarbon and brine truck loading and unloading areas located outside of hydrocarbon or brine storage secondary containment areas shall have a spill containment capacity equal to double the volume of the hoses used to connect the truck to the tanks, but not less than a capacity of 5 barrels. The spill containment shall be constructed and sealed in a manner that prevents the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater.

(j) Brine disposal well truck unloading areas and commercial brine truck loading and unloading areas located outside of hydrocarbon or brine storage secondary containment areas shall be constructed and sealed in a manner that prevents the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater. In addition, a ramp shall be constructed to contain the unloading vehicle, its hoses, and connections within the ramp area. The ramp area shall contain a sump and be connected to a secondary containment area so that any spillage drains into the sump and into the secondary containment area. The spill containment ramp and sump shall have a combined capacity of not less than 20 barrels.

(k) Sumps shall be constructed of materials impervious to hydrocarbons and brines and resistant to damage and deterioration during use. Sumps shall be connected to the ramp area and the secondary containment area in a manner that prevents leakage.

(l) Surface facilities for hydrocarbon and brine handling shall be constructed to meet all of the following minimum requirements:

(i) All transfer and injection pumps shall have leak containment.

(ii) All brine and hydrocarbon flow lines to a facility are considered part of that facility and are subject to the following requirements:

(A) All flow lines shall be pressure tested pursuant to the provisions of paragraph (iii)(A),(B),(C),(E), and (G) of this subdivision.

(B) A permittee may elect to not perform the pressure testing of the flow lines, except flow lines that transport brine only, if the permittee performs visual inspections of the entire flow line corridor every 3 months, except when impractical due to snow cover, and reports the results of the inspections to the supervisor or authorized representative of the supervisor annually by January 31 of each year for the previous calendar year.

(iii) All buried facility piping for the transport of liquids shall be pressure-tested pursuant to the following provisions, as applicable:

(A) Piping made of noncorrodible or corrosion-protected material shall be pressure-tested every 3 years.

(B) All piping other than piping specified in subparagraph (A) of this paragraph shall be pressure-tested every 12 months.

(C) If buried piping is excavated for repair or relocation, then the disturbed portion shall be pressure-tested immediately pursuant to subparagraphs (D) and (E) of this paragraph.

(D) The pressure test shall be 100% of the normal oil and gas separator operating pressure. The pressure shall be stabilized at 90% of test pressure, at a minimum, and shall hold for a period of 15 minutes.

(E) A permittee shall provide certification to the supervisor or authorized representative of the supervisor, within 30 days of a pressure test, that a pressure test was conducted and the facility piping passed the pressure test. If a facility's piping does

not pass the pressure test, the supervisor or authorized representative of the supervisor shall be notified by the permittee within 48 hours after the test. If the pressure test indicated that the facility's piping leaked, then the piping shall be repaired and retested before putting the piping back in service. After the repair of the piping, the permittee shall report the repair to the supervisor or authorized representative of the supervisor and provide certification that the piping has been retested and is not leaking.

(F) Single-phase gas lines are not subject to the pressure test requirements if the lines are protected by a liquid phase trap.

(G) The supervisor may approve or require other pressure testing or leak detection methods in place of the pressure testing required in this paragraph.

(iv) At production or injection well facilities, all piping shall be routed above the ground and kept within the secondary containment area where practical. Piping that cannot be routed above the ground shall have its location marked with posts or with other location-identifying markers approved by the supervisor or authorized representative of the supervisor so that the buried piping can be easily located.

(v) Brine injection wells shall have a working check valve on the flow line at or near the wellhead to avoid backflow.

(vi) All hydrocarbon and brine loading and unloading facility transfer lines that are not in use shall be secured to prevent spillage. A shutoff valve shall be installed at the truck connect point and at the storage vessels. At connect points, impermeable drip containment vessels shall be used and shall be an adequate size to contain all spillage and precipitation to avoid overflow.

(m) Wellheads, flare pits, vents, and flare stacks shall have secondary containment and spill containment areas constructed in a manner to prevent the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater. Secondary containment at the wellhead shall be constructed in a manner to capture any leakage of liquid that may occur. In addition, if the wellhead is provided with a pump jack or is converted to a pump jack equipped with a gasoline or diesel-powered engine, then the engine shall also have secondary containment that is sufficient to prevent the seepage of any machine oils or fuels into the surrounding soils, surface waters, or groundwater. Injection wells utilized for gas storage are exempt from this subrule.

(4) Upon completion of the construction of the facility, but before its use, a permittee of a well shall certify, to the supervisor or authorized representative of the supervisor, that the secondary containment area was constructed according to the approved plan. A permittee shall ensure that an approved spill or loss response and remedial action plan is also on file with the supervisor or authorized representative of the supervisor before a facility is used.

(5) Before any significant modification of the secondary containment area occurs, a permittee of a well shall notify the supervisor or authorized representative of the supervisor and receive approval before making the modification. The supervisor or authorized representative of the supervisor shall approve or deny the request within 10 days of receipt of the request.

(6) A permittee of a well shall perform inspections at the facility at a frequency that is sufficient to ensure that the throughput of fluids in the system does not exceed the

primary and secondary containment capacity between inspections. The permittee shall perform at least 1 inspection per week.

(7) The supervisor shall require the installation of an automatic facility shutdown system if the facility has a throughput of liquids in a 24-hour period that exceeds the containment volume of the secondary containment area. The automatic shutdown system shall be designed to prevent liquids from overflowing the secondary containment area. A facility shall be exempt from the requirement of an automatic shutdown system if the facility has staff present 24 hours per day and is equipped with alarm systems on the tank or tanks of the tank battery.

(8) The monitoring system required by R 324.1002(3)(b) shall be kept in a functional condition so that water samples can be collected and water level measurements can be taken every 6 months. The water samples shall be tested for specific conductance as an indicator of dissolved solids, concentrations of chloride, and a chemical analysis pursuant to subrule (3)(a)(iii) of this rule, except the chemical analysis provided by subrule (3)(a)(iii) of this rule shall not be required at monitoring systems at surface facilities where liquid hydrocarbons are not handled. If sampling indicates a possible problem, then additional sampling for the water quality parameters established in R 324.201(2)(j)(vi) may be required. The results of the sample analysis shall be provided to the supervisor or authorized representative of the supervisor as soon as the results are available. If the samples taken by the permittee show substantial increases above background water quality, then the permittee shall, at a minimum, increase monitoring. If the samples confirm that hydrocarbons are present at levels above background, then the permittee shall immediately take remedial action in the form of containment and removal.

(9) A permittee of a well shall provide a right of entry to the facility for monitoring at all times to the supervisor or authorized representative of the supervisor.

History: 1996 AACCS.

R 324.1003 Restoration of well site; filling and leveling of cellars, pits, and excavations; removal of debris.

Rule 1003. A permittee of a well shall fill and level the cellar and all pits and excavations, remove or eliminate debris, minimize erosion, and restore the well site as nearly as practicable to the original land contour or to a condition approved by the supervisor or authorized representative of the supervisor as soon as practical after the completion of plugging to the surface, but not more than 6 months after the completion of plugging to the surface.

History: 1996 AACCS.

R 324.1004 Safety measures.

Rule 1004. If hazards to life or property, or both, exist, then a permittee of a well shall post safety signs in conspicuous places around the well or surface facility. The supervisor or authorized representative of the supervisor may require the installation of fences, gates, or other safety measures.

History: 1996 AACCS.

R 324.1005 Use of pits to collect waste oil and tank bottoms prohibited; conveying, storing, or disposing of waste oil and tank bottoms.

Rule 1005. A permittee of a well shall not use earthen pits to collect waste oil and tank bottoms. A permittee shall not convey, store, or dispose of waste oil and tank bottoms in a manner that causes waste.

History: 1996 AACCS.

R 324.1006 Cleanup and disposal of losses.

Rule 1006. A permittee of a well shall clean up and dispose of, in a manner consistent with these rules and all applicable state and federal laws and regulations, losses of oil, gas, or brine from wells, flow lines, and associated surface facilities.

History: 1996 AACCS.

R 324.1007 Notice of serious accident; reporting.

Rule 1007. (1) A person shall immediately notify the supervisor or authorized representative of the supervisor of a serious accident that has created, or may create, a fire or other hazard that may cause waste. The notification shall be made within 8 hours of the accident, by telephone, and shall give the particulars of the accident. A detailed written report shall be submitted to the supervisor or authorized representative of the supervisor within 15 days of the accident.

(2) If a person cannot contact the supervisor or authorized representative of the supervisor after an accident, then the person shall immediately telephone the pollution emergency alerting system.

History: 1996 AACCS.

R 324.1008 Reporting of losses, spills, and releases.

Rule 1008. (1) A permittee of a well shall, under this rule and instructions issued by the supervisor and in compliance with all applicable state and federal laws and regulations, promptly report and record all reportable losses, spills, and releases of any of the following:

- (a) Brine.
- (b) Crude oil.
- (c) Oil or gas field waste.
- (d) Natural gas.

(e) Products and chemicals used in association with oil and gas exploration, production, disposal, or development.

(2) A permittee of a well shall promptly report, within 8 hours of a loss, release, or spill discovery, by telephone or in person, to the supervisor or authorized representative of the supervisor during normal business hours or to the department of environmental quality, pollution emergency alerting system between 5 p.m. and 8 a.m. and on weekends and holidays, all losses or releases of gas that result in, or may result in, a nuisance odor or unnecessary endangerment of public health or safety, and all losses or spills of 42 gallons or more of brine, crude oil, or oil and gas field waste. A permittee shall provide all of the following minimum information, to the extent known, when reporting the loss, spill, or release:

- (a) The name of person reporting the loss, spill, or release.
- (b) The name of permittee who has sustained the loss, spill, or release.
- (c) The date and time of the loss, spill, or release.
- (d) The date and time that the loss, spill, or release was discovered.
- (e) The date and time cleanup commenced.
- (f) The location of the loss, spill, or release, including all of the following information:

- (i) Well name.
- (ii) Quarter-quarter-quarter section. (iii)Section number.
- (iv)Township.
- (v) County.
- (g) The material lost, spilled, or released.
- (h) The volume of the loss, spill, or release.
- (i) The volume of the loss, spill, or release recovered.
- (j) The cleanup or recovery measures taken.
- (k) The cause of the loss, spill, or release.
- (l) Whether the loss, spill, or release contacted surface waters, groundwater, or other environmentally sensitive resources.
- (m) The approximate air temperature, wind direction, wind velocity, and precipitation conditions at the time of the spill or release.

(3) A permittee of a well shall submit written notification of the losses, spills, and releases to the supervisor or authorized representative of the supervisor by completing all parts of the form provided by the supervisor within 10 days from the time the loss, spill, or release was discovered.

(4) A permittee of a well shall report all losses or spills of less than 42 gallons of brine, crude oil, or oil and gas field waste by completing only parts 1 and 3 of the form provided by the supervisor if both of the following provisions apply:

(a) The loss or spill does not contact surface waters, groundwater, or other environmentally sensitive resources.

(b) The loss or spill is completely contained and cleaned up within 48 hours from the time the loss or spill was discovered.

(5) If a loss or spill of less than 42 gallons of brine, crude oil, or oil and gas field waste does contact surface waters, groundwater, or other environmentally sensitive resources, or is not completely contained and cleaned up within 48 hours from the time the loss or spill was discovered, then a permittee of a well shall report the loss or

spill as provided by subrule (2) of this rule and submit the written notification as provided by subrule (3) of this rule.

(6) If the loss or spill is less than 42 gallons of brine, crude oil, or oil and gas field waste, then the loss is not a reportable loss or spill if the loss or spill occurs while a permittee or an authorized representative of the permittee is on-site and the loss or spill is completely contained and cleaned up within 1 hour of the occurrence.

(7) A permittee of a well shall promptly report, within 8 hours of discovery of the loss or spill, by telephone or in person, a loss or spill of other chemicals used in association with oil and gas exploration, production, disposal, or development, shall provide the information required in subrule (2)(a) through (l) of this rule, and shall complete the form required in subrule (3) of this rule. A permittee shall report the losses or spills under other applicable state and federal laws and regulations.

History: 1996 AACS; 2001 AACS.

R 324.1009 Smoking and open flame restrictions.

Rule 1009. A permittee of a well shall ensure that smoking and open flames shall not occur where oil or gas, or both, constitutes a hazard of fire or explosion.

History: 1996 AACS.

R 324.1010 Gas burning, processing, or disposal.

Rule 1010. A permittee of a well shall ensure that all gas produced in the operation or testing of wells that is not utilized is burned, processed, or disposed of in a manner consistent with these rules and all applicable state and federal laws and regulations. The gas shall not be burned closer than 100 feet from a well or storage tank or 300 feet from structures used for public or private occupancy or from any other flammable and combustible material.

History: 1996 AACS.

R 324.1011 Purging, removal, and abandonment of lines and vessels.

Rule 1011. A permittee of a well shall purge all flow lines and vessels, including tanks, if the flow lines or vessels are not used for 1 year and shall provide notification of the purging operation to the supervisor or authorized representative of the supervisor. The supervisor may require the line to be removed or abandoned.

History: 1996 AACS.

R 324.1012 Identification of wells and surface facilities.

Rule 1012.(1)A permittee of a well shall ensure that a well is identified by a sign which is posted in a conspicuous place and which is not more than 20 feet from the well. A sign shall be durably constructed, be kept in good condition, and the lettering shall be

not less than 1 1/2 inches high and legible under normal conditions at a distance of 25 feet. A sign shall show all of the following information:

- (a) The permit number.
- (b) The name of the permittee.
- (c) The name of the lease and well number.
- (d) The well location by quarter-quarter section, township, and range.
- (e) A telephone number by which an authorized representative of the permittee may be contacted at any time to respond to an emergency at the well.

(2) A surface facility shall be identified by a sign which is posted in a conspicuous place and which is not more than 25 feet from the outside limits of the surface facility or at a location prescribed by the supervisor or authorized representative of the supervisor. A sign shall show all of the following information:

- (a) The name of the permittee or owner.
- (b) A telephone number by which an authorized representative of the permittee may be contacted at any time to respond to an emergency at the facility.
- (c) The location by quarter-quarter section, township, and range. If more than 1 facility is located at a common site, 1 identification sign is sufficient. A sign shall be kept in good condition and the lettering shall be not less than 1 1/2 inches high and legible under normal conditions at a distance of 25 feet.

History: 1996 AACS; 2001 AACS.

R 324.1013 Nuisance odors.

Rule 1013. A person shall not cause a nuisance odor in the exploration for, or in the development, production, handling, or use of, oil, gas, or brine or in the handling of any product associated with the exploration, development, production, or use of oil, gas, or brine.

History: 1996 AACS.

R 324.1014 Suspension of OIL AND GAS operations due to threat to public health and safety.

Rule 1014. (1) The supervisor or authorized representative of the supervisor shall have the authority to immediately require corrective action, including suspending any or all components of the oil and gas operations, if the oil and gas operations have been determined by the supervisor to be in violation of the provisions of the act, these rules, permit conditions, instructions, or orders of the supervisor and threatens the public health and safety.

(2) A suspension of oil and gas operations shall be in effect for not more than 5 days or until the operation is in compliance and protection of the public health and safety is ensured. To extend the suspension beyond 5 days, the supervisor shall issue an emergency order to continue the suspension of oil and gas operations and may schedule a hearing under part 12 of these rules. The total duration of the suspension of oil and gas operations shall not be more than 21 days, as provided in section 61516 of the act.

History: 1996 AACCS; 2002 AACCS.

R 324.1015 Nuisance noise; "decibel," "decibels on the a-weighted network," "noise-sensitive area," and "nuisance noise" defined.

Rule 1015. (1) A person shall not cause a nuisance noise in the production, handling, or use of oil, gas, or brine or in the handling of any product associated with the production or use of oil, gas, or brine.

(2) If the supervisor or authorized representative of the supervisor receives 1 or more complaints of noise heard by the complainant at noise-sensitive areas that is attributed to a surface facility, then the supervisor may require the permittee to collect decibel readings to determine the sound levels at the noise-sensitive areas and at a distance of 1,320 feet from the facility. If the sound level of the facility is more than 45 decibels on the a-weighted network at a distance of 1,320 feet from the facility, then the supervisor or authorized representative of the supervisor may find that a nuisance noise exists after considering all applicable information, including the distance between the surface facility and the noise-sensitive areas, the sound levels at the noise-sensitive areas, and sound attributable to sources

other than the surface facility. The supervisor or authorized representative of the supervisor may require appropriate noise control measures to reduce the decibel levels. If noise control measures are required, then the permittee shall submit, to the supervisor or authorized representative of the supervisor, for approval, an abatement plan and schedule for implementation within 30 days of a determination by the supervisor or authorized representative of the supervisor that noise control measures are necessary.

(3) As used in this rule:

(a) "Decibel" means a unit of sound level on a logarithmic scale measured relative to the threshold of audible sound by the human ear in compliance with the ANSI standard 1.1, entitled "Acoustical Terminology," 1994 edition, which is adopted by reference in these rules. Copies of the standard are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$100.00 each, and from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, at a cost as of the time of adoption of these rules of \$100.00 each.

(b) "Decibels on the a-weighted network" means decibels measured on the a-weighted network of a sound level meter, as specified in the ANSI standard 1.4, entitled "Specifications for Sound Level Meters," 1983 edition, which is adopted by reference in these rules. Copies of the standard are available for inspection at the Lansing office of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$70.00 each, and from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, at a cost as of the time of adoption of these rules of \$70.00 each.

(c) "Noise-sensitive area" means a residential dwelling, place of worship, school, or a hospital and also means an existing site that is maintained for public recreation for which quiet is a primary consideration in the use of the site.

(d) "Nuisance noise" means any noise from a well or its associated surface facilities that causes injurious effects to human health or safety or the unreasonable interference with the comfortable enjoyment of life or property.

History: 1996 AACCS.

R 324.1016 Construction standards for noise abatement at compressors associated with surface facilities.

Rule 1016. (1) This rule shall apply to compressors that have motors rated for more than 150 horsepower.

(2) A permittee of a well who installs a compressor after the effective date of these rules, or a permittee of a well who substantially reconstructs an enclosure for a compressor after the effective date of these rules, shall comply with all of the following provisions:

(a) The compressor, drive motor, and cooler shall be completely enclosed.

(b) The walls, doors, and roof of the enclosure shall be completely lined with sound-absorbent material.

(c) The compressor drive motor shall be equipped with a hospital-type muffler or the equivalent.

(d) Air intake and exhaust passages shall be constructed so as to include at least 1 right-angle turn between the point of air entrance or exit to or from the passage and the main volume of the compressor enclosure. Air intake and exhaust passages shall be completely lined with sound-absorbent material, unless the passages vent through the roof.

(e) The compressor shall be capable of operating with the enclosure doors closed at ambient air temperatures of 85 degrees Fahrenheit or lower. "Doors" as used in this rule shall not include necessary openings for air intake and exhaust passages.

(3) The supervisor or authorized representative of the supervisor may grant an exception to the requirements of subrule (2) of this rule if a permittee designs and constructs a compressor according to a plan submitted to, and approved by, the supervisor or authorized representative of the supervisor. The plan shall provide for sound abatement equal to or exceeding the sound abatement standard specified in subrule (2)(a) of this rule.

(4) A compressor which is installed as a replacement for, and on the same site as, a compressor that was installed before the effective date of these rules and which is an equivalent size as the previous compressor is not subject to subrule (2) of this rule.

History: 1996 AACCS.

PART 11. HYDROGEN SULFIDE MANAGEMENT

R 324.1101 Definitions; B to M.

Rule 1101. As used in this part:

(a) "Briefing area" means a specified geographic area nearby where all personnel can safely assemble in an emergency.

(b) "Colorimetric or length of stain tubes" means glass tubes that contain a chemical which changes color upon exposure to a specified substance and which allow the concentration of the specified substance to be read directly.

(c) "Emergency preparedness coordinator" means an individual appointed pursuant to Act No. 390 of the Public Acts of 1976, being §30.401 et seq. of the Michigan Compiled Laws, to coordinate emergency planning or services within the county or municipality.

(d) "Existing H2S well" means an H2S well that is drilled and completed before September 2, 1987.

(e) "Existing process equipment" means equipment for the production of oil or gas, or both, which was in existence, and through which oil or gas, or both, was being produced, before September 2, 1987. Existing process equipment does not include gas sweetening plants or stripping plants.

(f) "Flare" means a device for the burning of gasses in which the flame is exposed to the atmosphere and burning takes place at a height of not less than 20 feet above the ground.

(g) "H2S well" means a well that contains a hydrogen sulfide content in the gas of not less than 300 ppm.

(h) "Incinerator" means a device specifically designed for the destruction, by burning, of combustible gasses, in which the products of combustion are emitted to the outer air by passing through a stack or chimney that opens to the outer air at a height of not less than 20 feet above the ground.

(i) "Mcf" means 1,000 cubic feet of gas at standard conditions of 14.65 psi absolute and at 60 degrees Fahrenheit.

History: 1996 AACCS.

R 324.1102 Definitions; N to W.

Rule 1102. As used in this part:

(a) "NACE" means the national association of corrosion engineers.

(b) "New H2S well" means an H2S well that is drilled or completed after September 2, 1987.

(c) "Radius of exposure" means the distance, in feet, that results when appropriate values are substituted for the variables in the following equation:

$$\text{RoE} = (A \times B \times C) 0.6258 \text{ where}$$

A = 1.589 for a 100-ppm radius of exposure.

B = the mole fraction concentration of hydrogen sulfide in the released gas.

C = the maximum volume of gas determined to be available for release in cubic feet per 24 hours. The radius of exposure is the distance from a point of release at which a specified concentration of hydrogen sulfide would occur if gas of a known concentration of hydrogen sulfide were released at a known rate.

(d) "Safety equipment" means, at a minimum, all of the following items:

- (i) First aid kits.
 - (ii) Stretchers.
 - (iii) Blankets.
 - (iv) Portable dry chemical fire extinguishers.
 - (v) Ropes.
 - (vi) Flare guns and flares.
 - (vii) Battery-operated lanterns.
 - (viii) Portable electronic hydrogen sulfide detectors.
 - (ix) Warning signs that have the word "Danger" or "Caution" followed by the words "Poison Gas."
 - (x) Two copies of the owner's contingency plan.
 - (xi) Not less than 2 portable, self-contained, pressure-demand breathing apparatus that have a 30-minute air supply.
 - (xii) A supply of compressed breathable air or oxygen that is sufficient to recharge each self-contained breathing apparatus at least once.
- (e) "Well class" means the category into which an H₂S well falls or, in the case of an H₂S well to be drilled, the category into which it is expected that the well will fall, as follows:
- (i) "Class I H₂S well" means a well that has a 100-ppm radius of exposure of more than 300 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.
 - (ii) "Class II H₂S well" means a well that has a 100-ppm radius of exposure of not less than 100 feet and not more than 300 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.
 - (iii) "Class III H₂S well" means a well that has a 100-ppm radius of exposure of less than 100 feet and not less than 30 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.
 - (iv) "Class IV H₂S well" means a well that has a 100-ppm radius of exposure of less than 30 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.

History: 1996 AACCS.

R 324.1103 Metallic component standards.

Rule 1103.A permittee of a well shall ensure that metallic components of the well, flow line, and associated surface facilities installed during the course of drilling, completing, testing, producing, repair, workover, or servicing operations after September 2, 1987, where applicable, are in compliance with or exceed the standards for use in a hydrogen sulfide environment set forth in the NACE standard MR0175-2000, 2000 edition, entitled "Sulfide Stress Cracking Resistant Metallic Material for Oil Field Equipment," which is adopted by reference in these rules. Copies may be inspected at the Lansing office or field offices of the geological survey division of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Geological Survey Division, P.O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$50.00 each, and from the National Association of Corrosion Engineers,

P.O. Box 218340, Houston, Texas 77218, at a cost as of the time of adoption of these rules of \$50.00 each.

History: 1996 AACCS; 2001 AACCS.

R 324.1104 Permittee compliance with this part and state and federal laws and regulations.

Rule 1104. A permittee of a well shall comply with all of the provisions of this part. Compliance with this part does not exempt a permittee from complying with all applicable state and federal laws and regulations governing air pollution and emissions.

History: 1996 AACCS.

R 324.1105 Classification of H2S wells; applicability of rules to well classes.

Rule 1105.(1) An H2S well is considered a class I H2S well and is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1115(1) to

(5) and (7), and R 324.1116 to R 324.1130, unless a permittee can supply data showing that the well is a class II H2S, class III H2S, or class IV H2S well.

(2) An H2S well that is considered to be a class II H2S well is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1115(1) to (5) and (7), R 324.1116 to R 324.1129, and R 324.1130(1),(3) and (4).

(3) An H2S well that is considered to be a class III H2S well is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1109, R 324.1111, R 324.1112, R 324.1114, R 324.1115(1) to (5) and (7), R 324.1116 to R 324.1129, and R 324.1130(1) and (4).

(4) An H2S well that is considered to be a class IV H2S well is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1109, R 324.1111, R 324.1112(2), R 324.1114, R 324.1115(6) and (7), R 324.1118 to R 324.1124, R 324.1126 to R 324.1129, and R 324.1130(1) and (4).

(5) If a well is being drilled through, but not completed in, a reservoir known to contain hydrogen sulfide-bearing gas, then the well shall be in compliance with the requirements of the H2S well class to which it would be assigned if it were completed in the reservoir. Compliance shall continue until all hydrogen sulfide-bearing zones have been cased off.

(6) The supervisor may require a permittee to provide the information necessary to determine whether these rules apply to a well.

History: 1996 AACCS; 2001 AACCS.

R 324.1106 Location of H2S wells and associated surface facilities.

Rule 1106. (1) New H2S wells shall be located not less than 300 feet from existing water wells, existing structures used for public or private occupancy, existing areas

maintained for public recreation, or the edge of the traveled portion of an existing interstate, United States, or state highway.

(2) Surface facilities associated with new H₂S wells shall be located not less than 600 feet from existing water wells, existing structures used for public or private occupancy, existing areas maintained for public recreation, or the edge of the traveled portion of an existing interstate, United States, or state highway. The supervisor or authorized representative of the supervisor may grant an exception to the setback distance to not less than 450 feet for a class II H₂S well and not less than 300 feet for a class III H₂S well and a class IV H₂S well either upon presentation, to the supervisor or authorized representative of the supervisor, of a consent form, provided by the supervisor, signed by the owner or owners of all existing water wells, existing structures used for public or private occupancy, or existing areas maintained for public recreation located less than 600 feet from the proposed process equipment site or upon receipt of a petition from the permittee for a hearing pursuant to part 12 of these rules.

(3) If existing process equipment is located less than 600 feet from existing water wells, existing structures used for public or private occupancy, existing areas maintained for public recreation, or a state, United States, or interstate highway, then the supervisor or authorized representative of the supervisor may require relocation of the facility if it

is substantially reconstructed after September 2, 1987.

(4) The supervisor shall not require relocation of an existing facility because of its proximity to an existing water well, to a structure used for public or private occupancy, to an area maintained for public recreation, or to a state, United States, or interstate highway constructed or established after the installation of the facility or after September 2, 1987.

History: 1996 AACS.

R 324.1107 Training.

Rule 1107.(1) A permittee of a well is responsible for ensuring that all agents, employees, or other representatives of the permittee who are involved in drilling, completing, testing, producing, repair, workover, or servicing operations on an H₂S well have received training from persons qualified in hydrogen sulfide safety. The training shall include all of the following matters:

- (a) The physical properties and physiological effects of hydrogen sulfide.
- (b) The effects of hydrogen sulfide on metals and elastomers.
- (c) Emergency escape procedures.
- (d) The location and proper use of safety equipment.
- (e) The locations of primary and secondary briefing areas.
- (f) The location and operation of the hydrogen sulfide detection and warning system.
- (g) The corrective actions, shut-in procedures, H₂S well ignition procedures, and procedures for notifying off-site public authorities listed in the contingency plan to be followed in an emergency.
- (h) The contents of the permittee's contingency plan.

(2) Not less than 2 persons per crew shall be trained in emergency first aid procedures, including red cross-approved techniques of cardiopulmonary resuscitation.

(3) When a drilling contractor or other independent contractor is involved in drilling, completing, testing, producing, repair, workover, or servicing operations on an H2S well, a permittee of a well may rely on written certification obtained from the contractor that the agents and employees of the contractor involved in the operations have received the training required by this rule. A permittee shall retain the written certification. Failure to ensure that employees receive adequate training and are current in the training is sufficient cause for the suspension of any or all components of the oil and gas operations on the well. A suspension shall continue as provided in R 324.1014(2).

History: 1996 AACCS; 2002 AACCS.

R 324.1108 Securing of nonproducing H2S wells.

Rule 1108. A permittee of a nonproducing H2S well shall ensure that the well is secured to prevent a person other than authorized personnel from opening the well.

History: 1996 AACCS.

R 324.1109 Warning signs; specifications.

Rule 1109. A permittee of a well shall ensure that warning signs have letters that are not less than 1 1/2 inches in height and that are legible under normal conditions at a distance of 25 feet.

History: 1996 AACCS.

R 324.1110 Contingency plans for drilling and production.

Rule 1110.(1) A contingency plan for drilling shall be prepared by the applicant to provide an organized plan of action for alerting and protecting personnel at an H2S well site and the public. The contingency plan for drilling shall consist of 2 parts.

(2) Part 1 of the plan shall contain the general procedures that shall be followed in the event of an emergency involving the possible release of hydrogen sulfide into the atmosphere and shall include both of the following sections:

(a) A section that lists, by title, personnel to be contacted and their duties and responsibilities. The list shall also include a delegation of duties and responsibilities and shall specify who is responsible for ordering ignition of the H2S well if necessary. The list shall be kept current by the applicant or permittee.

(b) A section that contains all of the following information:

(i) The emergency circumstances that cause the plan to be put into operation.

(ii) The initial procedures to be followed if the plan is activated.

(iii) The actions to be taken to ensure that all personnel known to be on the location are accounted for and that nonessential personnel shall be safely removed.

(iv) The actions to be taken to restrict access of nonessential personnel to the location.

(v) The procedure for notifying the general public, public authorities, as listed in the contingency plan, and safety agencies in the event of an emergency.

(vi) If evacuation of the public is necessary, the procedure for conducting the evacuation.

(vii) The procedures for igniting the H₂S well.

(3) Part 2 of the plan shall be site-specific and shall contain all of the following information:

(a) An accurate map that shows the locations of all existing structures used for public or private occupancy, areas maintained for public recreation, roads, and railroads within a 1,300-foot radius of the drilling well in the case of a class I H₂S well or within a 500-foot radius of the drilling well in the case of a class II H₂S well.

(b) A list of names, telephone numbers, and addresses of all of the following:

(i) Seasonal and permanent residents.

(ii) Private businesses.

(iii) Schools.

(iv) Places of worship.

(v) Hospitals.

(vi) Governmental offices.

(vii) Parties responsible for the areas maintained for public camping or gathering identified on the map.

(c) A list of emergency telephone numbers, including the numbers of all of the following:

(i) Representatives of the permittee.

(ii) Representatives of the drilling contractor.

(iii) The emergency preparedness coordinator.

(iv) Local ambulance services.

(v) Local hospitals.

(vi) Local fire departments.

(vii) The department of environmental quality.

(viii) The pollution emergency alerting system.

(4) An applicant shall submit part 1 of the contingency plan for drilling an H₂S well at the request of the supervisor or authorized representative of the supervisor. The applicant shall submit part 2 of the contingency plan for drilling an H₂S well with the application for a drilling permit. The applicant shall submit a copy of part 2 of the contingency plan to the local emergency preparedness coordinator at the time the application is submitted to the supervisor. The supervisor or authorized representative of the supervisor may require that contingency plans for producing H₂S wells be updated periodically.

(5) An applicant may request, from the supervisor or authorized representative of the supervisor, an exception to the requirement to prepare the map and accompanying list of residences required in subrule (3) of this rule.

(6) A permittee shall prepare a contingency plan for production for any well, surface facility, or flow line subject to this rule. A contingency plan shall contain all of the following information:

(a) permittee name, well name, location, and permit number of the well or facility.

(b) An accurate map or site plan showing the location of all equipment carrying or containing fluids with hydrogen sulfide.

(c) Names and contact information for local representatives of the permittee who have knowledge of the equipment and authority to take corrective actions at the well or facility in an emergency situation.

(d) Available information on hydrogen sulfide concentrations at the site.

(7) Every 3 years or as required by the supervisor, a permittee shall review contingency plans and certify to the supervisor or authorized representative of the supervisor and the local emergency preparedness coordinator that the contingency plans are accurate. The permittee shall update the contingency plan under any of the following conditions and submit a copy of the updated contingency plan to the supervisor or authorized representative of the supervisor and the local emergency preparedness coordinator:

(a) change of the notification process or local representatives of the permittee.

(b) A substantial change in the site conditions or equipment noted on the plan.

(c) change of the permittee.

(8) A permittee shall provide a contingency plan for production to the supervisor or authorized representative of the supervisor and the local emergency preparedness coordinator for all wells, surface facilities, and flow lines subject to this rule 6 months after the effective date of these amendatory rules for all existing production facilities and before the commencement of production for all production facilities completed after the effective date of these amendatory rules.

History: 1996 AACCS; 2001 AACCS.

R 324.1111 Compliance with rules; time.

Rule 1111. A permittee of a well shall comply with R 324.1112 to R 324.1116 not later than the time at which drilling reaches a depth of 500 feet above the projected top of the geological stratum suspected by a permittee or the supervisor or authorized representative of the supervisor to contain hydrogen sulfide. Compliance shall continue until all formations or strata suspected to contain hydrogen sulfide are cased off, plugged, or drilled and proven not to be a potential problem.

History: 1996 AACCS.

R 324.1112 Briefing areas.

Rule 1112. (1) A permittee of a well shall establish primary and secondary briefing areas at the drilling site. A permittee shall ensure that safety equipment is located at the primary briefing area.

(2) The supervisor or authorized representative of the supervisor may require safety equipment, in addition to that listed in R 324.1102(d), if necessary for the safety of the public or the workers.

History: 1996 AACCS.

R 324.1113 Emergency preparedness coordinator; contact by permittee.

Rule 1113. A permittee of a well shall contact the appropriate emergency preparedness coordinator not less than 24 hours before the commencement of drilling the H₂S well.

History: 1996 AACS; 2001 AACS.

R 324.1114 Wind direction indicators.

Rule 1114. A permittee of a well shall install wind direction indicators at the drilling site. The wind direction indicators shall be visible from all normal work stations within the drilling site.

History: 1996 AACS.

R 324.1115 Equipment; electric or mechanical fan; hydrogen sulfide detection and warning system; emergency escape self-contained breathing apparatus; rig floor ventilation.

Rule 1115. (1) A permittee of a well shall install a hydrogen sulfide detection and warning system that activates audible and visual alarms if hydrogen sulfide is detected. Visual alarms shall be activated if a hydrogen sulfide concentration of 10 ppm is detected. Audible alarms shall be activated if a hydrogen sulfide concentration of 20 ppm is detected.

(2) A permittee of a well shall locate hydrogen sulfide sensors as follows:

(a) For rotary rigs, at all of the following locations:

(i) The shale shaker or at the point of first release of gas from the returning stream of drilling fluid.

(ii) On the rig floor.

(iii) In the substructure.

(iv) At the mud hopper.

(b) For cable tool rigs, at the point of first release of gas from the well bore and on the rig floor.

(3) After the sensors are mounted, a permittee of a well shall calibrate the system according to the manufacturer's instructions. The permittee shall test the detection and warning system before drilling into the geological stratum suspected to contain hydrogen sulfide. The permittee shall record the calibrations and tests in the driller's log. The supervisor or authorized representative of the supervisor may witness the testing and calibration.

(4) A permittee of a well shall ensure that an emergency escape self-contained breathing apparatus is readily available to every member of the drilling crew at that member's work station and to other personnel required to be on the rig floor during the drilling operation.

(5) A permittee of a well shall ensure that the rig floor and substructure is adequately ventilated to prevent the accumulation of gas. Forced-air ventilation shall be

used when natural ventilation is inadequate. An electric or mechanical fan shall be available on the drill site for ventilation.

(6) A permittee of a well shall ensure that the rig floor and substructure of a class IV H₂S well is adequately ventilated to prevent the accumulation of gas and shall utilize either a hydrogen sulfide detector that has an audible alarm or an electric or mechanical fan that operates constantly during the operation if natural ventilation is inadequate to keep the wellhead area free from gas.

(7) A permittee of a well shall ensure that well safety equipment is the same equipment that is required under R 324.1102(d) for class I H₂S and class II H₂S wells and R 324.1102(d)(viii), (ix), and (xi) for class III H₂S wells. Safety equipment shall be located at the primary briefing areas for class I H₂S and class II H₂S wells and at the well site for class III H₂S and class IV H₂S wells, if safety equipment is required for class IV H₂S wells, unless otherwise stated in this rule. The supervisor or authorized representative of the supervisor may require the use of safety equipment, in addition to the equipment listed in R 324.1102(d), if necessary for the safety of the public or the workers.

History: 1996 AACCS.

R 324.1116 Mud gas separator; burning of gas generated by mud gas separator; incinerator or flare installation; hydrogen sulfide concentration determination.

Rule 1116. (1) All of the following provisions apply to rotary drilling operations:

(a) If a gas kick occurs, all returning drilling fluid shall be circulated through a mud gas separator.

(b) All gas separated from the drilling fluid by the mud gas separator shall be routed to a properly engineered incinerator or flare that has an elevated discharge to the atmosphere and shall be burned.

(c) When gas is being routed to the incinerator or flare from the mud gas separator, the hydrogen sulfide content of the gas shall be determined by a permittee or the permittee's representative. The determination shall be made using colorimetric or length of stain tubes or other equipment designed to measure hydrogen sulfide concentrations and shall utilize a procedure approved by the supervisor or authorized representative of the supervisor. The results of the determination shall be entered into the driller's log.

(2) Both of the following provisions apply to cable tool drilling:

(a) All gas separated from other fluids shall be routed to a properly engineered flare or incinerator that has an elevated discharge to the atmosphere and shall be burned.

(b) When gas is being routed to the incinerator or flare, the hydrogen sulfide content of the gas shall be determined by a permittee or the permittee's representative. The determination shall be made using colorimetric or length of stain tubes or other equipment designed to measure hydrogen sulfide concentrations and shall utilize a procedure approved by the supervisor or authorized representative of the supervisor. The results of the determination shall be entered into the driller's log.

History: 1996 AACCS.

R 324.1117 Initial testing.

Rule 1117. (1) When initial testing of an H₂S well is performed, in addition to applicable air pollution control commission general rules, a permittee of a well shall comply with all of the following requirements not later than the start of testing if permanent surface facilities have not been installed:

(a) One or more wind direction indicators shall be installed and shall be visible from all normal work stations within the test site of class I H₂S and class II H₂S wells.

(b) An incinerator or flare shall be installed for the purpose of burning all gas and stock tank vapor produced during the test. The incinerator or flare shall be equipped with a continuous pilot light or a pilot light outage detector that has an automatic reignition system. The incinerator or flare shall be located not less than 75 feet from the wellhead and test tanks and shall be positioned so that the prevailing winds carry the combustion products away from the site.

(c) A flashback prevention system shall be installed between the incinerator or flare and the test tanks.

(d) All of the following equipment shall be located at the test site:

(i) Not less than 2 self-contained, pressure-demand breathing apparatus that have a 30-minute air supply for class I H₂S and class II H₂S wells.

(ii) A first aid kit for class I H₂S and class II H₂S wells.

(iii) A portable electronic hydrogen sulfide detector for class I H₂S and class II H₂S wells.

(iv) An emergency escape self-contained breathing apparatus for each member of the test crew for class I H₂S and class II H₂S wells.

(v) The supervisor or authorized representative of the supervisor may require the use of safety equipment in addition to the equipment listed in R 324.1102(e) if necessary for the safety of the public or the workers.

(e) Warning signs that have the word "Danger" or "Caution" followed by the words "Poison Gas" shall be posted at the entrances to all access roads.

(f) The supervisor or authorized representative of the supervisor shall be notified of the expected start-up date of the initial test.

(2) During the test period, a permittee of a well shall determine the hydrogen sulfide content of the gas produced. Hydrogen sulfide content shall be determined on-site using colorimetric or length of stain tubes or other equipment designed to measure hydrogen sulfide concentrations utilizing a procedure approved by the supervisor or authorized representative of the supervisor.

(3) All gas measurements made during the initial flow test shall be made using a meter that allows all gas metered to be burned.

(4) Operations or procedures that require the use of a self-contained breathing apparatus shall be performed only if not less than 2 people who are authorized by the permittee of the well are on-site.

(5) The supervisor or authorized representative of the supervisor may grant exceptions to this rule when compliance with the provisions of this rule is not necessary to provide for the protection or safety of the public or workers or when the

H₂S well or associated surface facilities are not likely to constitute sources of nuisance odors.

History: 1996 AACCS.

R 324.1118 Gas analyses.

Rule 1118. (1) The supervisor or authorized representative of the supervisor may require periodic gas analyses to determine hydrogen sulfide concentration.

(2) A permittee of a well shall make a second gas analysis 1 year after the date of the initial analysis required in R 324.1117(2). Further gas analyses shall be required only at the request of the supervisor or authorized representative of the supervisor.

(3) A permittee of a well shall notify the supervisor or authorized representative of the supervisor before the sampling and analysis required in subrules (1) and (2) of this rule.

(4) A permittee of a well shall report, in writing, the results of a gas analysis required by the supervisor or authorized representative of the supervisor to the supervisor within 1 month of the date of the analysis. The report shall state the methods of sampling and analysis used.

History: 1996 AACCS.

R 324.1119 Wellheads; painting requirements; warning signs.

Rule 1119. (1) A permittee of a well shall ensure that the valve or valves necessary to shut off all fluid flow nearest the wellhead are painted yellow.

(2) A permittee of a well shall ensure that the power supply kill switch of an H₂S well that is produced by artificial lift is painted yellow. A permittee of a well shall ensure that the power supply kill switch is conspicuously marked and readily accessible.

(3) A permittee of a well shall ensure that a warning sign that has the word "Danger" or "Caution" followed by the words "Poison Gas" is prominently displayed at the wellhead.

History: 1996 AACCS.

R 324.1120 Flow lines; markers; protection.

Rule 1120. (1) A permittee of a well shall ensure that the routes of flow lines that are located before the point of sale and that are used for transporting fluids containing hydrogen sulfide are marked. Markers shall be mounted not less than 4 feet above ground level, shall consist of signs denoting the presence of a buried line carrying hydrogen sulfide, and shall contain the name of the flow line owner and the flow line owner's emergency telephone number. Markers shall be properly maintained and shall be spaced

so that the route of the flow line can be easily traced. Routes shall be kept sufficiently cleared to allow adjacent markers to be visible with the naked eye.

(2) A permittee of a well shall ensure that flow lines constructed above ground level are protected from accidental damage by vehicular traffic or other similar causes.

History: 1996 AACCS.

R 324.1121 Heated vessels; installation of certain equipment required; exhaust gas stack height.

Rule 1121. A permittee of a well shall ensure that heated vessels fueled with natural gas that contains hydrogen sulfide are equipped with a system to prevent the emission of the fuel gas to the atmosphere in the event of a pilot failure or flameout and shall be in compliance with the emissions and operations requirements provided in R 336.1403. The exhaust gas stack height shall be not less than 20 feet.

History: 1996 AACCS.

R 324.1122 Vessels used for storing hydrogen sulfide-bearing liquid hydrocarbons or hydrogen sulfide-bearing brine; equipment requirements.

Rule 1122.(1) A permittee of a well shall ensure that a vessel which is located at an H₂S well site or in a central production facility serving an H₂S well and which is used for the storage of hydrogen sulfide-bearing liquid hydrocarbons or hydrogen sulfide-bearing brine is equipped with a sealing, pressure-vacuum-type hatch, except that a pressure-vacuum-type hatch is not required on a storage vessel if the venting of vapor to the atmosphere is permitted under subrule (4) of this rule. A hatch shall be kept closed when a tank is not being gauged.

(2) If a storage vessel described in subrule (1) of this rule releases a total 24-hour volume of 5 mcf or more of vapors, then a permittee of a well shall ensure that the vessel is equipped with a vent line for conveying released gasses and vapors to an incinerator, flare, or vapor recovery system. A flashback prevention system shall be installed on the line between a vessel and the incinerator or flare. If a vapor recovery system is used to control tank vapor emissions, then a flare or incinerator

shall be available for standby or emergency use. Installing a vapor recovery system does not exempt a flare or incinerator from being in compliance with the requirements of R 324.1123.

(3) If a storage vessel described in subrule (1) of this rule releases a total daily volume of 5 mcf or more of vapors, then a permittee of a well shall install a fence around the vessel equipped with a gate. A fence shall be located not less than 20 feet from the base of a storage vessel. A permittee shall ensure that warning signs with the word "Danger" or "Caution" followed by the words "Poison Gas" are installed on all sides of the fence. If the supervisor or authorized representative of the supervisor finds that a threat to the public safety exists due to emissions of sulfur-bearing gas or vapor, then fencing other than that specified in R 324.102(p) may be required.

(4) If a storage vessel described in subrule (1) of this rule releases a total daily volume of 5 mcf or less of vapor, then it may be vented to the atmosphere if the vent is located not less than 10 feet above the tank top and if the opening of the vent is within the diked area or not less than 20 feet above the ground if the opening of the vent is

outside the diked area. The supervisor may prohibit venting of vapor to the atmosphere if a verified chronic nuisance odor results from the sulfur-bearing compounds being vented.

(5) If the hydrogen sulfide concentration at the tank thief hatch is more than 500 ppm by volume, then a permittee of a well shall ensure that a tank has a latched gate at the foot of the catwalk stairs. A permittee of a well shall ensure that a sign reading "Self-contained Breathing Apparatus is Recommended Beyond This Point if Hatches are to be Opened" is posted on the gate.

(6) The supervisor may require the use of a tank gauging system that does not require the opening of the tank hatches if a verified chronic nuisance odor results from tank gauging.

(7) A person or a permittee of a well shall not install a tank which is used for the storage of hydrogen sulfide-bearing liquid hydrocarbons or brine from an H₂S well if the separator or treater immediately upstream of the tank has an operating pressure of more than 250 psig unless an independent

registered engineer certifies that the facility is designed and constructed such that any release of liquids or gas to the tank shall not cause a release of hydrogen sulfide to the atmosphere.

History: 1996 AACS; 2001 AACS; 2002 AACS.

R 324.1123 Incinerators and flares; equipment and design requirements; additional requirements.

Rule 1123.(1) A permittee of a well shall ensure that an incinerator or flare installed under R 324.1117, R 324.1122, or R 324.1124 is designed and equipped to prevent the release of unburned gas to the atmosphere. If the daily volume of gas handled by the incinerator or flare contains 28 pounds or more of hydrogen sulfide, then a permittee shall ensure that the incinerator or flare is equipped with a mechanism that operates upon failure of the pilot light to shut off the flow of fluid from the wellhead.

(2) A permittee of a well shall ensure that an incinerator or flare required by R 324.1122 is fenced. A fence shall be located not less than 20 feet from the base of the incinerator or flare. A permittee of a well shall ensure that warning signs that have the word "Danger" or "Caution" followed by the words "Poison Gas" are posted on all sides of the fence. If the supervisor or authorized representative of the supervisor finds that a threat to the public safety still exists due to emissions of the incinerator or flare, then fencing other than that specified in R 324.102(p) may be required.

(3) If the supervisor or authorized representative of the supervisor finds that a threat to the public health or safety exists due to the emission of sulfur-bearing gasses or vapors, then a flare stack or incinerator stack that is more than 20 feet high, as specified in R 324.1101(f) and (h), may be required.

History: 1996 AACS; 2002 AACS.

R 324.1124 Emergency relief valves.

Rule 1124. A permittee of a well shall ensure that an emergency relief valve on process equipment is equipped with a line for conveying the released gasses or vapors to an incinerator or flare. The supervisor or authorized representative of the supervisor may grant an exception if the total daily volume of gas produced is less than 5 mcf.

History: 1996 AACCS.

R 324.1125 Shut-in systems.

Rule 1125.(1)A permittee of a well shall ensure that an H₂S well which produces unattended and which has a stabilized producing tubing pressure of not less than 100 psig is equipped with a high-pressure and low-pressure shut-in system.

(2) A permittee of a well shall ensure that a class I H₂S well drilled after the effective date of these amendatory rules for which the 100 ppm radius of exposure includes an existing structure used for public or private occupancy, existing area maintained for public recreation, or the edge of the traveled portion of an existing interstate, united states, or state highway, shall be equipped with the following:

(a) Hydrogen sulfide sensors located on four sides of the wellhead at a distance of not more than 20 feet. The sensors shall be set to activate safety shutdown equipment as specified in subdivisions (b) and (c) of this subrule when a hydrogen sulfide concentration of 30 ppm is detected. A permittee of a well shall calibrate the sensor system according to the manufacturer's instructions.

(b) For flowing class I H₂S wells:

(i) Dual manual master valves.

(ii)A fail-closed wing safety valve automatically actuated by a low pressure pilot sensor downstream of the valve and by the hydrogen sulfide sensors at the wellhead.

(iii)Remote telemetry that alerts the well operator when the hydrogen sulfide sensors detect a hydrogen sulfide concentration of 30 ppm.

(iv) An emergency access valve into the tubing spool.

(c) For pumped class I H₂S wells:

(i) An emergency access valve into the tubing spool.

(ii)A fail-closed blowout preventer automatically actuated in the event the polish rod breaks.

(iii)A fail-closed polish rod ram blowout preventer automatically actuated by the hydrogen sulfide sensors at the wellhead.

(iv)Equipment that automatically shuts off the pump drive unit in the event of a stuffing box failure.

(v) A safety shut down of the pump drive unit, which cannot be isolated from the tubing pressure without unlocking a valve, automatically actuated by the high pressure low pressure sensor and the hydrogen sulfide sensors at the wellhead.

History: 1996 AACCS; 2001 AACCS.

R 324.1126 Vehicle loading racks; vapor return lines required; vapor vent lines permitted.

Rule 1126. (1) Truck vapor return lines are required on the loading racks of the surface facilities and shall be utilized when oil or condensate is loaded into the truck, except as provided in this rule.

(2) Truck vapor vent lines are permitted if the point of emission is not less than 75 feet from the loading rack and not less than 600 feet from an existing water well and an existing structure used for public or private occupancy. The allowance for truck vapor vent lines may be rescinded in specific cases if the supervisor or authorized representative of the supervisor determines that nuisance odors are caused by the use of the vent lines.

History: 1996 AACCS.

R 324.1127 Compliance with rules before production of new H2S well.

Rule 1127. (1) A permittee of a well shall comply with this rule and R 324.1119 to R 324.1126 before production of a new H2S well.

(2) The supervisor may grant exceptions to R 324.1119 to R 324.1123, R 324.1125, R 324.1126, and this rule when the rules are not necessary to provide for the protection or safety of the public or workers or when the H2S well or associated surface facilities are not likely to constitute sources of nuisance odors.

History: 1996 AACCS.

R 324.1128 Servicing; requirements.

Rule 1128. Before commencing an operation that requires removing the seal between the tubing and production casing, a permittee of a well shall meet all of the following requirements:

(a) Blowout prevention equipment sized to accommodate the tubing and rework drill pipe shall be installed and tested for class I H2S, class II H2S, and class III H2S wells.

(b) Primary and secondary briefing areas shall be established for class I H2S and class II H2S wells.

(c) The same safety equipment that is required under R 324.1102(d) is required for class I H2S and class II H2S wells and under R 324.1102(d)(viii), (ix), and (xi) is required for class III H2S wells. Safety equipment shall be located at the primary briefing areas for class I H2S and class II H2S wells and at the well site for class III H2S and class IV H2S wells if required for class IV H2S wells. The supervisor or authorized representative of the supervisor may require the use of safety equipment, in addition to the equipment listed in R 324.1102(d), if the equipment is necessary for the safety of the public or the workers.

(d) An electric or mechanical fan shall be located at the well site for class I H2S, class II H2S, and class III H2S wells. The fan shall be operated constantly during the operation to keep the wellhead area free from gas if natural ventilation is inadequate.

(e) A hydrogen sulfide detection and warning system shall be installed and have the detector located downwind from the well or in the direction in which the fan is blowing. The detection and warning system shall activate visual alarms if a hydrogen

sulfide concentration of 10 ppm is detected. Audible alarms shall be activated if a hydrogen sulfide concentration of 20 ppm is detected; however, the use of a hydrogen sulfide detection and warning system is optional for a class IV H₂S well.

(f) Signs that have the word "Danger" or "Caution" followed by the words "Poison Gas" shall be installed at the entrances of all access roads.

(g) The supervisor or authorized representative of the supervisor shall be notified before the start of servicing operations for class I H₂S, class II H₂S, and class III H₂S wells.

(h) A revised and updated contingency plan shall be at the well site and shall be reviewed with all workers for class I H₂S and class II H₂S wells.

History: 1996 AACS.

R 324.1129 Burning, processing, or disposing of hydrogen sulfide gas.

Rule 1129. (1) A permittee shall not release gas produced from an H₂S well to the environment, except as follows:

(a) By burning as fuel in a heated vessel in compliance with R 324.1121.

(b) By burning in a flare or incinerator that complies with R 324.1010.

(c) By injection into an approved underground formation under R 324.612 or R 324.703.

(d) By venting from tanks under R 324.1122(4) or R 324.1124.

(e) By disposal by other means as may be approved by the supervisor under a specific request by the permittee, if the permittee demonstrates to the supervisor that the manner of disposal prevents waste and does not cause unnecessary endangerment of public health, safety, and welfare.

(2) If a well or its associated surface facilities produce hydrogen sulfide and the supervisor or authorized representative of the supervisor receives 1 or more complaints of odor regarding the facility, then the supervisor may require the permittee of a well to perform numerical modeling to determine the concentration of hydrogen sulfide in the ambient air. Numerical modeling shall utilize the distance from the potential point of an uncontrolled release of gas at the well or its associated surface facilities to the closest existing structure used for public or private occupancy, existing area maintained for public recreation, or the edge of the traveled portion of an existing interstate, United States, or state highway. A permittee shall have the opportunity to provide, in addition to the numerical modeling, actual measurements of the concentration of hydrogen sulfide in the ambient air taken at the closest existing structure used for public or private occupancy, existing area maintained for public recreation, or the edge of the traveled portion of an existing interstate, United States, or state highway. The supervisor or authorized representative of the supervisor may determine a nuisance odor exists based on all applicable information. The supervisor or authorized representative of the supervisor may require appropriate emission control measures consistent with the provisions of this rule and R 324.1101 to R 324.1128. If emission control measures are required, then the permittee shall submit, within 30 days of being determined to be necessary by the supervisor, for the approval of the supervisor or authorized representative of the supervisor, a timetable for the installation of any equipment required.

History: 1996 AACS; 2001 AACS.

R 324.1130 Requirements for certain gathering lines, flow lines, and facility piping.

Rule 1130. (1) A gathering line, installed after the effective date of these amendatory rules carrying gas with more than 300 ppm hydrogen sulfide shall be subject to the provisions for design, construction, testing, maintenance, and operation as specified in administrative rules promulgated under Act No. 165 of the Public Acts of 1969, as amended, being §483.151 et seq. of the Michigan Compiled Laws.

(2) A flow line or facility piping, carrying gas from a class I H₂S well and which is subject to a maximum working pressure in excess of 125 psig shall be subject to the provisions for design, construction, testing, maintenance, and operation as specified in administrative rules promulgated under Act No. 165 of the Public Acts of 1969, as amended, being §483.151 et seq. of the Michigan Compiled Laws.

(3) A person or a permittee shall not install a flow line or gathering line, carrying gas from a class I H₂S or class II H₂S well, or modify an existing flow line or gathering line to serve additional class I H₂S or class II H₂S wells, unless all of the following provisions are met:

(a) The person or permittee shall calculate the 100 ppm radius of exposure, using either the equation set forth in R 324.1102(c) or another dispersion model accepted by the supervisor. The calculation shall be based upon the reasonably expected concentration of hydrogen sulfide to be transported in the flow line or gathering line, the maximum actual operating pressure, and the volume of gas that could be released from the flow line or gathering line, accounting for any automatic shut-in systems and blocking valves that will be utilized.

(b) If an existing structure used for public or private occupancy, an existing area maintained for public recreation or the edge of the traveled portion of an existing interstate, united states, or state highway falls within the 100 ppm radius of exposure, the person or permittee shall prepare a construction and operation plan that incorporates reasonable measures to reduce the potential for public exposure to hydrogen sulfide from a release that might occur. The construction and operation plan shall consider appropriate construction standards, routing alternatives, monitoring equipment, automatic controls for source shut-in, or other available engineering methods. The person or permittee shall submit the construction and operation plan to, and receive the approval of the supervisor or authorized representative of the supervisor. The supervisor or authorized representative of the supervisor shall have 30 days to approve the plan or to require modifications or additional information.

(c) Repair and maintenance of an existing flow line or gathering line are exempt from the provisions of this subrule.

(4) Gathering lines, flow lines, or facility piping are not subject to this rule if they are subject to the issuance of a certificate of public convenience and necessity by the Michigan public service commission under the provisions of Act 9 of the Public Acts of 1929, as amended, being §483.101 et seq. of the Michigan Compiled Laws or are subject to regulation by the Michigan public service commission under the provisions

of Act No. 165 of the Public Acts of 1969, as amended, being §483.151 et seq. of the Michigan Compiled Laws.

History: 2001 AACCS.

PART 12. HEARINGS

R 324.1201 Hearing; purpose; scheduling; request or petition generally.

Rule 1201. Hearings may be held to receive evidence pertaining to the need or desirability of an action or an order by the supervisor. A hearing may be scheduled at the initiative of the supervisor or by the supervisor upon the receipt of a petition, which is properly filed as specified in R 324.1202, from an owner, producer, lessee, lessor, or other person interested in the matter proposed for hearing.

History: 1996 AACCS.

R 324.1202 Petition for hearing; contents.

Rule 1202. (1) A proper written petition for a hearing, except for the material filed pursuant to subdivisions (e) and (f) of this subrule, shall be filed on 8 1/2 by 11-inch paper and shall contain at least all of the following information:

(a) The name and address of petitioner.

(b) A specific statement of the matters asserted or relief sought indicating the rule, order, or section of the act applicable to the petition.

(c) Property descriptions, locations, sections, townships, and counties relating to the matter to be heard.

(d) The names and last known addresses of the last record owners, lessees, lessors, or other parties of record in the register of deeds office who own interests in the lands that are the subject of the petition.

(e) A map of the area to be affected and of the contiguous property. Lease ownership and well locations within 1,320 feet of the area to be affected shall be identified.

(f) Other maps, plats, and exhibits that may be useful in considering the matter to be heard.

(g) The name and address of the newspaper circulated in the county or counties where the affected lands are located.

(h) A copy of a permit application and attachments pertinent to the matters asserted in the petition.

(i) The name, address, and telephone number of the representative or representatives of the petitioner to whom inquiries can be made.

(2) All of the following additional information shall be filed with the petition when a spacing or proration order is to be considered:

(a) The size, shape, and orientation of the proposed drilling unit.

(b) The well spacing pattern to be proposed.

(c) The surface geographic area to be included in the spacing order, and the geologic formation or formations to be spaced or prorated.

(d) Well production, testing history, and other applicable reservoir and geological data.

(e) Proposed daily well allowables, if applicable.

(3) A petition to establish secondary recovery operations pursuant to R 324.612 shall also include all of the following information:

(a) Applicable seismic lines, profiles, and interpretation showing seismic outlines or boundaries of reservoir structure and the geologic structure and area to be impacted by the operations.

(b) Appropriate geologic information, such as structural cross sections and productive areas, thickness isopach, and other essential maps.

(c) Applicable reservoir engineering data, such as the following:

(i) Pressure versus time.

(ii) Pressure versus oil production.

(iii) Reservoir rock and fluid properties.

(iv) Primary production.

(v) An estimated forecast of oil recoveries.

(vi) Estimated economics of secondary recovery project.

(d) A plan that shows the locations of existing production wells, proposed production wells, and proposed injection wells and a facilities plan that includes schematics that show the locations of existing and proposed flow lines and wells and associated surface facilities.

(e) If groundwater is to be injected, a hydrogeologic investigation report of the source aquifer.

(4) The supervisor may return a petition that is not in conformance with these rules and may include a list of the deficiencies of the petition.

(5) All of the following additional information shall be filed with the petition when compulsory pooling is to be considered:

(a) The ownership of oil and gas interests within the drilling unit and a specific description of the nature and extent of the interests sought to be pooled.

(b) Sworn statements that indicate, in detail, what action the petitioner has taken to obtain a voluntary unit.

(c) Whether or not the petitioner desires to drill or operate the unit, or both, and, if not, the name of the party nominated as operator and the recommendation of the petitioner as to the arrangements that are just and equitable to all owners within the drilling unit.

(d) The estimated costs of drilling, completing, and equipping the well, on a form provided by the supervisor, and additional compensation proposed for the risk associated with the drilling and equipping of the well.

History: 1996 AACCS.

R 324.1203 Hearings subject to the administrative procedures act of 1969.

Rule 1203. A hearing scheduled by the supervisor shall be conducted pursuant to Act No. 306 of the Public Acts of 1969, as amended, being §24.201 et seq. of the

Michigan Compiled Laws, unless a different procedure is authorized by the act or these rules. All hearings shall be conducted in a fair and impartial manner.

History: 1996 AACCS.

R 324.1204 Notice of hearing; service; answer.

Rule 1204. (1) The supervisor shall prepare and furnish the notice of hearing to the petitioner, together with instructions for publication and service of the notice. Upon receipt, the petitioner shall serve copies of the notice of hearing on the last known addresses of the last record owners, lessees, lessors, or other parties of record in the register of deeds office or assessor's records, if appropriate, who own interests in the lands that are the subject matter of the proposed action, unless otherwise provided in these rules.

(2) If directed by the supervisor, the petitioner shall also serve copies of the notice of hearing at the last known addresses of the last record owners, lessees, lessors, or other parties of record in the register of deeds office who own interests in all or part of the quarter-quarter sections of land directly and diagonally adjacent to the lands or areas that are the subject matter of the proposed action.

(3) The notice of hearing shall be published by the petitioner in an oil and gas industry publication circulated in Michigan and in a newspaper of general circulation in the county or counties involved with the matter to be heard. Publication shall occur not less than 21 days before the date of the hearing. Affidavits of proof of publication shall be filed with the supervisor before the date of the hearing.

(4) The notices of hearing shall be mailed not less than 21 days before the date of the hearing. Affidavits of proof of mailing by first-class mail or personal service shall be filed with the supervisor before the date of the hearing. An affidavit of proof of mailing shall state that the notice was deposited in the United States mail not less than 21 days before the hearing date, first-class postage prepaid, addressed to each person so served at his or her record address as set forth in the petition pursuant to R 324.1202. Each person so served and his or her address of record shall be specifically identified in the affidavit. The supervisor may require service by certified mail, return receipt requested.

(5) If a hearing is initiated by the supervisor, or if the scope of a hearing requested by a petitioner is enlarged at the initiative of the supervisor, then the supervisor shall publish the notice of hearing and may give additional notification of the hearing by United States mail or personal service.

(6) An interested person shall not be permitted to participate as a party in a hearing conducted pursuant to a petition unless the person files an answer in a timely manner with the supervisor and serves the answer to the petition upon the petitioner. The answer shall be in writing and shall set forth the interested person's positions with regard to the representations made or relief sought in the petition. An interested person is responsible for requesting a copy of the petition from the petitioner at the address set forth in the notice of hearing. The petitioner shall mail or otherwise deliver a copy of the petition and attachments to the interested person within 3 days after receipt of a written request. Failure of the petitioner to mail or otherwise deliver a copy of the petition to an interested person in a timely manner relieves the interested person of the obligation to file an answer and the interested person shall not be precluded from

presenting evidence or cross-examining witnesses. An interested person may mail or otherwise deliver his or her answer to the supervisor and mail or otherwise deliver a copy to the petitioner not less than 5 days before the date set for the hearing. Failure to file and serve an answer in a timely manner precludes an interested person from presenting evidence at the hearing or cross-examining witnesses. However, an interested person who does not file an answer in a timely manner may make a nonevidentiary statement at the hearing.

(7) The notice of hearing shall contain the following statement:

You can obtain a copy of the written petition by requesting one in writing from the petitioner at _____ . Take note that if you wish to participate as a party in the hearing by presenting evidence or cross-examining witnesses, you shall prepare and mail or otherwise deliver to the petitioner and supervisor, not less than 5 days before the hearing date, an answer to the petition in the manner set forth in R 324.1204(6). Proof of mailing or delivering the answer shall be filed with the supervisor on or before the date of hearing. The answer shall state with specificity the interested person's position with regard to the petition. Failure to prepare and serve an answer in a timely manner shall preclude you from presenting evidence or cross-examining witnesses at the hearing. If an answer to the petition is not filed, the supervisor may elect to consider the petition and enter an order without oral hearing.

(8) Upon a showing that service of notice cannot reasonably be made as provided by this rule, the supervisor may authorize service of the notice of hearing to be made in another manner reasonably calculated to give the interested parties actual notice of the proceeding and an opportunity to be heard. A request for this authorization shall be made by verified motion. The motion shall set forth sufficient facts to establish that service pursuant to subrules (1) through (7) of this rule cannot reasonably be made and shall suggest an alternative method of service.

History: 1996 AACCS.

R 324.1205 Types of hearings.

Rule 1205. (1) Upon receipt of a petition, the supervisor, after finding the petition to be complete, reasonable, and appropriate, shall determine whether the petition shall be heard. The supervisor shall give each hearing 1 of the following designations:

(a) A supervisor's evidentiary hearing to consider the adoption of an order having field-wide or statewide application or ramifications.

(b) A supervisor's evidentiary hearing to consider matters of local concern in the administration of these rules or the orders of the supervisor or to consider other matters as may be referred to the supervisor.

(c) A supervisor's uncontested evidentiary hearing to consider matters of local concern in the administration of these rules or the orders of the supervisor or to consider a petition to which an answer was not filed as provided in R 324.1204(6).

(2) If a timely answer is not filed to a petition or if oral hearing is waived by all interested persons present at a hearing, then the supervisor may direct that a petition be processed under subrule (1)(c) of this rule. In these cases, proceedings pursuant to subrule (1)(c) of this rule may be used if it appears that all issues of material fact may be resolved by means of written materials and that the proceeding can be efficiently

handled without oral hearing. Where there is no oral hearing, all substantive evidence shall be presented by verified statement. The supervisor may require supplemental verified statements.

(3) Prehearing conferences may be held at the discretion of the supervisor. A party may request a prehearing conference in his or her petition or in a responsive pleading. A hearing may be converted to a prehearing conference to ensure an orderly and expeditious hearing.

(4) The parties to a proceeding may, by stipulation in writing or entered on the record, agree upon facts, law, or procedure involved in the matter. Stipulations of fact shall be considered as evidence in the proceeding.

(5) The supervisor may, at any time during a proceeding, designate a hearings officer to conduct an evidentiary hearing as provided for under either subrule (1)(a) or subrule (1)(b) of this rule.

(6) The parties to a matter within the jurisdiction of the supervisor may agree to dispose of all or a part of a matter at issue by stipulation and consent order. The supervisor may enter the stipulation as a consent order, place the stipulation on public notice as is appropriate, or reject the stipulation.

History: 1996 AACCS.

R 324.1206 Final decision or order.

Rule 1206. (1) The supervisor shall issue a final decision or order as a result of a hearing held under R 324.1205 or as a result of the procedure pursuant to R 324.1205(1)(c) after giving due consideration to all of the following:

(a) The record.

(b) The supervisor's experience, technical competence, and specialized knowledge.

(c) The proposal for decision, if one is issued, and exceptions to the proposal for decision, replies to exceptions, and, if permitted by the supervisor, oral arguments and briefs.

(d) The advice or recommendations of the representative of the supervisor when required or appropriate.

(e) The stipulations or agreements that the contesting parties have placed on the record at a hearing or submitted in writing to the supervisor or the hearings officer.

(f) The act and rules.

(2) The final written decision or order of the supervisor shall be furnished to the petitioner. The petitioner shall serve copies, by first-class mail, to all persons who were mailed a notice of the hearing, who filed an appearance at the hearing, or who otherwise requested a copy of the final written decision.

(3) When a hearing is scheduled at the initiative of the supervisor, the supervisor shall serve copies of the final written decision or order, by first-class mail, to all persons who filed an answer, who filed an appearance at the hearing, or who otherwise requested a copy.

(4) After the hearing on a petition for an order to pool and after thorough consideration of the evidence and testimony submitted, the supervisor shall either

rule that pooling is not necessary to prevent waste or shall enter an order pooling the separately owned tracts and interests within the drilling unit. The pooling order shall authorize 1 of the owners within the affected unit to drill and operate the well within the affected unit and provide that the well shall be commenced within 90 days if drilling of the well has not already commenced, unless otherwise specified in the pooling order. The pooling order is null and void as to all parties and interests with respect to any well that has not commenced within 90 days after the date of the order. The order shall set forth the terms and conditions under which each of the owners may share in the working interest ownership of the well drilled or to be drilled on the pooled unit and for the sharing of any production from the well. The order shall provide for conditions under which each mineral or working interest owner who has not voluntarily agreed to pool all of the owner's mineral or working interest in the pooled unit may share in the working interest share of production or be compensated for the owner's working interest within the pooled unit according to either of the following provisions:

(a) Pay to the party authorized to drill, or who has drilled, the well that owner's proportionate share of the actual cost of drilling, completing, equipping, and operating the well in the pooled unit that the owner elects to participate in, or give bond for the payment of the share of the costs that have been, or are subsequently, actually incurred, whether the well is drilled as a producer or a dry hole.

(b) As to each well that the owner does not elect to participate in as provided in subdivision (a) of this subrule, if the well has been, or is subsequently, completed as a producer, authorize the operator of the well to take out of the nonparticipatory interest's share of production from the well the party's share of the cost of drilling, completing, equipping, and operating the well, plus an additional percentage of the costs that the supervisor considers appropriate compensation for the risks associated with drilling a dry hole and the mechanical and engineering risks associated with the completion and equipping of each well.

(5) Each nonparticipating owner who has not elected to participate in the drilling of any well by agreeing to pay the owner's working interest share of the costs shall make an election, within 10 days of receipt by the owner of the supervisor's certified mail copy of the order, as to which alternative in subrule (4)(a) or (b) of this rule the owner will select. If the nonparticipating party does not notify the supervisor in writing within 10 days of the owner's election as to any well proposed for the pooled unit, then the owner shall be considered to have elected the alternative in subrule (4)(b) of this rule. For the type of compulsory pooling order specified in this rule, the owner of an unleased mineral interest shall be treated as a working interest owner to the extent of 100% of the interest owned in the pooled unit. The unleased mineral interest shall be considered to be subject to a 1/8 royalty interest, which shall be free of any withholding for payment of any costs of drilling, completing, equipping, or operating the well to be drilled. All operations, including, the commencement, drilling, completing, equipping, or operation of a well, upon a portion of a drilling unit for which pooling has been ordered shall be considered for all purposes to be the conducting of operations upon each separately owned tract in the drilling unit. The portion of the production allocated to a separately owned tract or separately owned interest included in a drilling

unit shall, when produced, be considered for all purposes to have been actually produced from the separately owned tract or tracts by a well drilled in the drilling unit.

History: 1996 AACCS.

R 324.1207 Subpoenas; discovery.

Rule 1207. (1) At any time in a proceeding, the supervisor may order a party or witness to attend and testify orally at the hearing. Subpoenas for attendance at a hearing shall be issued by the supervisor upon application by a party. A subpoena may also command the person to whom it is directed to produce the books, papers, documents, or tangible things designated in the subpoena, which shall be specified in detail.

(2) A subpoena shall state the purpose or the title of the proceeding and shall command each person to whom it is directed to attend and comply with the subpoena at a time and place specified in the subpoena. The supervisor, upon a motion made at or before the time specified in the subpoena for compliance with the subpoena, may do either or both of the following:

(a) Quash or modify a subpoena or subpoena duces tecum if it is unreasonable or oppressive or if it requires the production of evidence that is not relevant or material to a matter in issue.

(b) Condition the subpoena, in the case of a subpoena duces tecum, upon the advancement, by the person in whose behalf the subpoena is issued, of the reasonable cost of producing the books, papers, documents, or tangible things, unless otherwise provided by law.

(3) The supervisor may issue an order to take a deposition, interrogatory, or other discovery either upon a motion by the supervisor or for good cause shown by a party to a proceeding. If a deposition, interrogatory, or other discovery is permitted, it shall be taken according to the rules for conducting discovery in circuit court civil cases under the Michigan rules of court.

History: 1996 AACCS.

R 324.1208 Continuance of hearing.

Rule 1208. A hearing, as provided in these rules, may be continued at the discretion of the supervisor or the presiding officer until all required testimony is submitted and all pertinent data and information are received. Further notice of the continuance of the hearing is not required, other than the announcement at the hearing of the date, time, and place of the continued hearing or service of written notice on those persons who filed an appearance at the first hearing.

History: 1996 AACCS.

R 324.1209 Failure to give notice of hearing.

Rule 1209. Failure to give notice of the time of a hearing to a person entitled to the notice shall not constitute a bar to conducting of the hearing if the petitioner can demonstrate substantial compliance with the notice requirements.

History: 1996 AACCS.

R 324.1210 Administrative complaint; notice of hearing.

Rule 1210. (1) The staff of the supervisor may file an administrative complaint with the supervisor. An administrative complaint shall set forth the nature of the violations complained of and shall specifically cite the provisions of the act, these rules, permit conditions, instructions, or orders of the supervisor allegedly violated. The supervisor shall select a date for the hearing and prepare a notice of hearing. Upon request, the person alleged to be in violation shall provide, to the supervisor, a list of the last known names and addresses of all persons of record with the register of deeds who own oil and gas interests within the unit. The notice of hearing and administrative complaint shall be served by certified mail, return receipt requested, on the person alleged to be in violation, the operator, the surety, and other interested persons as the supervisor shall consider necessary or appropriate. The notice shall be served not less than 21 days before the hearing date. The hearing shall be a hearing before the supervisor.

(2) A hearing held pursuant to an administrative complaint shall be a hearing before the supervisor pursuant to R 324.1205.

History: 1996 AACCS.

R 324.1211 Emergency orders and hearings.

Rule 1211. (1) When an emergency order is issued by the supervisor, the person subject to the order shall be served with the order, either personally or by certified, return receipt mail.

(2) An emergency hearing may be scheduled by the supervisor to consider matters of urgency or as a result of the issuance of an emergency order. Notice of hearing shall be served by certified mail, return receipt requested, not less than 10 days before the hearing date, on other interested persons as the supervisor shall consider necessary and appropriate.

History: 1996 AACCS.

R 324.1212 Appeals to the director of the department of environmental quality.

Rule 1212. (1) An owner or producer may file an appeal to the director of the department of environmental quality pursuant to section 61503 of the act. The appeal shall be in writing and filed with the director of the department of environmental quality. The appeal shall set forth the basis for the filing of an appeal.

(2) An appeal from an order of the supervisor that is issued after a hearing shall be an appeal on the record. The appealing party shall order and file a transcript of the proceeding before the supervisor. The supervisor shall prepare and file the record of the proceeding.

(3) Upon receipt of an appeal from an order of the supervisor, the director of the department of environmental quality shall set a schedule for the filing of briefs on appeal. Oral argument, if requested, shall be scheduled after the filing of briefs. A prehearing conference may be scheduled for the purpose of establishing a schedule for the appeal.

(4) The producer or owner appealing an order, action, or inaction of the supervisor shall file a petition of appeal to the director of the department of environmental quality. The petition and notice requirements are the same requirements for petitions for a hearing before the supervisor pursuant to R 324.1201 through R 324.1204.

(5) An appeal to the director of the department of environmental quality shall be filed within 28 days of the order, action, inaction, or procedure as provided in section 61503(2) of the act.

History: 1996 AACCS.

PART 13. ENFORCEMENT

R 324.1301 Authority of supervisor.


Rule 1301. The supervisor, under section 61506 of the act, may do any of the following:

(a) Enforce all rules, issue orders, determinations, and instructions necessary to enforce the rules and regulations, and do whatever may be necessary with respect to the subject matter stated in these rules to carry out the purposes of these rules and the act, whether or not the orders, determinations, or instructions are indicated, specified, or enumerated in the act or rules.

(b) Order the suspension of any or all components of the oil and gas operations when a violation exists. The suspension time shall continue until a correction is made and a violation no longer exists under section 61516 of the act. The supervisor may also prohibit the purchaser from taking oil, gas, or brine from the lease during the required suspension time.

(c) Order a well plugged for a continuing violation of the act or these rules.

History: 1996 AACCS; 2002 AACCS.

| | | | |
|--|---|--|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: TABLE OF CONTENTS Program Name: COMPLIANCE AND ENFORCEMENT Number: OOGM-601.00 Page: 1 of 32 | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |

SECTION 1: COMPLIANCE AND ENFORCEMENT INTRODUCTION

INTRODUCTION
AUTHORITY
DEFINITIONS
POLICY

SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS

INTRODUCTION
PROCEDURES

SECTION 3: ESCALATED COMPLIANCE AND ENFORCEMENT PROCESS

INTRODUCTION
PROCEDURES

SECTION 4: SETTLEMENT ISSUES

PROCEDURES

SECTION 5: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENTS

ISSUE
PROCEDURES

SECTION 6: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES

PROCEDURES

Appendix A Compliance and Enforcement Process

Compliance and Enforcement Flowchart

Appendix B Forms

OOGM Forms

Appendix C Escalated Enforcement Options

Withholding of Permits

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.00

Subject: COMPLIANCE AND ENFORCEMENT
TABLE OF CONTENTS

Page 2 of 32


Suspension of Operations

Notice of Determination

Stipulation and Consent Agreement

Referrals to the Department of Natural Resources, Law Enforcement Division, Environmental
Investigation Section

Referral to the Department of Attorney General

| | | | |
|--|--|--|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: SECTION 1: COMPLIANCE AND ENFORCEMENT INTRODUCTION Program Name: COMPLIANCE AND ENFORCEMENT Number: OOGM-601.01 Page: 3 of 32 | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |

INTRODUCTION:

Compliance and enforcement activities are an important tool for the Office of Oil, Gas, and Minerals (OOGM) to use in meeting its mission. Compliance and enforcement activities include conducting inspections, reviewing and evaluating reports, monitoring operations and activities, providing compliance assistance, issuing informal and formal compliance notifications, and conducting escalated enforcement activity. The purpose of this policy is to ensure that OOGM effectively identifies and investigates potential violations of the statutes, rules, permits, and orders that it administers and that the identified violations are responded to in a consistent and effective manner. This policy establishes basic principles applicable to OOGM compliance and enforcement activities and provides guidance to ensure a reliable, predictable, and effective compliance and enforcement program.

AUTHORITY:

Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.61501 to MCL 324.61527
Part 616, Orphan Well Fund, of the NREPA, MCL 324.61601 to MCL 324.61607
Part 625, Mineral Wells, of the NREPA, MCL 324.62501 to MCL 324.62518

DEFINITIONS:

“Compliance and Bonding Specialist” means the staff person responsible for processing escalated enforcement activities in the Permitting and Technical Services Section (PTSS).

“Compliance Communication” means any verbal communication, e-mail, fax, letter, or Notice of Inspection used to notify a permittee of a violation.

“Compliance Coordinator” means professional staff within an OOGM district office responsible for coordinating and tracking district compliance and enforcement activities.

“District Supervisor” means the manager having supervisory responsibilities for an OOGM District Office.

“EIS” means Environmental Investigation Section, Law Enforcement Division, Department of Natural Resources (DNR).

“Enforcement Notice” provides the notification that the case has been referred for escalated enforcement.

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.01

Subject: SECTION 1: COMPLIANCE AND ENFORCEMENT INTRODUCTION

Page 4 of 32

“Field Operations Section Supervisor” means the manager having supervisory responsibility for the OOGM Field Operations Section (FOS).

“HP TRIM” means Hewlett Packard Total Records Inventory Management software for records/document management.

“Minor Violations” generally are defined as those that do not pose a threat to the public health, safety or the environment. These violations may include the minor staining of soils with oil; debris at the well site; flammable and combustible materials within a radius of 75 feet of the wells and surface facilities; containment dikes that are too low; and similar types of violations.

“MIR Database” means the Michigan Implementation of the Risk Based Data Management System database.

“Opportunity to Show Compliance Meeting (OTSCM) Chairperson” means the designated staff person to chair the meeting.

“Office Chief” means the Assistant Supervisor of Wells, Supervisor of Mineral Wells, and the OOGM Chief.

“Permitting and Technical Services Section Supervisor” means the manager having supervisory responsibility for the OOGM Permitting and Technical Services Section (PTSS).

“Professional Staff” means geologist, geologist technician, geologist specialist, engineer specialist, hydrogeologist, or environmental quality analyst.

“Second Violation Notice (discretionary)” is a second formal means of notifying the recipient of a Significant Violation or when previous attempts to gain voluntary compliance have failed to correct the compliance issue or violation.

“Section Supervisor” means the section manager having supervisor responsibilities for a section within the OOGM.

“Secretary” means clerical and/or administrative staff within OOGM districts, sections or units.

“SEMA” means Senior Executive Management Assistant.

“Significant Violation” includes all hydrogen sulfide (H₂S) violations; violations that pose a threat to the public health, safety or the environment; the failure to plug or produce a well; spills, leaks, and resultant contamination that pose a threat to the groundwater or surface waters of the state. Significant Violations also include failure of the permittee to file required records, since the absence of those records significantly impedes the ability of the OOGM to investigate and develop cases involving threats to the public health, safety or the environment.

“Unit Supervisor” means the manager having supervisor responsibilities for a Unit within the Permitting and Technical Services Section of the OOGM.

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.01


Subject: SECTION 1: COMPLIANCE AND ENFORCEMENT INTRODUCTION

Page 5 of 32

“Violation Notice” (previously known as Notice of Non-Compliance) is a formal means of notifying the recipient of a Significant Violation or when previous attempts to gain voluntary compliance have failed to correct the compliance issue or violation.

POLICY:

It is the policy of the OOGM to require full compliance by permittees with all statutes, rules, orders, instructions, and permits administered by the Department of Environmental Quality (DEQ). Toward that end, compliance and enforcement actions should ensure that OOGM program priorities and regulatory responsibilities are successfully carried out. Compliance and enforcement actions should be 1) timely, 2) appropriately applied to violations, 3) consistent throughout the OOGM and 4) progressive in nature in response to repeat or continuing violations. Enforcement in and of itself is not a goal, compliance is the goal. The OOGM upholds the DEQ policy that using both compliance assistance and enforcement tools are warranted in meeting the goal of protecting and enhancing Michigan’s environmental quality and public health. Although the compliance and enforcement process for OOGM is typically a progressive process, i.e., starts with sending a Compliance Communication, followed by a Violation Notice, staff may initiate or take action at any point in the process as circumstances warrant. These circumstances include but are not limited to the seriousness of the violation, resources damaged or impaired, or impact on DEQ program functions. Additionally, staff may encounter a situation where a potential crime has been committed that warrants a criminal investigation and ultimate prosecution. Potential criminal violations shall be referred to the EIS, Law Enforcement Division, DNR in accordance with DEQ policy. The OOGM will measure compliance and enforcement program achievements to assist in program management and to allow the OOGM to determine rates of compliance as required by the DEQ’s planning process.

| | | | |
|---|---|------------------|--|
|  | Office of Oil, Gas, and Minerals | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| | POLICY AND PROCEDURES | | |
| Original Effective Date: February 7, 2014 Revised Date: | Subject: SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| Reformatted Date: | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.02 | Page: 6 of 32 | |

INTRODUCTION: The following procedural steps are a progressive series of actions as described in Section 1 utilized by the OOGM to assist a company in achieving compliance.

PROCEDURES:

| Step | Who | Does What |
|------|-----------------------------|---|
| 1. | Professional Staff | <p>A. Conducts inspection of a well site or facility and/or reviews and evaluates reports, records, or other required submittals.</p> <p>B. Notifies the permittee of any violations observed using the appropriate compliance and enforcement tool. As appropriate, creates field note in the MIR Database citing violation and method of notification.</p> <p>C. If the violation is a Minor Violation, or sufficiently resolved in a timely manner, no further action may be necessary.</p> <p>D. If violation remains unresolved, or if progress toward resolution of violation is deemed insufficient, notifies permittee using appropriate Compliance Communication.</p> <p>E. If a Violation Notice is deemed appropriate, completes Form <u>EQ 7330 Violation Notice</u> and creates compliance case number in the MIR Database and completes appropriate compliance screens.</p> |
| 2. | Compliance Coordinator | Reviews Violation Notice and compliance case data in the MIR Database. Send draft of Violation Notice to District Supervisor or Section Supervisor. |
| 3. | District or Unit Supervisor | Reviews and signs the Violation Notice. Ensures the Violation Notice is sent to permittee. |
| 4. | Professional Staff | <p>A. Conducts follow up review of status on resolution of the Violation Notice. If compliance has been achieved, sends Form <u>EQ 7399 Compliance Case Closure</u> letter and closes compliance case in the MIR Database with notation indicating resolution on appropriate compliance screens.</p> <p>B. If violation remains unresolved, or if progress toward resolution of violation is deemed insufficient, refers case to district Compliance Coordinator.</p> <p>C. If a Second Violation Notice is deemed appropriate, completes Form <u>EQ 7330 Violation Notice</u> and makes further entry in the MIR Database compliance case screens.</p> |
| 5. | Compliance | Reviews Second Violation Notice and compliance case data in |

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.02

Subject: SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS

Page 7 of 32

| Step | Who | Does What |
|------|-----------------------------|--|
| | Coordinator | the MIR Database. |
| 6. | District or Unit Supervisor | Reviews and signs second Violation Notice. Ensures Second Violation Notice is sent to permittee. |
| 7. | Professional Staff | <p>A. Conducts follow up review of status on resolution of the second Violation Notice. If compliance has been achieved, sends compliance case closure letter and closes compliance case in the MIR Database with notation indicating resolution on appropriate screens.</p> <p>B. If violation remains unresolved, or if progress toward resolution of violation is deemed insufficient, refers case to Compliance Coordinator using Form <u>EQ 7347 Case Referral</u>.</p> |
| 8. | Compliance Coordinator | <p>A. Initiates, prepares case for, and coordinates an Opportunity to Show Compliance Meeting (OTSCM.)</p> <p>B. Prepares a draft Notice <u>EQ 7348 Opportunity to Show Compliance Meeting</u> document using information obtained from the case referral package, the MIR Database, permit and bond files, and any other information sources as deemed applicable to the case. The draft shall specifically cite the sections of the statute, rules, permit conditions, instructions, or orders the permittee allegedly violated.</p> <p>C. Solicit comments on draft Notice <u>EQ 7348 Opportunity to Show Compliance Meeting</u> from the Professional Staff, District or Unit Supervisor, and Section Supervisor and incorporate into the draft Notice <u>EQ 7348 Opportunity to Show Compliance Meeting</u> as applicable.</p> <p>D. Finalize Notice <u>EQ 7348 Opportunity to Show Compliance Meeting</u>.</p> <p>E. Update the MIR Database compliance case screens to reflect the development of the Notice <u>EQ 7348 Opportunity to Show Compliance Meeting</u>.</p> |
| 9. | Secretary | Schedules the informal OTSCM meeting. |
| 10. | OTSCM Chairperson | Conducts informal OTSCM meeting as scheduled. Follow OTSCM instructions. Refer to Form <u>EQ 7348 Opportunity to Show Compliance Meeting</u> . |
| 11. | Professional Staff | <p>A. If the permittee will not attend the meeting or if it is determined that the current address on file with the OOGM is not valid (as evident by returned mailings), Professional Staff may participate in the informal OTSCM by conference call.</p> <p>B. If the permittee has made contact with the OOGM and has indicated attendance at the scheduled informal OTSCM, all Professional Staff involved in the case are expected to be present at the time of the scheduled informal OTSCM.</p> <p>C. All witnesses providing information during the informal</p> |


OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.02

Subject: SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS

Page 8 of 32


| Step | Who | Does What |
|------|-----------------------------|---|
| | | meeting must come prepared with adequate documentation (photos, data, written statements from the permittee, etc.) to support the OOGM's position that the permittee is in violation as documented in the Notice of OTSCM. There shall be no discussion of issues that are not included in the Form <u>EQ 7348 Opportunity to Show Compliance Meeting</u> during the informal meeting. |
| 12. | Professional Staff | Following the conclusion of the informal OTSCM and/or after the meeting chairperson has left the room, all Professional Staff may participate in negotiation of enforcement action (Appendix C) as appropriate for any unresolved violations admitted to by the permittee during the informal meeting. Negotiations shall not occur during the informal meeting in the presence of the OTSCM Chairperson. |
| 13. | OTSCM Chairperson | Within 15 working days, issue a Form <u>EQ 7349 Compliance Determination Memo</u> addressed to the FOS and PTSS Section Supervisors, Compliance and Bonding Specialist, and Compliance Coordinator. |
| 14. | Compliance Coordinator | <p>A. If the Chairperson has determined that the permittee is not in compliance with the statutes, rules, orders, instructions, or permits, prepares Form <u>EQ 7372 Withhold Permits</u> letter for signature by the Office Chief.</p> <p>B. If an Escalated Enforcement Referral Memo is deemed appropriate, completes Form <u>EQ 7350 Escalated Enforcement Referral Memo</u> and makes further notation in the MIR Database compliance case screens. Also completes compliance Form <u>EQ 7347 Case Referral Check List</u> with appropriate case documents (case referral package) and notifies District or Unit Supervisor.</p> |
| 15. | OTSCM Chairperson | If the Chairperson has determined that the permittee is in compliance with statutes, rules, orders, instructions, and permits, advises the District/Unit to close the case. |
| 16. | Professional Staff | Conducts inspection or file review, reports results to Compliance Coordinator, and closes case. |
| 17. | Compliance Coordinator | Upon notice from Professional Staff that the permittee is in compliance with the statute, completes Form <u>EQ 7399 Case Closure Letter</u> , notates the closure of the case in the MIR Database. |
| 18. | District or Unit Supervisor | If an Escalated Enforcement Referral Memo is deemed appropriate, reviews and signs Form <u>EQ 7350 Escalated Enforcement Referral Memo</u> and case referral package. Ensures the <u>EQ 7350 Escalated Enforcement Referral Memo</u> and case referral package is sent to Compliance and Bonding Specialist. |

| | | | |
|--|--|------------------|--|
|  | Office of Oil, Gas, and Minerals | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| | POLICY AND PROCEDURES | | |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: SECTION 3: ESCALATED COMPLIANCE AND ENFORCEMENT PROCESS Program Name: COMPLIANCE AND ENFORCEMENT Number: OOGM-601.03 | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | | Page: 9 of 32 | |

INTRODUCTION: The following procedural steps are intended to compel compliance when the progressive actions taken in Section 2 have failed to result in compliance.

PROCEDURES:

| Step | Who | Does What |
|------|-----------------------------------|---|
| 1. | Compliance and Bonding Specialist | Reviews Form <u>EQ 7350 Escalated Enforcement Referral Memo</u> and case referral package along with the compliance case history. If violation(s) remains unresolved, or if progress toward resolution of violation(s) is deemed insufficient, completes Form <u>EQ 7351 Enforcement Notice</u> and recommends enforcement option(s), and forwards to the appropriate Section Supervisor. |
| 2. | FOS or PTSS Supervisor | Reviews <u>EQ 7351 Enforcement Notice</u> and case referral package and informs Compliance and Bonding Specialist of approval, denial, or modification. |
| 3. | Compliance and Bonding Specialist | If approved, ensures Enforcement Notice is sent to permittee, Section Supervisor, and District or Unit Supervisor(s). |
| 4. | Professional Staff | Conducts inspections or reviews files or case information to monitor compliance progress. Reports finding to Compliance and Bonding Specialist as needed. |
| 5. | Compliance and Bonding Specialist | If formal resolution of the violation(s) cited in the Enforcement Notice is not achieved, confers with FOS and/or PTSS Supervisor for selection of additional escalated enforcement option including but not limited to: Suspension of Operations, Holds Permit, Consent Agreement, Civil/Criminal Actions, or Notice of Determination. |

| | | | |
|--|---|-------------------|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: SECTION 4: SETTLEMENT ISSUES | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.04 | Page: 10 of 32 | |

POLICY: Refer to the DEQ Policy and Procedure Number 04-003, Appendix A.



DEQ POLICY AND PROCEDURES

SUBJECT: COMPLIANCE AND ENFORCEMENT
Date: May 30, 2001
Revised: January 7, 2008

Number: 04-003
Page 1 of 3

This document is intended to provide guidance to staff to foster consistent application of the DEQ's compliance and enforcement processes and procedures. This document is not intended to convey any rights to any person nor itself create any duties or responsibilities under law. This document and matters addressed herein are subject to revision.

ISSUE:

An important tool the Department of Environmental Quality (DEQ) has in meeting its mission is its compliance and enforcement activities. This includes inspections, reporting, monitoring, and informal and formal compliance notifications, and escalated enforcement activities. The purpose of this policy is to assure that the DEQ effectively identifies and investigates potential violations of the statutes, rules, permits, licenses and orders that it administers, and that the identified violations are responded to in a consistent and effective manner.

The DEQ has four divisions, one bureau, and two offices (hereafter "divisions") that have regulatory program responsibilities. These divisions administer numerous state and delegated federal environmental programs that require ongoing compliance and enforcement activities and, on occasion, the initiation of escalated enforcement actions. Through the years, each division has developed its own compliance and enforcement process to meet its specific regulatory needs. The DEQ's varied compliance and enforcement processes, procedures, documents, and associated nomenclature create a challenge to communicate internally and externally about DEQ compliance and enforcement policies, practices, activities and successes.

This policy establishes some basic principles applicable to the DEQ's compliance and enforcement programs. It also provides guidance and direction for divisions in key areas that need to have consistent departmental processes and procedures to ensure a reliable, predictable, and effective compliance and enforcement program.

It is important to view enforcement as one tool available to achieve compliance. Enforcement in and of itself is not a goal—compliance is the goal.

POLICY:

All DEQ compliance and enforcement programs shall be administered in accordance with this policy to ensure that these basic principles are followed.

1. **Compliance and enforcement actions must be timely:** To be most effective, an action must occur promptly after the violation takes place or is discovered. A timely action not only sends a clear message to violators, but also limits the environmental harm that a given violation may cause.

DEQ POLICY AND PROCEDURES

SUBJECT: COMPLIANCE AND ENFORCEMENT

Number: 04-003

Date: May 30, 2001

Page 2 of 3

Revised: January 7, 2008

2. **Compliance and enforcement actions must be appropriate to the violations alleged:** In deciding which compliance and enforcement action is the most appropriate response for a violation, consideration needs to be given to a number of factors. These factors include, but are not limited to, the violation's effect on program integrity; the severity and duration of the violation; any public health risk or resource damage caused by the violation; the compliance history of the violator; and the willfulness, negligence, and recalcitrance of the violator.
3. **Compliance and enforcement actions must be consistent for like violations:** Compliance and enforcement actions of the DEQ must not be construed as arbitrary, capricious, or as an abuse of discretion. To this end it is important that compliance and enforcement actions be consistent and fair. Like violations of a given statute, rule, permit or license should end in a similar result where the circumstances are the same or comparable. However, consistency does not mean identical and often no two cases are identical.

A consistent compliance and enforcement program provides the regulated community with the benefit of knowing what to expect from the DEQ when violations occur. A consistent approach also ensures a level playing field for all regulated entities. Cases requiring an action that differs or appears to differ from past actions for like or similar violations need to be documented with material facts that account for the difference in the level of action taken. In most instances the procedures set forth below will be followed; however, it is impossible to articulate every reason or possibility where it may be appropriate to use a different procedure that is within the scope of DEQ's discretion.

4. **Compliance and enforcement actions in response to repeat or continuing violations must be progressive in nature:** To ensure that violations are resolved as quickly and efficiently as possible, the DEQ will use a progressive compliance program. Failures to comply with previous compliance and enforcement actions must subject the violator to progressively stronger actions.
5. **Compliance and enforcement actions must be responsive to division program priorities and needs:** Compliance and enforcement actions should ensure that program and regulatory responsibilities are successfully carried out. Compliance and enforcement should not be considered as a program unto itself, but should reflect larger program priorities that are set forth in annual work plans.

COMPLIANCE ASSISTANCE:

Although this policy sets standards for carrying out compliance and enforcement responsibilities, it does not lessen each division's responsibility to foster compliance through compliance assistance activities. The DEQ believes that both activities--assistance and enforcement--have a justified place in DEQ efforts. By using both compliance and enforcement and assistance tools, the goal of protecting and enhancing Michigan's environmental quality and public health should be met.

DEQ POLICY AND PROCEDURES

SUBJECT: COMPLIANCE AND ENFORCEMENT
Date: May 30, 2001
Revised: January 7, 2008

Number: 04-003
Page 3 of 3

IMPLEMENTATION OF POLICY:

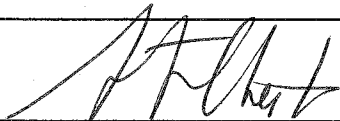
This policy identifies some basic elements that must be contained in each division's compliance and enforcement program. These elements are listed in sections found in **Appendix A**, in the order they normally occur in the compliance and enforcement process of divisions. The sections in order are as follows:

1. Compliance Evaluations
2. Compliance and Enforcement Process
3. Settlement Issues
4. Compliance Coordination, Tracking, and Measurement
5. Coordination and Management of Multimedia Cases

Divisions shall develop and implement necessary policies, procedures, and guidance for each section. Divisions have the latitude to tailor their compliance and enforcement program to meet the needs of the statutory requirements it is charged with administering; however, this policy sets forth the minimum standards that must be met for each section.

Periodically, DEQ management will find it necessary to provide direction on how this policy applies to given situations, provide details on initiatives, or set priorities. Divisions shall ensure that these directives are maintained with this policy and that appropriate changes are made to division programs, policies, and procedures to implement the directives. Revisions to this policy shall be implemented by the divisions within six (6) months of the effective date of the revision.

Approved: _____



Date: _____

1-7-08

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
TABLE OF CONTENTS**

Number: 04-003

Date: May 30, 2001

Page 1 of 1

Revised: January 7, 2008

TABLE OF CONTENTS

SECTION 1: COMPLIANCE EVALUATIONS

- A. SETTING COMPLIANCE EVALUATION PRIORITIES**
- B. EVALUATION PROCEDURES**

SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS

- A. NOMENCLATURE**
- B. STANDARD COMPLIANCE AND ENFORCEMENT PROCESS**
- C. VIOLATION RESPONSE**
- D. CRIMINAL VIOLATIONS**
- E. REFERRALS TO THE ATTORNEY GENERAL**

SECTION 3: SETTLEMENT ISSUES

- A. CIVIL PENALTIES**
- B. STIPULATED PENALTIES**
- C. ADMINISTRATIVE PENALTIES**
- D. SUPPLEMENTAL ENVIRONMENTAL PROJECTS**
- E. JUDICIAL VS ADMINISTRATIVE ORDERS**
- F. PRESS RELEASES**

SECTION 4: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENTS

- A. COMPLIANCE TRACKING**
- B. COMPLIANCE MEASURES**
- C. COMPLIANCE COORDINATION**

SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 1: COMPLIANCE EVALUATIONS**

Number: 04-003

Date: May 30, 2001

Page 1 of 2

Revised: January 7, 2008

SECTION 1: COMPLIANCE EVALUATIONS

The success of a strong compliance and enforcement process is judged by the degree to which violations are detected and by the timeliness of achieving compliance. Based on the information obtained from compliance evaluations, the DEQ is in the best position to determine what actions will have the greatest impact in ensuring that the environment and public health is protected. Every entity the DEQ oversees could benefit from frequent contact with the DEQ. With frequent contacts the DEQ could offer timely compliance assistance and solve problems before they become significant compliance or escalated enforcement issues. However, the DEQ does not have the resources to provide that level of overview. Therefore, compliance evaluation efforts must be planned to ensure the maximum impact on maintaining a strong rate of compliance.

A. SETTING COMPLIANCE EVALUATION PRIORITIES

A compliance evaluation is any effort designed to ascertain the compliance status of a facility or person. Compliance evaluations include, but are not limited to, inspections, file reviews, evaluation of required submittals, evaluation of sampling or monitoring data, and permit or license application reviews. Compliance evaluation priorities should be set to provide for the best use of limited resources. In setting compliance evaluation priorities, the following factors should be considered:

1. Resources are available for follow-up actions or escalated enforcement.
2. DEQ planning targets and division program means.
3. Violations with a high potential for public health impact or resource damage are the highest priority of the DEQ.
4. A geographic and program balance.
5. Statutory requirements.
6. Grant and program delegation requirements.
7. Compliance history.
8. Special enforcement initiatives.

A list of planned compliance evaluations shall be prepared annually. Procedures should ensure that all regulated entities are evaluated on a set frequency and that scheduled evaluations are consistent with program priorities and targets. When appropriate, representatives from Indian tribes and local authorities should be invited to participate in compliance evaluations.

B. EVALUATION PROCEDURES

Compliance evaluation procedures shall establish the criteria for conducting evaluations and must address the following issues:

1. Evaluation types.

DEQ POLICY AND PROCEDURES

SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 1: COMPLIANCE EVALUATIONS
Date: May 30, 2001
Revised: January 7, 2008

Number: 04-003

Page 2 of 2

2. The situation in which each type of evaluation is to be used.
3. The statutory or program foundation for the evaluation.
4. The intended scope of the evaluation.
5. Anticipated staff resources necessary to perform the evaluation.
6. Any forms or checklists associated with the evaluation.
7. Any special equipment or supplies needed to perform the evaluation.
8. The final report format of the evaluation.

As appropriate, the procedure must also cover such issues as:

Pre-evaluation

- Gaining access to sites.
- File reviews of previous evaluation reports and pertinent information.
- Review of legal requirements or performance standards that are to be evaluated.
- How and when to make site contacts.

Evaluation

- Sampling procedures.
- Evidence collection.
- Chain-of-custody requirements.
- Completion of required forms, reports, and checklists.

Post-evaluation

- Post-evaluation consultations.
- Site compliance status determination.
- File documentation.
- Database documentation.
- Written notification of inspection results to site personnel.
- When and what type of follow-up evaluations are needed.

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|--|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS | Number: 04-003 |
| Date: | May 30, 2001 | Page 1 of 9 |
| Revised: | January 7, 2008 | |

SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS

The DEQ's standard environmental compliance and enforcement process may be defined as a progressive sequence of actions taken to compel compliance with environmental statutes and regulations. Although the compliance and enforcement process is progressive, the DEQ may initiate or take action at any point in the process as the facts and circumstances warrant in conjunction with the authority provided by the applicable statutes and regulations or as required by an applicable enforcement response policy for a federally delegated program.

The compliance and enforcement process is initiated when the first compliance communication is issued by the DEQ. The process provides reasonable opportunities to resolve violations in a consistent and progressively escalated manner. Although some circumstances may require immediate escalation, there is a general presumption that the process will start at the lowest stage. However, specific factors or circumstances, such as seriousness of the violation, resources damaged or impaired, previous compliance history, agency program needs, or an applicable federal enforcement response policy for a delegated program may all serve to escalate the initial level of enforcement action.

Each division shall have written compliance and enforcement procedures that:

1. Incorporate the nomenclature and compliance and enforcement process described below.
2. Identify staff responsibilities and authorities.
3. Specify how violations will be identified and prioritized for action.
4. Establish time frames for response.
5. Establish appropriate responses to violations.
6. Establish criteria for referral of cases for escalated enforcement.
7. Provide for the handling of criminal violations and for referrals to the Department of Attorney General (DAG).
8. Provide guidance to staff on when and under what conditions a violation should be considered for referral for criminal action versus being referred for administrative or civil enforcement or when and under what conditions a parallel proceeding should be considered.
9. Describe how division management will provide appropriate oversight and review.

To facilitate a reliable, predictable, and effective department-wide compliance and enforcement program, all divisions shall incorporate the DEQ compliance and enforcement process and nomenclature described below within their written compliance and enforcement procedures.

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS**

Number: 04-003

Date: May 30, 2001

Page 2 of 9

Revised: January 7, 2008

A. NOMENCLATURE

➤ Compliance Communication (discretionary):

A Compliance Communication is an informal means of communication used by DEQ staff via telephone, e-mail, letter or in person to communicate to a regulated entity that there are compliance issues or violations that need attention. Typically, a Compliance Communication is used to address violations or issues that are relatively minor in nature, few in number and can be resolved promptly with limited DEQ oversight. Compliance Communications should be documented in writing in the DEQ's files and will:

- Be specifically identified as a "Compliance Communication";
- Include a brief description of the compliance issue or violation(s) and a specified date for compliance;
- Include a summary of any instructions or directives given by DEQ staff to the regulated entity; and
- Be signed and dated by the DEQ staff person who provided the communication.

➤ Violation Notice¹:

A Violation Notice (see Attachment 1) is a formal means of notifying the recipient of a significant or priority violation or when previous attempts to gain voluntary compliance have failed to correct the compliance issue or violation. The Violation Notice formally notifies the recipient of the violation and provides the DEQ with a means for tracking its resolution. The Violation Notice places the recipient on notice that a violation(s) has been identified and provides the recipient with an opportunity to correct the violation in a timely manner. If the recipient fails to comply with a Violation Notice, the DEQ may escalate the enforcement action.

The Violation Notice, at a minimum, will:

- Reference any previous Compliance Communications (if appropriate);
- Identify the legal authority under which the compliance evaluation was conducted, the type of compliance evaluation performed or what was evaluated (i.e., inspection, record review, etc.), and the scope of the evaluation (e.g., evaluation of compliance with the statute, administrative

¹ A "VIOLATION NOTICE" HAS HISTORICALLY BEEN CALLED A LETTER OF WARNING IN THE WASTE AND HAZARDOUS MATERIALS DIVISION; NOTICE OF VIOLATION IN THE LAND AND WATER MANAGEMENT DIVISION; NOTICE LETTER OR NOTICE OF NONCOMPLIANCE IN THE WATER BUREAU; LETTER OF VIOLATION IN THE AIR QUALITY DIVISION; AND NOTICE OF NONCOMPLIANCE IN THE OFFICE OF GEOLOGICAL SURVEY.

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS**

Number: 04-003

Date: May 30, 2001

Page 3 of 9

Revised: January 7, 2008

- rules, permit or license by specific reference).
- Clearly indicate any limitations on the scope of the evaluation (e.g., that the inspection was limited to a portion of the facility; that only a financial assurance record review was conducted; that an evaluation of monitoring results from calendar years 2006 and 2007 to date was performed, etc.).
- Describe the method(s) used to discover the violation;
- Describe in narrative form what provisions of the law, rule, permit, or license were violated with a reference to the specific law or rule citation or specific permit or license provision also noted;
- Describe the act or omission that created the violation;
- Cite the date(s) or approximate period of time during which the violation occurred and whether the violation is ongoing;
- Specify the action(s) necessary to return the regulated entity to compliance or request submittal of a compliance program to resolve the violation(s);
- Provide the regulated entity with an opportunity to submit factual information to refute the DEQ's findings;
- Specify a deadline for response;
- Be signed by a supervisor or other DEQ staff person designated by the division.

The Violation Notice should be written in an informative manner and should not be overly formalistic, accusatory or threatening.

If a sufficient response to the Violation Notice is received and the violation has been, or is being, corrected in a timely manner, no further enforcement action is usually necessary. However, some federal enforcement response policies for delegated programs require that certain types of violations be referred for the assessment of a monetary penalty even if the violation has already been corrected.

➤ Second Violation Notice (discretionary):

Failure to adequately and timely respond to the first Violation Notice or failure to respond at all may result in either issuance of a second Violation Notice (see Attachment 2) or initiation of escalated enforcement proceedings. If a second Violation Notice is issued, at a minimum, it will:

- Reference the first Violation Notice;
- Advise of failure to adequately respond to the first Violation Notice;
- Reiterate the action(s) necessary to be undertaken to return to compliance or again request submittal of a compliance program to address the violation(s);
- Identify any additional violations noted since issuance of the first Violation Notice and describe the action(s) that need to be undertaken to return to compliance or request submittal of a compliance program to address the violation(s);

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|--|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS | Number: 04-003 |
| Date: | May 30, 2001 | Page 4 of 9 |
| Revised: | January 7, 2008 | |

- Specify a deadline for response;
- Specify the potential consequences for violating the law, rule, permit, or license and/or for not taking appropriate action(s) to resolve or address the violation(s); and
- Be signed by a supervisor or other DEQ staff person designated by the division.

Each division's compliance and enforcement procedures should include guidance that enables a trained employee to determine under what circumstances it is appropriate to send out a second violation notice.

➤ Enforcement Notice:

A case is usually referred for escalated enforcement because preceding administrative actions have been unsuccessful; however, seriousness of the violation, resources damaged or impaired, previous compliance history, agency program needs, or the applicable federal enforcement response policy for a delegated program may also result in a referral for escalated enforcement.

After a case has been referred, a formal Enforcement Notice (see Attachment 3) should be sent to the violator. At a minimum, the Enforcement Notice will:

- Advise that the case has been referred for escalated enforcement;
- Reference any previously issued Violation Notices;
- Specify the nature of the unresolved violation(s);
- Provide the violator with a final opportunity to: (1) demonstrate compliance; (2) present factual information in writing that should be considered regarding the violations; or, if appropriate, (3) meet and discuss options for satisfactorily resolving the violation(s);
- Specify a deadline for response;
- Specify the consequences for failure to adequately respond and/or resolve or address the violations; and
- Be signed by a supervisor or other DEQ staff person designated by the division.

DEQ POLICY AND PROCEDURES

| | |
|---|-----------------------|
| SUBJECT: APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS | Number: 04-003 |
| Date: May 30, 2001 | Page 5 of 9 |
| Revised: January 7, 2008 | |

ATTACHMENT 1

[Date]

[Person or Facility Name]
[Address]
[City, Township, Village], Michigan [ZIP Code]

Dear Mr./Mrs. _____:

SUBJECT: Violation Notice

The Violation Notice should:

- Reference any previous DEQ Compliance Communications (if appropriate);
- Describe the method used to discover the violation;
- Identify the legal authority under which the compliance evaluation was conducted, the type of compliance evaluation performed or what was evaluated and clearly indicate any limitations on the scope of the evaluation (if any).
- Describe in narrative form what provisions of the law, rule, permit, or license were violated with a reference to the specific law or rule citation or specific permit or license provision also noted;
- Describe the act or omission that created the violation;
- Cite the date(s) that the violation occurred or specify the period of time during which the violation occurred, and whether the violation is ongoing;
- Specify the action(s) that needs to be undertaken to return the regulated entity to compliance or request submittal of a compliance program to address the violation(s);
- Provide the regulated entity with an opportunity to submit factual information to refute the DEQ's findings; and
- Specify a deadline for response.

We anticipate and appreciate your cooperation in resolving this matter. If you have any questions, please feel free to contact me.

Sincerely,

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|--|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS | Number: 04-003 |
| Date: | May 30, 2001 | Page 6 of 9 |
| Revised: | January 7, 2008 | |

ATTACHMENT 2

[Date]

[Person or Facility Name]
[Address]
[City, Township, Village], Michigan [ZIP Code]

Dear Mr./Mrs. _____:

SUBJECT: Second Violation Notice

The second Violation Notice should:

- Reference the first Violation Notice;
- Advise of the failure to adequately respond to the first Violation Notice;
- Reiterate the action(s) that needs to be undertaken to return to compliance, identify deficiencies in the initial submittal which require a modification to the compliance program, or again request submittal of a compliance program to address the violation(s);
- Identify any additional violations noted since issuance of the first Violation Notice and describe the action(s) that need to be undertaken to return to compliance or request submittal of a compliance program to address the additional violation(s);
- Specify a deadline for response;
- Specify the potential consequences for violating the law, rule, permit, license, or order and/or for not taking appropriate action(s) to resolve or address the violation(s); and
- Be signed by a supervisor or other DEQ staff person designated by the division.

Please be advised that issuance of this Violation Notice does not preclude or limit the DEQ's ability to initiate any other enforcement action under state or federal law as appropriate.

If you have any questions, please feel free to contact me at the telephone number listed below.

Sincerely,

DEQ POLICY AND PROCEDURES

SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS
Date: May 30, 2001
Revised: January 7, 2008
Number: 04-003
Page 7 of 9

ATTACHMENT 3

CERTIFIED MAIL

ENFORCEMENT NOTICE

In the matter of:

[Facility Name or Regulated Entity]
[Address]
[City, Township, Village of _____], Michigan [ZIP Code]

ATTENTION: [Owner/Operator], [Title]

The Enforcement Notice should follow this format and:

- Advise that the case has been referred for escalated enforcement;
- Reference any previously issued Violation Notices;
- Specify the nature of the unresolved violations;
- Provide the opportunity to: (1) demonstrate compliance; (2) present factual information in writing that should be considered regarding the violations; or, if appropriate, (3) meet and discuss options for satisfactorily resolving the violation(s);
- Specify a deadline for response; and
- Be signed by a supervisor or other DEQ staff person designated by the division.

Be advised that failure to timely and adequately resolve or address the violation(s) cited in this Enforcement Notice may result in further enforcement proceedings including, but not limited to, referral of the matter to the Department of Attorney General for commencement of civil litigation. Be further advised that this Enforcement Notice does not preclude or limit the Department of Environmental Quality's ability to initiate any other enforcement action under state or federal law as appropriate.

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

By: _____

Date: _____

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS**

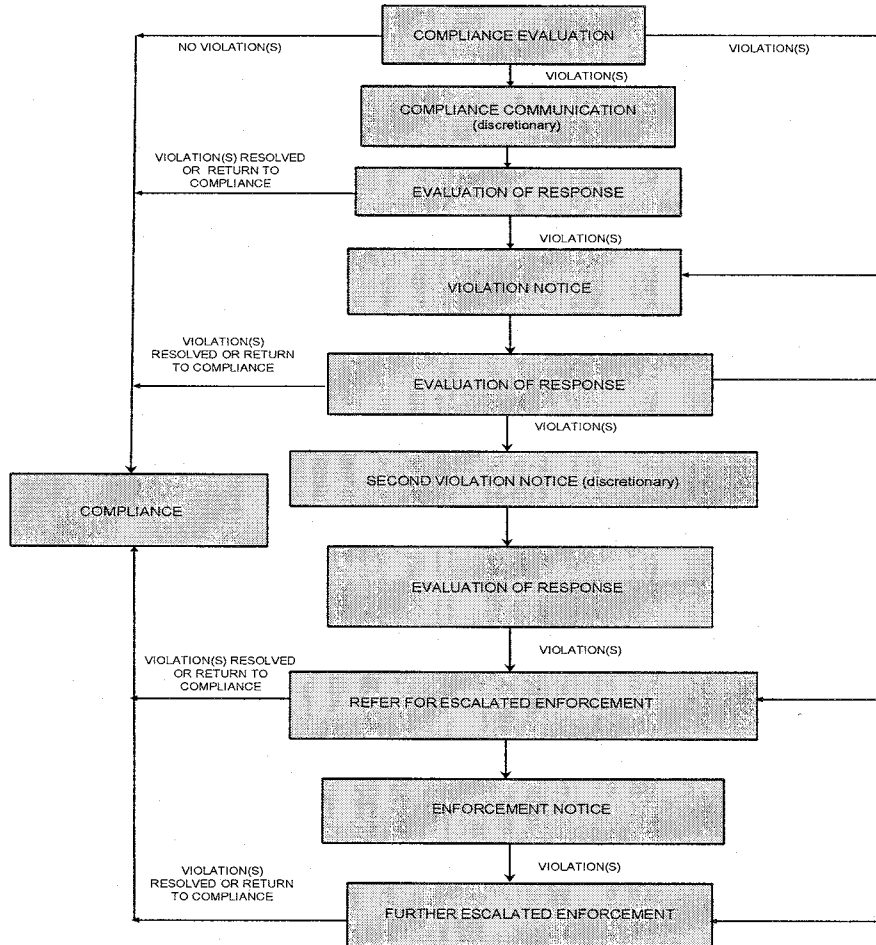
Number: 04-003

Date: May 30, 2001

Page 8 of 9

Revised: January 7, 2008

STANDARD COMPLIANCE AND ENFORCEMENT PROCESS



NOTES: 1. At each evaluation point, staff determines if the facts and circumstances warrant pursuing further enforcement.
2. Cases that are referred for criminal prosecution are not subject to this process.

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|--|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 2: COMPLIANCE AND ENFORCEMENT PROCESS | Number: 04-003 |
| Date: | May 30, 2001 | Page 9 of 9 |
| Revised: | January 7, 2008 | |

B. VIOLATION RESPONSE

The compliance and enforcement procedures for each division should provide guidance that enables a trained employee to determine an appropriate response to an identified violation. The procedure should focus on standard violations or classes of violations that commonly occur in the program being administered. Violations are to be evaluated using factors such as:

1. Frequency and duration of the violation.
2. Extent or deviation of the violation from the requirement (magnitude of the violation).
3. Harm to the public health, the environment, or the integrity of the regulatory program.
4. Compliance history of the violator.

For divisions which administer delegated federal programs and the United States Environmental Protection Agency (U.S. EPA) has developed enforcement guidance, the divisions may reference and adopt that guidance.

C. CRIMINAL VIOLATIONS

Employees of the DEQ will encounter situations where a crime may have been committed that may warrant a criminal investigation and ultimately prosecution. Potential criminal violations shall be referred to the Office of Criminal Investigations in accordance with DEQ Policy No. 09-002. Each division's compliance and enforcement procedures shall ensure that criminal investigations referred to the OCI are properly communicated in accordance with the division's referral procedures for criminal cases. Division's compliance and enforcement procedures should also ensure that referrals for criminal investigation are evaluated and/or discussed in accordance with DEQ Policy No. 04-004, Parallel Proceedings, and DEQ Policy No. 04-005, District Enforcement Review Discussions.

The OCI shall develop and maintain a priority system for conducting and completing criminal investigations. In setting priorities the OCI shall work cooperatively with divisions to ensure that division program priorities are met.

D. REFERRALS TO THE ATTORNEY GENERAL

DEQ staff works closely with staff of the DAG in situations where the DEQ requires legal advice or representation. In order to make the most efficient use of staff time, divisions shall establish clear lines of communication and authority for discussing and referring matters to the DAG. These procedures shall be consistent with DEQ Policy No. 09-002.

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 3: SETTLEMENT ISSUES**

Number: 04-003

Date: May 30, 2001

Page 1 of 7

Revised: January 7, 2008

SECTION 3: SETTLEMENT ISSUES

A. CIVIL PENALTIES

In addressing violations it is necessary to consider whether the violations alleged warrant fines and penalties. This determination needs to be made early in the compliance and enforcement process. The application of penalties needs to be consistent and documented. Penalties are to be calculated based on the factual elements of each case and are intended to eliminate any economic benefit gained from the violation and to create deterrence from future violations. The procedures for penalty calculations shall address the following issues:

1. Criteria for determining when a penalty is appropriate.
2. Criteria for determining the penalty amount.
3. Criteria for the calculation, review, and approval of proposed penalties.
4. Standard procedures for documenting penalty calculations.

Generally, penalties should be considered when one or more of these conditions exist:

1. The violation exceeds a set threshold or an agreement the DEQ has made with the U.S. EPA through the program planning process or delegation agreement.
2. The violation results in harm or impairment of the environment or public health.
3. Failure to receive a penalty could negatively impact the integrity of the regulatory program.
4. The violation is willful.
5. The violation is due to negligence.
6. The violation is in direct disregard to a directive of the DEQ.
7. Compliance efforts to resolve the violation have not been successful and escalated enforcement was needed.
8. The violation is of an Administrative Consent Order, a Unilateral Director's Order, or a Judicial Order.

Division chiefs should have knowledge of all proposed penalties being negotiated in their division and in no case should a penalty in excess of \$50,000 be proposed without prior consultation with the division chief. For proposed penalties in excess of \$500,000 the Deputy Director needs to be consulted. When a proposed penalty is in excess of \$20,000, it is expected that the proposed penalty shall be presented to the other party in person during a settlement meeting.

Penalty calculation procedures should be specific to each division and consider the following factors:

1. The magnitude and duration of the violation.

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 3: SETTLEMENT ISSUES**

Number: 04-003

Date: May 30, 2001

Page 2 of 7

Revised: January 7, 2008

2. The impact or potential for impact that the violation poses to the environment, public health, or program integrity.
3. The monetary benefit to be gained by the violation.

The penalty procedure shall include a penalty matrix that staff can use to calculate penalties. Divisions that administer programs with different statutory penalty amounts may need to develop penalty guidance and matrices for each program.

EXAMPLE PENALTY MATRIX

| DEGREE OF HARM TO THE ENVIRONMENT/PUBLIC HEALTH | | | |
|---|---|---|--|
| | HIGH IMPACT | MEDIUM IMPACT | LOW IMPACT |
| V I O L A T I O N M A G N I T U D E | PENALTY RANGE \$25,000 TO \$16,000 | PENALTY RANGE \$20,000 TO \$10,500 | PENALTY RANGE \$14,500 TO \$8,000 |
| | HIGH MAGNITUDE | HIGH MAGNITUDE | HIGH MAGNITUDE |
| | HIGH IMPACT | MEDIUM IMPACT | LOW IMPACT |
| | PENALTY RANGE \$20,000 TO \$10,500 | PENALTY RANGE \$15,000 TO \$5,000 | PENALTY RANGE \$9,500 TO \$2,500 |
| | MEDIUM MAGNITUDE | MEDIUM MAGNITUDE | MEDIUM MAGNITUDE |
| | HIGH IMPACT | MEDIUM IMPACT | LOW IMPACT |
| | PENALTY RANGE \$14,500 TO \$8,000 | PENALTY RANGE \$9,500 TO \$2,500 | PENALTY RANGE \$4,000 TO \$500 |
| | LOW MAGNITUDE | LOW MAGNITUDE | LOW MAGNITUDE |

Each violation will be compared to the matrix and assessed the appropriate penalty amount. If a violation were for multiple days, the assessed penalty could then be multiplied by the number of days of violation.

Multiple days of violation can be addressed by creating a second matrix that sets a penalty amount for the duration of violations and adding that amount to the base penalty amount or by other alternative means.

The calculated penalty amount may be adjusted up or down with justification, but should remain in the established penalty range. Factors that would warrant penalty adjustment include:

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 3: SETTLEMENT ISSUES**

Number: 04-003

Date: May 30, 2001

Page 3 of 7

Revised: January 7, 2008

1. Compliance history.
2. Recalcitrance of the violator.
3. Willfulness of the violator.
4. Strength of the case.
5. The violation is of the terms of an Administrative or Judicial Order and is not addressed by agreed-to stipulated penalties.
6. The violation resulted in serious impact or an imminent and substantial endangerment to public health or the environment.

The final calculated proposed penalty should be sufficient enough to eliminate any substantial economic benefit that would give a violator a clear advantage over its business competitors. Divisions should use the final calculated proposed penalty to begin settlement negotiations. In all cases, the proposed penalty should be reasonable so as to facilitate resolution of the violation and provide for improvements to environmental protection. The negotiated or final penalty assessed should be justified by the circumstances and should be able to withstand scrutiny when similar circumstances arise.

B. STIPULATED PENALTIES

Stipulated penalties are specified in settlement agreements and address potential future violations of certain terms of the settlement agreement. Stipulated penalties may be applied for failures to meet scheduled dates, to perform specified actions, or to meet environmental performance criteria or other requirements established in the agreement. The amount and terms of stipulated penalties are specified in settlement agreements and can be collected if the terms of the agreement are violated.

The primary goal of stipulated penalties is to act as a deterrent to violating the terms and conditions of the settlement agreement. To have this effect, stipulated penalties must be established at an amount high enough to represent a true penalty for not complying with the agreement.

Persons violating the terms and conditions of a settlement agreement are, by definition, "repeat offenders" and should be subject to penalties that are higher on a per-diem basis than any initial civil penalties that may have been imposed. Stipulated penalties for particularly egregious violations may even be considerably higher. Any clearly definable event in a settlement agreement may be established in the agreement as subject to stipulated penalties. Stipulated penalties are most useful in ensuring that activities specified in a settlement agreement are proceeding on schedule and that interim progress toward a final goal is being made. Settlement agreement language for stipulated penalties must be clearly written to require specific performance milestones by specific dates. Automatic provisions for having stipulated penalties accrue and payable to the state should be clearly incorporated into the settlement document. Settlement documents are to be clearly written to

DEQ POLICY AND PROCEDURES

SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 3: SETTLEMENT ISSUES

Number: 04-003

Date: May 30, 2001

Page 4 of 7

Revised: January 7, 2008

avoid disputes regarding the application of stipulated penalties. The final amount of stipulated penalties to be assessed may be subject to negotiation.

C. ADMINISTRATIVE PENALTIES

If a division has authority to issue administrative penalties they shall have procedures for determining the penalty amount, assessing the penalty, and the collection of the penalty.

D. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

When requested, the DEQ may consider the use of a supplemental environmental project (SEP) as a part of a settlement agreement.

As a part of the settlement agreement with the DEQ, the alleged violator may request to incorporate a SEP, underwritten by the alleged violator, in lieu of payment of a portion of the monetary penalty. SEPs are neither required by nor prohibited by regulations administered by the DEQ.

A SEP shall be developed in accordance with DEQ Policy No. 04-002.

E. JUDICIAL VS ADMINISTRATIVE ORDERS

Sometimes it is necessary to settle violations by the entry of a settlement agreement. The following guidance is provided to assist divisions in determining which type of agreement, judicial or administrative, to enter.

A settlement agreement is a legally enforceable document that binds the DEQ and a person for the purpose of resolving the alleged violation(s) of laws or regulations administered by the DEQ. A settlement agreement usually contains provisions requiring the person to correct the violation, take steps to ensure the violation is not repeated, repair environmental damage and/or pay a monetary compensatory damage amount, or pay a penalty to deter future noncompliance. A settlement agreement may be in the form of a Judicial Order (court-approved consent decree) or an Administrative Consent Order (an agreement without the involvement of the court).

Because of the additional work required by staff of the DEQ and the DAG with a Judicial Order, Administrative Consent Orders should be used for the vast majority of settlement agreements. An advantage to a Judicial Order is that it provides an additional tool to ensure compliance with the settlement agreement. As a result, if one of the following three situations occurs, then a judicial settlement is probably appropriate.

1. Settlements that will have a high degree of public concern.

DEQ POLICY AND PROCEDURES

SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 3: SETTLEMENT ISSUES

Number: 04-003

Date: May 30, 2001

Page 5 of 7

Revised: January 7, 2008

Examples are:

- a) when public input from citizens, legislators, public officials, environmental groups, or others rise to the level where it may significantly impact compliance with the terms and conditions of a settlement and the oversight of a court is needed; or
 - b) when there is a major disagreement with the U.S. EPA over fines, penalties, or other corrective actions for particular violations.
2. Settlements that will be complex, financially significant, or otherwise unusual.

Factors to be considered in determining if this situation exists include:

- a) a multi-year corrective project or extensive remediation program attributable to the lengthy duration and/or magnitude of the violation(s);
- b) a complex or unusually large SEP;
- c) an unusually large fine, penalty, or financial assurance or expenditure;
- d) an unusually large number of violations;
- e) a recent history (within the past five years) of noncompliance with the laws, regulations, or previous settlements;
- f) when facts are present to reasonably expect that the violator does not have the wherewithal or the intent to comply with a settlement agreement, notwithstanding the violator's indications to the contrary.

If more than one of the items listed above are being considered or are factors in the settlement negotiations, then a judicial settlement is probably appropriate as an added tool to ensure compliance with the settlement agreement.

3. When the alleged violator requests a judicial settlement and the DEQ agrees.

There may be instances in which the person seeks a judicial settlement in lieu of an Administrative Order. If the person articulates a good reason as to why a judicial settlement should be pursued in lieu of an Administrative Order, then barring a significant impact on the compliance program, it should be pursued judicially.

When a settlement agreement involves a "Covenant Not to Sue" and/or contribution protection, the DAG has final approval under the law as to whether to pursue a matter in court.

Once both parties agree that a judicial settlement is the appropriate mechanism for the settlement agreement, unless a matter has already been filed in court, then staff

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 3: SETTLEMENT ISSUES**

Number: 04-003

Date: May 30, 2001

Page 6 of 7

Revised: January 7, 2008

should follow the steps outlined in DEQ Policy No. 09-002. An enforcement lawsuit that has been filed prior to any contemplated or anticipated settlement should be settled judicially rather than administratively, if a settlement is subsequently reached.

F. PRESS RELEASES

Press releases can be an effective method to inform the regulated community and the public of DEQ compliance efforts, and serve as a deterrent for illegal environmental activity. To ensure that noteworthy compliance actions initiated by the DEQ, with or without DAG involvement, are publicized, divisions are to take into account the criteria listed below when evaluating whether or not the action warrants a press release. Meeting one criterion alone may not necessarily justify a press release.

1. The violation created a known public health threat or long-term damage to the environment.
2. The person knowingly violated the law and/or deliberately disregarded a direction/order given by DEQ staff.
3. The violation was the focus of significant local attention.
4. The resolution of the violation resulted from a decision by a judge or jury trial.
5. The violation was a felony.
6. There is involvement of the DAG (should be limited to major involvement, not just signing a document as to form).
7. The DEQ action is a Cease and Desist Order.
8. The violation resulted in arrests, filing of major civil suits or settlements with substantial penalties, recovered costs, or restitution for damages (not just a notice of violation).
9. The violation and subsequent DEQ action has the potential to serve as a deterrent to an identified sector that has the likelihood of the same violation and/or will serve to educate the public in a significant way.

A violation such as failure to obtain a permit or license, when a permit or license would have been issued if applied for, may not be sufficient alone to warrant a press release (except where the violator willfully failed to seek a permit or license).

During settlement discussions, the regulated entity should be advised early on that the DEQ may issue a press release. The content of press releases is non-negotiable.

To assist the DEQ Press Secretary in processing requests for press releases, division staff should:

- a) Draft the release with all pertinent facts:
 - Violation(s).

DEQ POLICY AND PROCEDURES

**SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 3: SETTLEMENT ISSUES**

Number: 04-003

Date: May 30, 2001

Page 7 of 7

Revised: January 7, 2008

- Name of violator.
 - Location of offense.
 - Unique or interesting facts about the case.
 - Duration of offense.
 - Amount of fines/penalties/jail time.
 - Response activities to be performed to regain compliance.
- b) Include a quote from the Director (and/or Attorney General with approval), as appropriate.
- c) Use approved structure and format.
- d) Forward a draft copy of the release to the Press Secretary and the Deputy Director for consideration.

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 4: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENTS | Number: 04-003 |
| Date: | May 30, 2001 | Page 1 of 4 |
| Revised: | January 7, 2008 | |

SECTION 4: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENTS

A. COMPLIANCE TRACKING

Each division shall have an electronic database for the tracking of compliance activities. The database must enable a division to track the following information for each entity evaluated for compliance.

| Evaluations |
|--|
| • Dates conducted |
| • Types of evaluations conducted |
| • Compliance status at each evaluation |
| Compliance Activities |
| • Dates compliance actions taken |
| • Types of compliance actions taken |
| • Status of each compliance action |

The tracking system should also allow divisions to produce the compliance measures report identified in the next section of this policy.

B. COMPLIANCE MEASURES

It is important that the DEQ is able to assess the effectiveness of its compliance and enforcement programs. It is also important that this information be readily available to the public. Divisions shall develop measurements that demonstrate program achievement and assist in program management. Measurements should also allow divisions to determine rates of compliance as required by the DEQ's planning process. Divisions shall set a reporting frequency and a management review process.

At a minimum the following measures, where applicable to the program, shall be compiled on a quarterly basis.

| | |
|----|--|
| 1. | Number of known entities (facilities, sources, complaints, or other form of activity) subject to regulation, oversight, or evaluation. |
| 2. | Number of entities that have an evaluation planned by division policy, procedures, or program commitments. |
| 3. | Number of entities with a planned evaluation that were evaluated. |
| 4. | Number of evaluated entities, planned or otherwise, that were determined to be in noncompliance. |
| 5. | Number of evaluated entities whose noncompliance meets a division's Significant Noncompliance criteria (if applicable). |

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 4: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENTS | Number: 04-003 |
| Date: | May 30, 2001 | Page 2 of 4 |
| Revised: | January 7, 2008 | |

| | |
|-----|--|
| 6. | Number of non-compliant entities that returned to compliance before an escalated enforcement action was taken. |
| 7. | Number of non-compliant entities where an escalated enforcement action was taken. |
| 8. | Number of Judicial Orders still in effect. |
| 9. | Number of Administrative Consent Orders that are still in effect. |
| 10. | Number of Director's /Supervisor of Wells Final Orders that are still in effect. |
| 11. | Number of Demand Letters/Orders for Administrative Penalties issued. |
| 12. | Number of referrals that are pending with the OCI. |
| 13. | Number of referrals to the OCI that have a final disposition. |
| 14. | Number of referrals that are pending with the DAG. |
| 15. | Number of referrals to the DAG that have a final disposition. |
| 16. | Total amount (in dollars) of fines and penalties agreed to or ordered (include civil, criminal, administrative, and SEPs). |
| 17. | Total amount (in dollars) of environmental damages agreed to or ordered. |
| 18. | Total amount (in dollars) of DEQ cost agreed to or ordered. |
| 19. | Number of final settlement agreements or orders that contain a SEP. |
| 20. | Total amount (in dollars) of fines and penalties off set by a SEP. |
| 21. | Total number of permit applications backlogged. |
| 22. | Total number of permit applications received. |
| 23. | Total number of permits issued. |
| 24. | Total number of permits denied. |
| 25. | Total number of permit decisions made on time. |

C. COMPLIANCE COORDINATION

It is important that compliance and enforcement staff within each division effectively communicate and work in a cooperative manner. This can be accomplished through regular meetings between regulatory divisions who will assign a representative to attend these meetings.

The purpose of the Compliance and Enforcement Chiefs Meetings (C&E Meetings) is to:

1. Champion the DEQ's compliance and enforcement efforts and processes.
2. Provide for the exchange of compliance and enforcement ideas, views, and experiences among the DEQ's program divisions and offices.
3. Foster cooperation and coordination in compliance and enforcement activities.
4. Develop recommendations to the DEQ management on compliance and enforcement issues.

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 4: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENTS | Number: 04-003 |
| Date: | May 30, 2001 | Page 3 of 4 |
| Revised: | January 7, 2008 | |

The C&E Meetings will routinely consider the following items:

1. Multi-division/multimedia case coordination.
2. Coordination of civil and criminal enforcement actions.
3. Review of judicial/administrative case decisions that may have an impact on the DEQ's compliance and enforcement processes.
4. Receive case reviews of important cases that divisions are processing or have completed.
5. Identify/recommend special training needs of compliance and enforcement staff.
6. Develop methods to provide coordinated tracking and reporting of compliance and enforcement activities.
7. Coordination of DEQ interaction with the U.S. EPA on enforcement and compliance issues.
8. Receive information on new laws and rules that impact compliance and enforcement activities.
9. Develop and/or share tools that assist in the DEQ's compliance and enforcement activities.
10. Tracking the disbursement of cost, damages, and penalties in the DEQ's accounting system.
11. Evaluation of DEQ and U.S. EPA enforcement and compliance policy and procedures.

Each compliance and enforcement representative is responsible to ensure that compliance and enforcement staffs in their division, as well as division management, are kept informed about the information shared at the C&E Meetings.

When possible, the C&E Meetings will be held from 9:00 a.m. to noon on the fourth Wednesday of each month. The meetings will be chaired by the Office of Civil Enforcement Coordination (OCEC) Chief.

It is important that the information discussed at the monthly C&E Meetings gets out to the district offices. This is essential since the field staffs are on the front lines and take the lead role to ensure compliance with permits and regulations. To facilitate this communication the following shall apply:

1. Each field operations supervisor (FOS) has an open invitation to attend the C&E Meetings. Attendance is optional, based on approval of the division chief.
2. FOS will receive any updates on meetings and issues covered at C&E Meetings, as applicable, from their respective C&E chief.
3. When C&E Meetings have agenda items that are relevant to FOS those items will be grouped and given a specific time so that FOS can make appropriate plans to attend the meeting for these items.

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 4: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENTS | Number: 04-003 |
| Date: | May 30, 2001 | Page 4 of 4 |
| Revised: | January 7, 2008 | |

4. FOS, collectively or singularly, can request to have items placed on the C&E Meeting agenda.
5. FOS attendance at C&E Meetings will only be required when their involvement is essential to completing an assignment or developing guidance/policy.
6. As appropriate, the OCEC Chief will attend FOS meetings to discuss specific compliance and enforcement issues.

Even though this process should further the communication between the field and compliance and enforcement staffs, personal contact and interaction between these two groups is essential. Therefore, division chiefs are to ensure that this happens on a regular basis within their divisions.

DEQ POLICY AND PROCEDURES

SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA
CASES
Number: 04-003

Date: May 30, 2001
Revised: January 7, 2008
Page 1 of 7

SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES

Staff of the DEQ often initiate or become involved in enforcement actions that may involve violations of various provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), or other statutes administered by the DEQ. Communication and coordination between the DEQ divisions should occur early on in the process to ensure that all violations are appropriately addressed, and to avoid potential claim splitting.

Multimedia enforcement constitutes a comprehensive approach to case development and enforcement usually against a single facility where all of the processes at that facility are inspected and examined as a whole to determine compliance with all environmental statutes. There are many benefits to conducting multimedia enforcement efforts. Environmental contamination is, by nature, unconstrained by statutory boundaries so effective coordination and communication between divisions are critical. Multimedia enforcement can result in:

- Improved detection and resolution of environmental violations. Cross-statutory inspections and analysis of violations afford the most effective method of identifying the extent of environmental problems. This leads to comprehensive enforcement activities.
- Achievement of optimal enforcement results. Multimedia enforcement actions increase the potential for achieving broad environmental benefits as part of an overall settlement. In addition, penalties will more accurately reflect the full extent of the gravity of harm and economic benefit gained by noncompliance. A penalty that reflects the full range of violations also provides an increased opportunity for supplemental environmental project proposals.
- More effective enforcement. Targeting facilities or companies with significant, pervasive violations can eliminate the root cause of an environmental problem. This may not be possible through an enforcement action brought pursuant to one statutory authority.
- More efficient use of resources. Multimedia actions reduce and streamline the resource burden otherwise required by the numerous single-statute cases brought to resolve a complex environmental problem.
- Fundamentally change the regulated community's perceptions and behavior regarding environmental compliance. Broad-based actions and subsequent results can assist the regulated community's meaningful implementation of environmental management systems. Furthermore, publicity of far-reaching multimedia cases can assist in general deterrence.

The existence of multiple violations involving different provisions of the NREPA administered by more than one division does not automatically require that a case be managed as a multimedia case. The facts and circumstances of each case will be

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES | Number: 04-003 |
| Date: | May 30, 2001 | Page 2 of 7 |
| Revised: | January 7, 2008 | |

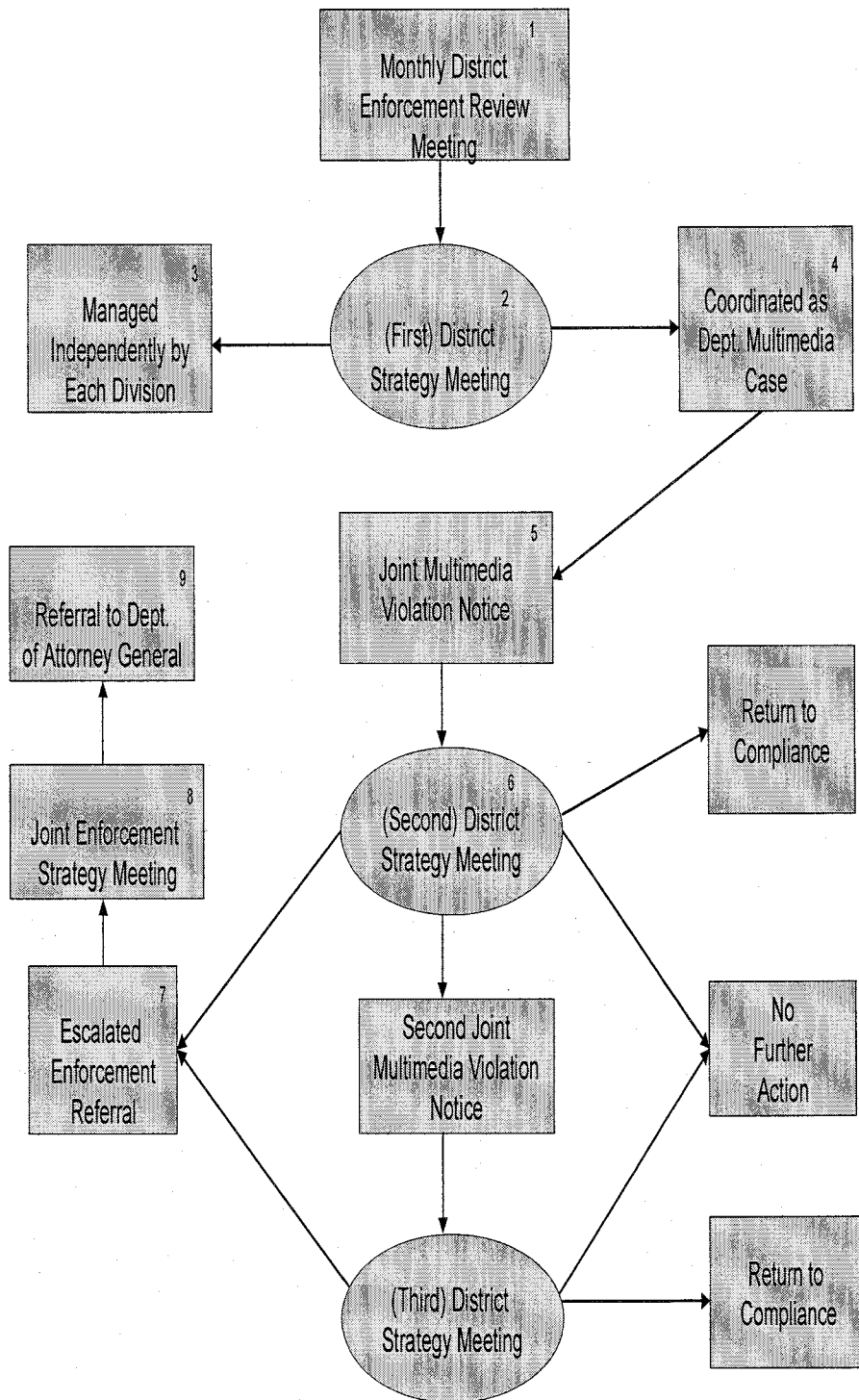
different and each case must be analyzed and discussed internally between the divisions before deciding on a course of action or strategy.

Following is a flowchart illustrating DEQ's coordination and management of multimedia cases. This process is intended to foster communication and coordination between divisions that will result in more effective multimedia enforcement.

DEQ POLICY AND PROCEDURES

SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA
CASES
Date: May 30, 2001
Revised: January 7, 2008

Number: 04-003
Page 3 of 7



DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES | Number: 04-003 |
| Date: | May 30, 2001 | Page 4 of 7 |
| Revised: | January 7, 2008 | |

Footnotes to Flowchart:

1. **Monthly District Enforcement Review Meetings**

DEQ Policy Number 04-005, District Enforcement Review Discussions, requires the Multimedia Coordinator (MMC) to schedule and chair monthly district enforcement review meetings. During these meetings, it is the MMC's responsibility to ensure that all high priority and significant new violations, new enforcement case referrals, and the status of any ongoing multimedia enforcement cases are discussed. There should also be discussion and agreement on which cases, if any, to be scheduled for a District Strategy Meeting. The MMC is responsible for scheduling the District Strategy Meetings and in doing so, should allow each division sufficient time to discuss the facts of the case with their respective compliance and enforcement (C&E) Unit/Section and FOS prior to the meeting.

The District Environmental Conservation Officer (ECO), or their assigned representative, will attend each monthly enforcement review meeting. At these meetings, the ECO will provide a status update for each pending district criminal case that has been referred and discuss any district cases that have been initiated by the OCI - unless confidential.

District Supervisors (or their designee) will attend the monthly district enforcement review meetings and discuss any new significant or high priority violations, new enforcement case referrals, and the status of any cases that have violations of different statutes administered by other divisions where their division is the lead.

2. **(First) District Strategy Meeting**

For each case with violations of different statutes administered by multiple program divisions, the MMC and appropriate district supervisors should discuss and agree upon the relative priority of the case for all divisions involved and an appropriate course of action; strategy for case development or resolution, including a schedule for completing any necessary activities; and a lead division. This discussion should be scheduled separate from the monthly district enforcement review meetings.

District supervisors should consult with their respective C&E Unit/Section and FOS prior to agreeing to a course of action or strategy regarding a potential multimedia enforcement case so that they can represent their respective division's position on the case. Once a strategy or course of action is agreed to, each district supervisor is responsible for ensuring that their staff completes any necessary activities according to the agreed upon schedule.

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES | Number: 04-003 |
| Date: | May 30, 2001 | Page 5 of 7 |
| Revised: | January 7, 2008 | |

The MMC should attempt to resolve any dispute or disagreement about a case's priority, enforcement strategy or schedule through discussions with the appropriate division FOS, C&E chief(s), and district supervisor(s) as appropriate. If further efforts to resolve the dispute or disagreement are necessary, the MMC may request that the OCEC Chief facilitate the discussions. If the MMC and the OCEC Chief are unable to satisfactorily resolve the dispute, the OCEC Chief will escalate the matter to the Deputy Director for final resolution.

3. **Managed Independently by Each Division**

If it is concluded at the district strategy meeting that a case with violations of different statutes administered by multiple program divisions will be managed independently (or continue to be managed independently) by each respective division, district supervisors still have an obligation to regularly communicate with the MMC and the other divisions regarding the status of their respective case. This can be accomplished at the monthly district enforcement review meeting. If the facts and circumstances significantly change in a case, it is the district supervisor's responsibility to schedule interim enforcement strategy discussions with the other district supervisors and the MMC to reaffirm the course of action and/or strategy. Prior to interim enforcement strategy discussions, it is each district supervisor's responsibility to consult with their respective C&E unit/section and FOS as appropriate.

4. **Coordinated as Department Multimedia Case**

If it is decided at the district strategy discussions that a case will be developed and coordinated as a department multimedia case, the district supervisor of the lead division will be responsible for periodically following up with the other district supervisor(s) to ensure that the case is proceeding accordingly to the agreed upon strategy and/or schedule. Interim strategy discussions between the MMC and applicable district supervisors should be scheduled as necessary and as the facts and status of the case warrant.

District supervisors are responsible for ensuring that their portion of the case is progressing according to the agreed-upon schedule for case development or resolution.

5. **Joint Multimedia Violation Notice**

If a case will be managed as a department multimedia case, a multimedia violation notice should be sent specifying the violations identified by each division. These violations may be identified as a result of a joint multimedia inspection or evaluations performed in follow-up to an initial single media inspection. Each division has the responsibility of identifying the issues and violations that should be included in the violation notice and should consult with

DEQ POLICY AND PROCEDURES

| | | |
|-----------------|---|-----------------------|
| SUBJECT: | APPENDIX A COMPLIANCE AND ENFORCEMENT SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES | Number: 04-003 |
| Date: | May 30, 2001 | Page 6 of 7 |
| Revised: | January 7, 2008 | |

their respective C&E unit/section or FOS as appropriate.

Each division is responsible for evaluating the sufficiency of any response received to the multimedia violation notice and providing comments to the lead division in a timely manner.

6. **(Second) District Strategy Meeting**

After receiving comments from each division regarding the sufficiency of any response to the multimedia violation notice, the lead division will convene another district strategy meeting to discuss and agree upon a go forward course of action or strategy and a schedule. District supervisors should consult with their respective C&E unit/section and FOS prior to agreeing to any course of action or strategy.

District supervisors are responsible for ensuring that their staff completes any necessary activities identified during the strategy meeting according to the agreed upon schedule.

The MMC should attempt to resolve any dispute or disagreement about a case's priority, enforcement strategy or schedule through discussions with the appropriate division FOS, C&E chief(s), and district supervisor(s) as appropriate. If further efforts to resolve the dispute or disagreement are necessary, the MMC may request that the OCEC Chief facilitate the discussions. If the MMC and the OCEC Chief are unable to satisfactorily resolve the dispute, the OCEC Chief will escalate the matter to the Deputy Director for final resolution.

7. **Escalated Enforcement Referral**

If it becomes necessary to refer a multimedia case for escalated administrative or civil enforcement, each district supervisor is responsible for completing an enforcement referral and providing it to both the MMC and their division C&E and FOS, as appropriate, within the timeframe established at the District Strategy Meeting. Upon receipt of the necessary referrals, the MMC will prepare a memorandum addressed to the OCEC Chief that identifies the case's relative priority; identifies the lead division coordinating the case development; provides recommendations for each division; and summarizes the relevant case issues. The case should be identified as a multimedia enforcement case in the subject line of the memorandum and a copy of each division enforcement referral should be attached. A copy of the memorandum and attachments should also be provided to the appropriate C&E chiefs, FOS, assistant division chiefs and division chiefs, as applicable.

8. **Joint Enforcement Strategy Meeting**

Upon receipt of the multimedia referral memorandum for escalated civil or administrative enforcement from an MMC, the OCEC Chief will schedule a

DEQ POLICY AND PROCEDURES

SUBJECT: APPENDIX A
COMPLIANCE AND ENFORCEMENT
SECTION 5: COORDINATION AND MANAGEMENT OF MULTIMEDIA
CASES
Date: May 30, 2001
Revised: January 7, 2008

Number: 04-003
Page 7 of 7

strategy meeting with the appropriate C&E chiefs, district supervisors, and the MMC to discuss and agree on an appropriate enforcement strategy with associated deadlines and to assign a division to be the lead for coordinating enforcement matters between divisions, the DAG and OCEC as necessary.


District Supervisors shall ensure that their staff provides any necessary support for the multimedia case after it has been referred regardless of which division is assigned as the lead for coordinating enforcement matters and as necessary to meet the established deadlines.

The C&E chief for the lead division is responsible for ensuring that the case proceeds according to the agreed-upon deadlines established in the enforcement strategy meeting and scheduling interim strategy meetings as necessary. The OCEC Chief will facilitate and oversee this process as necessary.

Any dispute or disagreement about the decisions made at the Joint Enforcement Strategy Meeting should be resolved by the OCEC Chief in discussions with the appropriate division C&E chief(s), MMC, and district supervisor(s) as appropriate. If the OCEC Chief is unable to satisfactorily resolve the dispute, the OCEC Chief will escalate the matter to the Deputy Director for final resolution.

9. **Referral to the DAG**

The C&E chief (or their staff) for the lead division will be responsible for preparing the referral to the DAG in accordance with DEQ Policy 09-002, Referrals of Matters to the Attorney General. The other C&E chiefs shall provide the necessary staff support to ensure that their violations and issues are appropriately addressed and included in the referral, any subsequent settlement documents, or litigation. After a case has been referred to the DAG, and as necessary thereafter, the lead division's C&E chief is responsible for ensuring that there is effective coordination and communication between the divisions.

| | | | |
|--|---|-------------------|--|
|  | Office of Oil, Gas, and Minerals | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| | POLICY AND PROCEDURES | | |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: SECTION 5: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENT | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.05 | Page: 11 of 32 | |

ISSUE:

It is important that the OOGM is able to assess the effectiveness of its compliance and enforcement programs. It is also important that this information be readily available to the public. Professional Staff must also effectively communicate and work in a cooperative manner with other divisions within the DEQ on compliance and enforcement programs.

PROCEDURES:

| Step | Who | Does What |
|------|----------------------------------|---|
| 1. | Office Chief/Section Supervisors | Ensures that an electronic database for the tracking of compliance activities is available to Professional Staff. The database shall enable dates and types of evaluations conducted and the compliance status at regulated sites to be adequately tracked. Additionally, the database shall enable Professional Staff to track the dates, types, and status of compliance actions. |
| 2. | Professional Staff | Enters data into the MIR Database to allow for tracking of compliance activities. Data includes on-site inspections, verbal and written communications, records received, and miscellaneous correspondence relevant to regulated operations. |
| 3. | Section Supervisors | A. On a quarterly basis, runs query of the MIR Database to obtain measures applicable to the program as determined by Section Supervisors. Applicable measures may include Compliance Case Summaries from field note print/RBDMS.Net. <ol style="list-style-type: none"> 1. Number of known entities (facilities, sources, complaints, or other form of activity) subject to regulation, oversight, or evaluation. 2. Number of entities that have an evaluation planned by division policy, procedures, or program commitments. 3. Number of entities with a planned evaluation that were evaluated. 4. Number of evaluated entities, planned or otherwise, that were determined to be not in compliance. 5. Number of evaluated entities whose non-compliance meets a division's Significant Non-compliance criteria |

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.05

Subject: SECTION 5: COMPLIANCE COORDINATION, TRACKING, AND MEASUREMENT

Page 12 of 32

| Step | Who | Does What |
|------|---|--|
| | | <p>(if applicable).</p> <ol style="list-style-type: none"> 6. Number of non-compliant entities that returned to compliance before an escalated enforcement action was taken. 7. Number of non-compliant entities where an escalated enforcement action was taken. 8. Number of Judicial Orders still in effect. 9. Number of Administrative Consent Orders that are still in effect. 10. Number of Supervisor of Wells Final Orders that are still in effect. 11. Number of Demand Letters/Orders for Administrative Penalties issued. 12. Number of referrals that are pending with the EIS. 13. Number of referrals to the EIS that have a final disposition. 14. Number of referrals that are pending with the Department of Attorney General (DAG). 15. Number of referrals to the DAG that have a final disposition. 16. Total amount (in dollars) of fines and penalties agreed to or ordered (include civil, criminal, administrative, and Supplemental Environmental Projects (SEPs)). 17. Total amount (in dollars) of environmental damages agreed to or ordered. 18. Total amount (in dollars) of DEQ cost agreed to or ordered. 19. Number of final settlement agreements or orders that contain a SEP. 20. Total amount (in dollars) of fines and penalties offset by a SEP. 21. Total number of permit applications backlogged. 22. Total number of permit applications received. 23. Total number of permits issued. 24. Total number of permits denied. 25. Total number of permit decisions made on time. |
| 4. | Compliance and Bonding Specialist/Designate | <ol style="list-style-type: none"> A. Evaluate information from step 3 and evaluates per management review process. Following review process makes recommendation to Section Supervisors. B. Participates in Compliance and Enforcement Chiefs Meetings and communicates activities and important issues discussed to Section Supervisors. |
| 5. | Section Supervisors | Receives information from steps 3 and 4 and evaluates per |


OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.05

Subject: SECTION 5: COMPLIANCE COORDINATION, TRACKING, AND
MEASUREMENT

Page 13 of 32

| Step | Who | Does What |
|------|-----|--|
| | | management review process. Following review process, directs any appropriate actions to be taken by Professional Staff as necessary. |

| | | | |
|--|--|-------------------|--|
|  | Office of Oil, Gas, and Minerals | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| | POLICY AND PROCEDURES | | |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: SECTION 6: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.06 | Page: 14 of 32 | |

PROCEDURES:

NOTE: Where these procedures describe an action by a division or office other than the OOGM or a department other than the DEQ, they are for information only; those actions are subject to the procedures or the respective division, office, or department. General Compliance and Enforcement Procedures that apply to all divisions/offices of the DEQ are addressed in the DEQ Policy and Procedure 04-003.

| Step | Who | Does What |
|------|--|---|
| 1. | Professional Staff | If information becomes available during enforcement case development that there may be additional violations of the NREPA or other statutes that other DEQ divisions are responsible for administering, OOGM staff should immediately bring the case to the attention of his/her supervisor for multi-media consideration. |
| 2. | OOGM District Supervisor | If it is determined during enforcement case development that there may be additional violations of the NREPA or other statutes that other DEQ divisions are responsible for administering, the initiating District Supervisor should bring the case to the attention of the other District Supervisors and the District Coordinator, as appropriate, for discussion. If the case involves potential criminal violations, a referral to the EIS should be made per the normal procedures, and the EIS shall be involved in the case coordination efforts. The purpose of early coordination of potential enforcement actions is to facilitate appropriate multi-media coordination and to provide the other DEQ divisions and the EIS with sufficient time for investigation and case development, as well as the ability to consult with and refer the case to their respective compliance and enforcement unit staff within the same time frame as that of the initiating District Supervisor. |
| 3. | Compliance Coordinator | Upon notification by the initiating District Supervisor of a potential multi-media enforcement case, the Compliance Coordinator shall review the potential case with the applicable District Supervisors to determine if additional violations and claims may be/are appropriate for inclusion into the enforcement action. |
| 4. | OOGM and Other Division District Supervisors | Each District Supervisor shall review the potential case for their respective divisions, obtaining concurrence with their proposed response, as appropriate, from their division staff |

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.06

Subject: COMPLIANCE AND ENFORCMENT

SECTION 6: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES

Page 15 of 32

| Step | Who | Does What |
|------|--|---|
| | | and management. If it is determined that it is, or may be, appropriate to include additional violations and claims in the enforcement action, the District Supervisors shall ensure that their respective staff identify the nature of such violations and claims, as well as provide a time frame for conducting any investigations necessary for case development. Each District Supervisor with additional violations and claims should advise the Compliance Coordinator, the initiating District Supervisor, and other District Supervisors, as appropriate, of the nature of such violations and claims and provide the time frame for completing any necessary investigations, case development, and referral preparation. |
| 5. | Compliance Coordinator | <p>A. The Compliance Coordinator shall confer with the District Supervisors involved, the Division Compliance and Enforcement Chiefs' affected and appropriate EIS staff to determine the lead division.</p> <p>B. The Compliance Coordinator shall periodically (at the District Supervisors Meetings, or through another appropriate mechanism) follow up with the appropriate District Supervisor(s) and the EIS to ensure that the investigation, case development, and referral preparation are proceeding in a concurrent and timely manner. This follow-up shall continue until all referrals have been made to the respective compliance and enforcement staff, at which point the coordination will continue between the compliance and enforcement staff and the EIS of the respective divisions.</p> |
| 6. | OOGM and Other Division District Supervisors | Each division's supervisor shall be responsible for referring violations to their respective compliance and enforcement staff and the EIS for handling according to division procedures. When the District Supervisor is ready to refer the facility they shall include a list of all of the violations and claims identified through the Compliance Coordinator - generated discussions in item 1, above, in the referral package. |
| 7. | Compliance Coordinator | Upon receipt of an enforcement referral from the District Supervisor, the Compliance and Enforcement Chief of the lead division shall notify the other Compliance and Enforcement Chiefs and the EIS that the referral has been received and shall: a) confirm that the other divisions do not have or have chosen not to pursue a potential claim; or b) confirm the status of the other divisions' progress on referring potential violations and claims to their respective compliance and enforcement staff, so that all claims can be addressed simultaneously in a joint enforcement action, including a joint referral to the DAG, |

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE


Number: OOGM-601.06

Subject: COMPLIANCE AND ENFORCMENT
SECTION 6: COORDINATION AND MANAGEMENT OF MULTIMEDIA CASES

Page 16 of 32

| Step | Who | Does What |
|------|--|--|
| | | unless the case has been or will be resolved in another fashion, i.e. Administrative Consent Order, criminal prosecution, etc. The EIS Chief and Compliance and Enforcement Chiefs involved shall determine the appropriate case strategy to be pursued if criminal violations are involved. The lead division shall coordinate the joint referral to the DAG for civil action. |
| 8. | Other Division Compliance and Enforcement Chiefs | <p>A. Review the case with the lead division's Compliance and Enforcement Chief to determine if additional claims that fall under their respective jurisdiction need to be included. If a division recommends that additional violations and claims be added, that division should be prepared to support those claims, including a claim for civil fines and penalties, in the enforcement action or reach an otherwise agreed upon approach with the lead division. In the alternative, a division may identify a potential claim and indicate that they do not intend to pursue it.</p> <p>B. The other Compliance and Enforcement Chiefs shall ensure that the applicability of their respective division's policies and procedures, as they relate to the violations and potential claims and the scope of the referral, are appropriately addressed. The other Compliance and Enforcement Chiefs shall calculate appropriate civil fines and penalties and provide the amounts of any cost recovery or natural resource damage claims proposed to be included in the enforcement action.</p> |
| 9. | Compliance and Enforcement Chiefs | At the time a case is referred to the DAG, and as necessary thereafter, the Compliance and Enforcement Chiefs shall meet to define their respective roles and provide for effective interdivisional coordination as the case proceeds. |

OFFICE CHIEF APPROVAL:

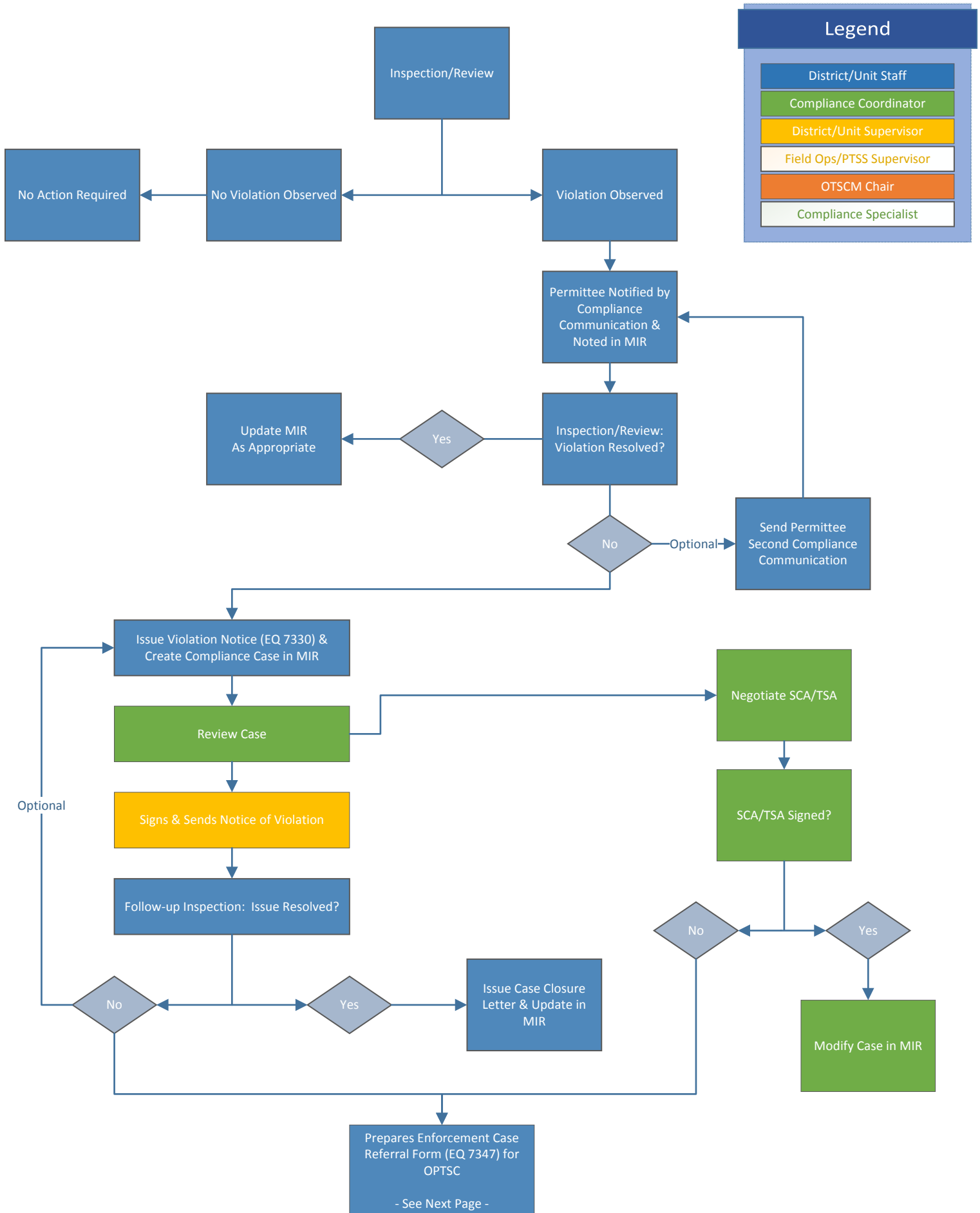


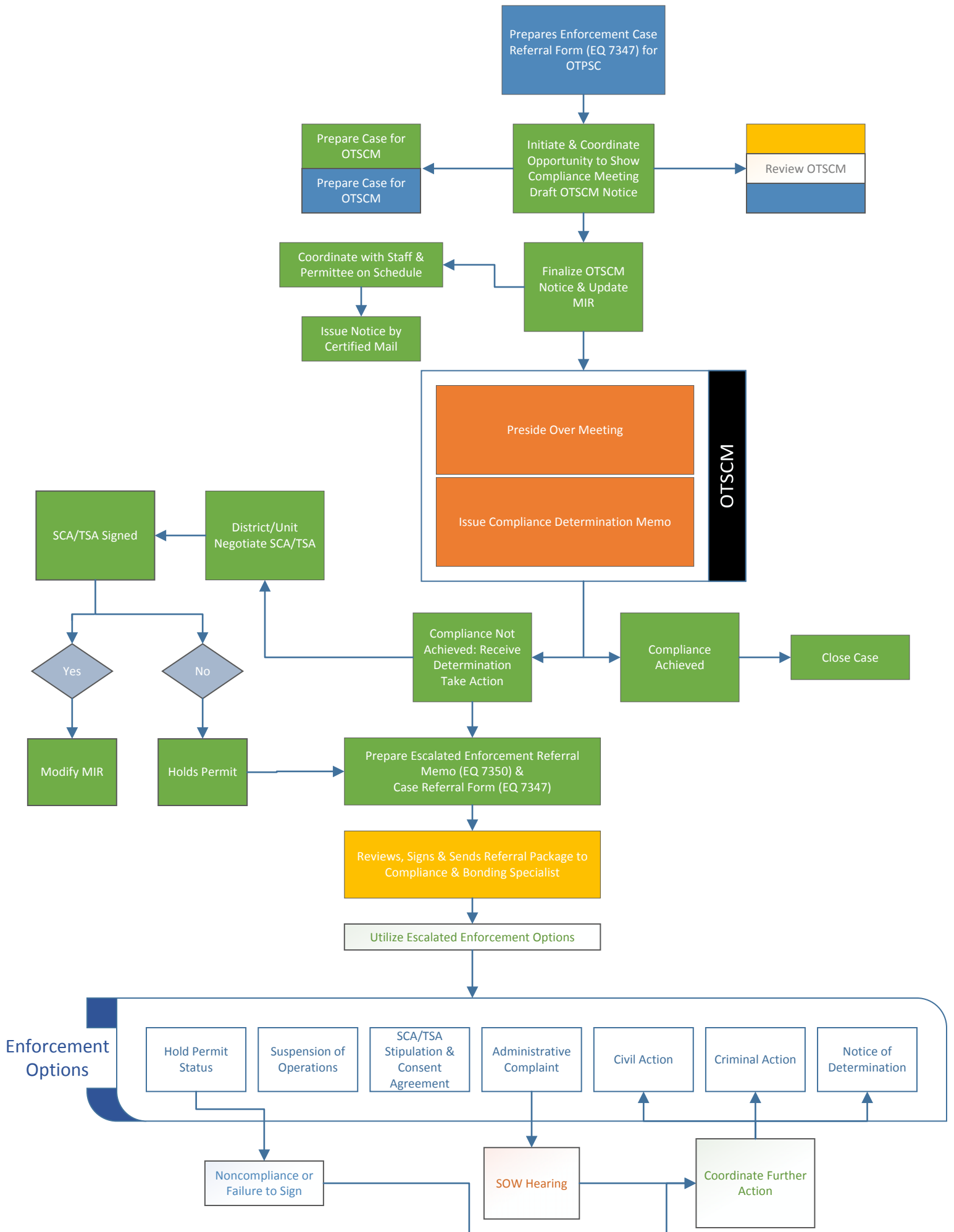
Harold R. Fitch, Chief
Office of Oil, Gas, and Minerals

Appendix A

Compliance and Enforcement Process Flowchart

Generalized Compliance & Enforcement Flowchart





Prepares Enforcement Case Referral Form (EQ 7347) for OTSC

Prepare Case for OTSC
Prepare Case for OTSC

Initiate & Coordinate Opportunity to Show Compliance Meeting Draft OTSCM Notice

Review OTSCM

Coordinate with Staff & Permittee on Schedule

Finalize OTSCM Notice & Update MIR

Issue Notice by Certified Mail

Preside Over Meeting

Issue Compliance Determination Memo

OTSCM

SCA/TSA Signed

District/Unit Negotiate SCA/TSA

Yes

No

Modify MIR

Holds Permit

Compliance Not Achieved: Receive Determination Take Action

Compliance Achieved

Close Case

Prepare Escalated Enforcement Referral Memo (EQ 7350) & Case Referral Form (EQ 7347)

Reviews, Signs & Sends Referral Package to Compliance & Bonding Specialist

Utilize Escalated Enforcement Options

Enforcement Options

Hold Permit Status

Suspension of Operations

SCA/TSA Stipulation & Consent Agreement

Administrative Complaint

Civil Action

Criminal Action

Notice of Determination

Noncompliance or Failure to Sign

SOW Hearing

Coordinate Further Action

Appendix B

Forms

EQ1083 Referral Memo to Deputy Director

TO: Jim Sygo, Deputy Director

FROM: **[insert division chief's name]**, Chief, **[insert division name]** Division

DATE:

SUBJECT: **[insert Site name]**, **[insert County name]** County
[insert Site ID No. or other division identifier]

The attached letter and briefing report are provided for your consideration. Please contact me at **[insert telephone number]** or **[insert name of other division contact/Compliance and Enforcement Chief]** at **[insert telephone number]** if you have questions regarding this matter.

Attachments

cc: **[insert name of other division contact]**, **[insert division acronym]**

EQ 0183 (03/2001)

EQ 0184 Referral Memo to Deputy Director

[insert date]

{This is intended to be a ONE-PAGE letter. Use Arial 12 font, if possible; otherwise, Arial 11 font will be accepted. Replace all text in brackets with the appropriate information. All information inserted into the document should follow the *Department of Environmental Quality Correspondence Guidelines*.}

ATTORNEY-CLIENT PRIVILEGE

The Honorable Bill Schuette
Attorney General
Department of Attorney General
P.O. Box 30212
Lansing, Michigan 48909

Dear Attorney General Schuette:

The Department of Environmental Quality (DEQ) requests Department of Attorney General (DAG) assistance in [insert statement of goal (e.g., negotiating a legally binding agreement)] related to the [insert facility/company name and city]. [Briefly define the nature of the violation or other statutory provision that necessitates the referral. Include a reference to the specific statutory provision.]

The DEQ requests that the DAG [briefly describe the type(s) of action we are requesting the DAG to take (e.g., obtain site access or injunctive relief, negotiate a voluntary Administrative Order by Consent, provide counsel to an administrative action, file a complaint in an adversarial proceeding, etc.). Specify the specific statutory authority for that action (NREPA citation) and the specific elements that need to be addressed by the action (e.g., securing implementation of response activities, reimbursement of state costs, assessment of a fine and penalties, assessment of natural resource damages, placement of a lien, etc.) [If appropriate, insert: If a voluntary agreement cannot be reached in a timely manner, we also request that the DAG take all necessary legal actions, including the filing of a lawsuit, to compel (insert name of person/entity) to comply with (specify provisions).]

[If applicable, insert: Assistant Attorney General [insert name] has previously assisted the DEQ in [action] concerning this site.] A briefing report is enclosed for your information. If you have any questions, please contact [insert division/office chief's name], Chief, [insert division/office name], at [insert telephone number]; or you may contact me.

Sincerely,

BRIEFING REPORT

[insert company/individual's name]
[insert facility/company street address]
[insert city name], [insert county name] County, Michigan
Site ID No. [insert number]

{This briefing report is intended to follow the *Department of Environmental Quality Correspondence Guidelines* (page 60) for a Briefing Paper. Use Arial 12 font, if possible; otherwise, Arial 11 will be accepted. Replace all text in brackets with the appropriate information. If this briefing is for a contested case referral, use the division/office name and acronym in addition to the department name.}

ATTORNEY-CLIENT PRIVILEGE

Issue or Request

{State the issue in a clear and concise manner. This can be accomplished in a few sentences or greater detail, if necessary, to describe the issue.}

This briefing report has been prepared to support the referral of the [insert facility/company name and acronym] to the Department of Attorney General (DAG) for [very briefly state the goal/objective of the referral (e.g., assistance in seeking site access or injunctive relief, negotiating a voluntary agreement, filing a complaint in an adversarial proceeding, etc.) and state the relief sought (e.g., to seek implementation of response activities, reimbursement of costs, placement of a lien, etc.)].

Background/Facts

{This section is intended to provide a basis or foundation to further describe the issue. Provide a summary of the RELEVANT site/company history to the issue at hand.}

[Include such information as:

- Type of business conducted as it relates to the environmental problem.
- Location of the facility/company.
- Relative size of the environmental issue/facility or company.
- Names of liable parties (LP).
- Dates of ownership and/or operation of facility/company by LP along with supporting evidence.
- Factual basis to support the determination that there is/was a violation, or release or threatened release of hazardous substances that exceeds an applicable discharge standard/cleanup criteria, including information that links the discharge/release or threatened release to the LP's activity that caused the discharge/release or threatened release. (This may need to be tailored to each program area.)
- The nature and extent of response activities conducted to date, who conducted those response activities, and the results of investigations into the nature and extent of

ATTORNEY-CLIENT PRIVILEGE

Briefing Report

[insert company/individual name]

Page 2

contamination. Include specific information regarding the performance of Remedial Investigation/Feasibility Study activities, interim response actions, or other response activities at the facility/company. Provide information on the documented concentrations of contaminants as compared to appropriate criteria in order to establish the magnitude of the problem.

- Summary of additional response activities that need to be performed at the facility/company.
- Use of affected properties – industrial, commercial, residential, etc.
- If applicable, impact on, and/or damage to, natural resources.
- Summary of response activities taken by the DEQ, if any, and the approximate costs incurred by the State to date.
- Describe other regulatory considerations, if applicable.]

Analysis

[Describe the reasons why a referral is necessary, including a demonstration that the division/office has exhausted its administrative options or reasons why the problem is so egregious or of the nature that requires immediate referral to the DAG. For example, summarize relevant dates and types of actions initiated by the DEQ and the LP's response, both positive and negative, to DEQ requests, including DEQ requests that LP take response actions at the facility/company, and the LP's responses to information requests, notice letters, demand letters, attempted consensual agreement negotiation, etc. If the DEQ has had no recent contact with the LP, an effort should be made to determine the LP's current position regarding compliance/noncompliance prior to the referral being made (unless the violation is egregious).]

Recommendation

[Provide specific suggestions for resolution of the issue or problem including the relevant statutory remedies (and citations). Also describe why voluntary/DEQ compliance has not/will not be obtained and why DAG assistance is necessary. Include specific justification.]

Staff Contacts

{Revise this section as appropriate for each division/office.}

[Insert project manager's name] is the project manager assigned to [insert facility/company acronym] and may be reached at [insert telephone number] or [insert e-mail ID]@michigan.gov. [Insert district enforcement coordinator's name] is the district enforcement coordinator and may be reached at [insert telephone number] or [insert e-mail ID]@michigan.gov. We request that the assistant attorney general assigned to this case contact [insert compliance and enforcement chief's name], Chief, [insert compliance

ATTORNEY-CLIENT PRIVILEGE

Briefing Report

[insert company/individual name]

Page 3

and enforcement section/unit name], [insert division/office name/acronym], at [insert telephone number] or [insert e-mail ID]@michigan.gov. [Insert compliance and enforcement chief's name] will coordinate a team meeting at which a case strategy will be formulated and staff assignments will be made.

[Optional: The DAG staff time should be charged to Index Code No. [insert Index Code number], PCA No. [insert PCA number], and Project Code No. [insert Project Code number].

Prepared by: [insert name and title]
[insert district/section/unit name]
[insert division/office name]
Department of Environmental Quality
[insert date]

EQ0186 (09/2012)

OTHER DEPARTMENT BUSINESS: PUBLIC HEARINGS AND MEETINGS:

DEADLINE FOR PUBLIC COMMENT REGARDING A NOTICE OF DETERMINATION. The Office of Oil, Gas, and Minerals (OOGM) has issued a Notice of Determination for a well known as the _____, Permit Number _____, located in Section _____ of _____ TOWNSHIP in _____ COUNTY. Any owners, operators, persons with working interest or persons with standing may contest the Notice of Determination by submitting a petition for a hearing to show cause in accordance with Administrative Rule 324.1202 promulgated under Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Petitions for Hearing may be submitted to **Ms. Susan Maul**, OOGM, P.O. Box 30256, Lansing, Michigan 48909-7756, or via e-mail to mauls@michigan.gov by _____. Information Contact: **Mr. Joe Pettit**, OOGM, pettitj@michigan.gov, or 517-335-6766.

PUBLIC NOTICE
Department of Environmental Quality
Office of Oil, Gas, and Minerals

The Office of Oil, Gas, and Minerals (OOGM) has issued a Notice of Determination (NOD) pursuant to Sections 61505 and 61519 of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The NOD orders the permittee of record to repair its well, plug and abandon its well, perform site restoration activities, or perform response activities. If the permittee of record fails to comply with the NOD, then the OOGM intends to repair the well, plug and abandon the well, perform site restoration activities, or perform response activities to enforce the NOD.

| Well Name & Number | Permit Number | Permittee Of Record | Township | County |
|--------------------|---------------|---------------------|----------|--------|
| | | | | |
| | | | | |
| | | | | |

Any owners, operators, working interest partners, or persons with standing may challenge the NOD by submitting a petition for a Supervisor of Wells hearing to show cause in accordance with Administrative Rule 324.1202 promulgated under Part 615. Submit Petitions for Hearing to Susan Maul, Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909-7756, or via e-mail to mauls@michigan.gov by

For additional information go to www.michigan.gov/deq or contact Joe Pettit, Compliance and Bonding Specialist at 517-335-6766 or via e-mail at pettitj@michigan.gov.

ATTORNEY-CLIENT PRIVILEGE

The Honorable Bill Schuette

Page 2

[insert date]

Dan Wyant
Director
517-284-6700

Enclosure

cc/enc: Mr. S. Peter Manning, DAG

Mr./Ms. [insert Assistant Attorney General's name, if mentioned in letter], DAG

Mr. Jim Sygo, Deputy Director, DEQ

Mr./Ms. [insert division/office chief's name], DEQ

EQ 7329 Compliance Communication Letter

Dear _____ :

SUBJECT: **COMPLIANCE COMMUNICATION**
PN _____, (Well/facility name), (County)

On _____, staff of the Office of Geological Survey (inspected, reviewed records, etc.) on the above site(s).

(Include a brief description of the compliance issue or violation(s).)

(Include a summary of any instructions or directives given by DEQ staff to the regulated entity.)

We anticipate and appreciate your cooperation in resolving this matter, or contacting us with an acceptable alternative, by (date). If you have any questions, please feel free to contact me.

Sincerely,

Unit or District Office
Office of Geological Survey

cc: Supervisor, Cadillac District Office, DEQ

EQ 7330 Violation Notice

Dear _____ :

SUBJECT: **VIOLATION NOTICE**
Compliance Case No. _____ , and Case Name _____

Staff of the Office of Oil, Gas, and Minerals (OOGM), Department of Environmental Quality (DEQ) conducted **(a records review, an inspection)** pursuant to the authority granted in Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), on **(Date)** for the following well(s) and surface facilities:

List:

**(Well name and number, permit number, township and county) and/or
(Facility name and number, Mir facility number, township and county)**

Based upon staff observations, the OOGM alleges that **(Company)** is in violation of administrative rules promulgated pursuant to Part 615 as detailed below.

(Describe in narrative the observation and what provisions of the law, rule, or permit that were violated with only a reference to the specific law or rule citation or specific permit for each well. Do not copy rules verbatim.)

In order to bring your operation into compliance with the statute, the following measures need to be taken.

1. **(Specify the action that needs to be undertaken to return the company to compliance with deadline date)**
- 2.

The above measures shall be taken by the date(s) specified above. Please contact **(staff person, address and phone)**, when the work has been completed and/or if you have any questions or if you wish to submit factual information that may negate the alleged violation(s). We anticipate and appreciate your cooperation in resolving this matter.

Sincerely,

District Office
Office of Oil, Gas, and Minerals

cc: , District Supervisor, DEQ
District Compliance Coordinator, DEQ
Compliance and Bond Specialist, DEQ
District File

(For Second Violation Notice substitute the following sentences in place of the sentence "We anticipate and appreciate.....")

If ***(Company)*** fails to achieve compliance or contact this office to propose an acceptable compliance schedule by the dates specified above, this matter will be referred to the Permits and Technical Services Section, Office of Oil, Gas, and Minerals. This referral will initiate appropriate enforcement action.

Appendix For Spill Clean Up Requiring Hydro: Alternative Wording for action needed to be taken:

1. Provide documentation as specified by the rule above and on form EQP 7233 describing the spills and provide documentation of cleanup of the above referenced spills.
2. Remove visibly contaminated soils by 11/22/04. Samples shall be collected from the bottom and sides of the excavation. Soil samples shall be analyzed as indicated below in paragraph 3.d.
3. Conduct a hydrogeologic investigation of the site. The minimum requirements for a hydrogeologic investigation are as follows:
 - a. A soil boring shall be taken at a sufficient depth and spacing to determine impact of the spill on soils. (Samples shall be analyzed every five feet, if appropriate).
 - b. Wells shall be installed of sufficient number and location in order to:
 - 1) determine the direction of groundwater flow;
 - 2) sample the groundwater in the area of greatest discharge and down gradient; and
 - 3) obtain a background water quality sample.
 - c. A minimum of three wells shall be installed and set in a triangular pattern around the spill to determine general direction of groundwater flow across the site. Once the direction of groundwater flow is determined, a boring (both up gradient and down gradient of the spill) must be drilled and the groundwater vertically sampled to determine quality. A well shall be installed in the zone of highest concentration, if contamination is found in either boring.
 - d. Water samples shall be analyzed for the following parameter(s) by an accredited laboratory:

Inorganic: chloride, calcium, sulfate, potassium, magnesium, sodium, bicarbonate and carbonate.

Organic: benzene, toluene, ethylbenzene, and xylene (BTEX).

Soil samples shall be analyzed for sodium, chloride, BTEX and Total Petroleum Hydrocarbons (TPH)

Groundwater contamination is defined as: measurements above five parts per billion (ppb) benzene, 790 ppb toluene, 74 ppb ethylbenzene, and 280 ppb xylenes (BTEX) in the groundwater, as determined by laboratory samples of groundwater using Analytical methods and recommended detection levels as described in the current Department of Environmental Quality, Remediation and Redevelopment Division (RRD) Operational Memorandum #2 (*Sampling and Analysis Guidance, October 22, 2004*). Chloride in the groundwater which measures above 250,000 ppb (250 ppm) chloride (as determined by laboratory sample analyses) is also contamination as described in the RRD Operational Memorandum #1 (*Part 201 Cleanup Criteria / Part 213 Risk-based Screening Levels, September 28, 2012*)

Soil contamination is defined as: contamination which measures above 100 ppb benzene, 16,000 ppb toluene, 1,500 ethylbenzene, and 5,600 ppb xylenes in the soil, as determined by laboratory sample(s) of soil, using Analytical methods and recommended detection levels as described in the current RRD Operational Memorandum #2 (*Sampling and Analysis Guidance, October 22, 2004*). Contamination in soils which measures above 5,000 microgram milligrams per kilogram chloride or above 2,500 milligrams per kilogram sodium as determined by laboratory analyses of sample(s) is also contamination as described in the RRD Operational Memorandum #1 (*Part 201 Cleanup Criteria / Part 213 Risk-based Screening Levels, September 28, 2012*). Contamination in soils which measures above 10,000 mg/kg (ppm) Total Petroleum Hydrocarbons Diesel Range Organics (TPHDRO) as described in Supervisor's Letter 1997-1.

In the event that there is soil and/or groundwater contamination and the contaminant concentrations exceed the residential cleanup requirements of Section 20120a(1)(a) or (17) of the NREPA, then the [well/facility] site and property constitutes a "facility" regulated under Part 201.

An owner or operator of property who has knowledge that the property is a facility, as defined under Part 201, has certain "due care" obligations under Section 20107a of Part 201 of the NREPA. The owner or operator is responsible for taking measures to prevent exacerbation of the existing contamination, taking response activities necessary to allow the use of the property to be conducted in a manner that protects public health and safety, and to take reasonable precautions against the reasonably foreseeable acts or omissions of a third party and the consequences that could result.

If the owner/operator is responsible for the activity causing the release, in addition to the obligations described previously, the owner/operator also has an affirmative obligation under Section 20114 of Part 201 to conduct certain emergency and interim response activities and diligently pursue the remediation of the property to achieve the cleanup criteria specified in Part 201. The liability provisions of Part 201 are set forth in Section 20126 and certain exceptions, exemptions and defenses are available.

The Michigan Department of Environmental Quality (MDEQ) advises you to become familiar with Part 201 of the NREPA and to take the necessary steps to comply with any statutory obligations you may have.

4. Results of the soil sampling and hydrogeological study must be submitted in a report to the OOGM Cadillac District Supervisor by January 22, 2005. If groundwater contamination is found, the submitted report must include a site map, all data obtained, analysis of data, interpretation, conclusion, and a Remedial Action Plan (RAP). The RAP must specifically address the following:
 - a. Chemical and static water levels tabulated in chronological order.
 - b. Cross-sections (down the axis and across the axis of the plume) with vertical sampling intervals and results, lithology, and screen locations indicated on the cross-sections.
 - c. A static water level contour map demonstrating groundwater flow direction.
 - d. A site map showing all surface features within a quarter of a mile of the site, including homes, surface waters, wetlands, roads, supply wells, soil borings, monitor wells, etc.
 - e. Area water well records (match well records with homes on map) within a quarter of a mile from the site. Survey of homeowners where well records are not available.
 - f. Well records for monitor wells and soil borings.
 - g. The elevations of screens in monitor wells.
 - h. The description of area and regional geology.
 - i. An is contour map of plume concentrations.
 - j. The interpretation of data and conclusions.
5. In the event groundwater contamination is found, you must also submit a work plan for a remedial investigation to fully determine the vertical and horizontal extent of the groundwater contamination.

**MDEQ – OFFICE OF OIL, GAS, AND MINERALS
COMPLIANCE AND ENFORCEMENT CASE
REFERRAL FORM**

Purpose of Referral: OTSCM Escalated Enforcement

| | |
|----------------|-------------------|
| Permittee: | OOGM Case Number: |
| Permit Number: | Well(s): |
| District/Unit: | Date: |
| Staff: | Telephone: |
| Supervisor: | Telephone: |

INFORMATION INCLUDED WITH THIS REFERRAL

| | |
|--|------------------------|
| <input type="checkbox"/> 1. Correspondence copies; include certified return receipts | |
| Date of inspection: | |
| Compliance Communication(s) dated: | |
| Date VN sent via U.S. mail: | |
| Date return receipt signed: | |
| (Non-Pickup) Date VN returned: | |
| Date Second VN sent via U.S. mail: | |
| Date return receipt signed: . | |
| OTSCM Determination Memo: | |
| <input type="checkbox"/> 3. Field notes with dates from: . | to: |
| <input type="checkbox"/> 4. Chronology | |
| <input type="checkbox"/> 5. Photos | |
| <input type="checkbox"/> 6. Sample analysis | |
| <input type="checkbox"/> 7. Landfill, trucking receipts | |
| <input type="checkbox"/> 8. Other | |
| <input type="checkbox"/> 9. Orphan Well Analysis | |
| Date Case Accepted: | Date Case Assigned to: |
| Date Returned to District: | |
| Reason: | |
| Compliance Staff: | |

Opportunity to Show Compliance Meeting (OTSCM) Structure & Language

Chairperson's Instructions, Opening Statement, and Closing Statement for OTSCM

The statements given below are to be used for all Opportunity to Show Compliance Meetings (OTSCM) that you conduct as an OTSCM Chairperson. The Opening Statement shall be read at the beginning of the OTSCM and the Closing Statement shall be read at the end of the meeting. ***You must not deviate from these written statements.*** Should the permittee(s), or his/her representative, request a copy of the statements, please provide same.

Meeting Chairpersons shall not involve themselves in settlement negotiation either during or after the close of the meeting. Should negotiations commence during the meeting, the meeting chairperson shall adjourn the meeting and allow staff to continue with the negotiations. The meeting can be reconvened at the request of any or all persons involved. All discussions following the close of the meeting shall be directed to the Compliance Unit.

Permittee(s) may be represented by an attorney at the meetings. However, the permittee's representative shall have no status beyond that which is afforded the permittee(s) who is alleged to be in violation.

The permittee(s) may also cause to be made a record of the proceedings of the OTSCM Meeting for their personal use. This record will not be utilized by the supervisor's representative and shall not be accepted as a part of the record in a subsequent formal hearing.

OPENING STATEMENT FOR OTSCMs

The purpose of this Opportunity To Show Compliance Meeting is to give _____ an Opportunity To Show Compliance with Part 615 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and rules promulgated thereunder, and (if applicable, Part 31) and promulgated rules by demonstrating that the violations alleged in the Enforcement Notice provided to _____ dated _____ have been corrected or are inaccurate.

These proceedings are to be based solely on the Enforcement Notice and only information pertinent to the Enforcement Notice will be considered in my determination. If anyone presents points which are not responsive to the matter at hand, I may stop the discussion. In any event, I will not consider unrelated matters in my decision.

A finding of noncompliance with Part 615, may cause drilling permits and permit transfers to be withheld from _____ or it may result in shut-in of production in certain cases. If you are determined to be in noncompliance with the statute, I will recommend that escalated enforcement action be taken.

This is an informal meeting:

- There is no sworn testimony.
- Anyone who is a part of these proceedings may ask or answer questions.
- You have the right to have an attorney present, he or she may speak for you, but your representative shall have no status beyond that which is afforded to you, as the permittee.
- You have the right to make a record of these proceedings for your personal use.
- *This record will not be utilized by the Supervisor of Wells representative and shall not be accepted as part of the record in a subsequent formal hearing.*

As the Meeting Chairperson, it is my job to first listen to the Compliance and Enforcement Unit staff present the allegations and then listen to your response to those allegations. Compliance and Enforcement staff may use other DEQ staff to discuss the basis of the Notice of Violation.

You _____ will be given the opportunity to respond to the allegations listed in the Notice of Violation as soon as staff's presentation is complete. When you have finished your response, I will ask if there are more comments and, if there are none, close the meeting.

Based on the presentation and your response I will determine if the allegations in the Notice of Violation have been supported or refuted and, based on that, if compliance with the Act(s) is demonstrated.

Do you have any questions on why we are here or on how the meeting will be conducted?

CLOSING STATEMENT

If there are no further statements, I will take into consideration all relevant facts that have been presented here and make a finding in the next 15 working days. You will receive a copy of my findings resulting from these proceedings.

This meeting is now closed.

(OPTIONAL: Written material as discussed during the hearing will be accepted until DATE.)

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

DATE

TO: Adam Wygant, Supervisor, Technical Services Section

FROM: _____, OPTSC Meeting Chairperson

SUBJECT: Opportunity to Show Compliance Meeting, Company/Case #

On _____, an Informal Opportunity to Show Compliance meeting was held to allow _____ to show compliance with Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); MCL 324.61501 et seq. A Notice of Violation dated _____ was sent to _____ informing them of the meeting. There was no representative of the company present at the meeting.

The Compliance Unit staff presented their case with supporting documentation. Based on the information supplied at the meeting, I find that _____ is (or is not) in compliance with Part 615 of the NREPA and the promulgated rules. Therefore, I recommend escalated enforcement.

cc: Mr. Rick Henderson, OOGM
Mr. Joe Pettit, OOGM
Staff Person, OOGM

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION



TO: _____, Supervisor
Permits and Technical Services Section
Office of Oil, Gas, and Minerals

FROM: _____
Cadillac District Office
Office of Oil, Gas, and Minerals

SUBJECT: **ESCALATED ENFORCEMENT REFERRAL**
Compliance Case Number

The Cadillac District Office is requesting that the Permits and Technical Services Section initiate escalated enforcement action in accordance with the Office of Oil, Gas and Minerals (OOGM) Policy and Procedure No. 601.03, Escalated Enforcement Referrals, against _____ concerning the following well and associated surface facility:

| Well Name and Number | Permit Number | Township | County |
|----------------------|---------------|----------|--------|
|----------------------|---------------|----------|--------|

| Facility Name and Number | MIR Facility Number | Township | County |
|--------------------------|---------------------|----------|--------|
|--------------------------|---------------------|----------|--------|

Copies of all relevant Compliance Communications and Violation Notices are attached for your convenience. If you need any additional information, please call me at _____.

attachments

cc: _____, Cadillac District Office, OOGM
_____, PTSS, OOGM

**MDEQ – OFFICE OF OIL, GAS, AND MINERALS
FIELD TO LANSING ENFORCEMENT CASE REFERRAL FORM**

| | |
|--|---|
| Permittee: Click here to enter text. | OOGM Case Number: Click here to enter text. |
| Permit Number: Click here to enter text. | Well(s): Click here to enter text. |
| District/Unit: Click here to enter text. | Date: Click here to enter text. |
| Staff: Click here to enter text. | Telephone: Click here to enter text. |
| Supervisor: Click here to enter text. | Telephone: Click here to enter text. |

INFORMATION INCLUDED WITH THIS REFERRAL

| | |
|--|--|
| <input type="checkbox"/> 1. Correspondence copies; include certified return receipts | |
| Date of inspection: Click here to enter text. | |
| NOI dated: Click here to enter text. | |
| Date return receipt signed: Click here to enter text. | |
| (Non-Pickup) Date NOI returned: Click here to enter text. | |
| Date NOV sent via U.S. mail: Click here to enter text. | |
| Date return receipt signed: Click here to enter text. | |
| <input type="checkbox"/> 2. 201 Number: Click here to enter text. | Project Number: Click here to enter text. |
| <input type="checkbox"/> 3. Field notes with dates from: Click here to enter text. | to: Click here to enter text. |
| <input type="checkbox"/> 4. Chronology | |
| <input type="checkbox"/> 5. Photos | |
| <input type="checkbox"/> 6. Sample analysis | |
| <input type="checkbox"/> 7. Landfill, trucking receipts | |
| <input type="checkbox"/> 8. Other Click here to enter text. | |
| <input type="checkbox"/> 9. Orphan Well Analysis Click here to enter text. | |
| Date Case Accepted: Click here to enter text. | Date Case Assigned to: Click here to enter text. |
| Date Returned to District: Click here to enter text. | |
| Reason: Click here to enter text. | |
| Compliance and Enforcement Staff: Click here to enter text. | |

EQ 7350 Enforcement Notice

CERTIFIED MAIL

Dear _____ :

SUBJECT: **ENFORCEMENT NOTICE**
Compliance Case No.

On _____, staff of the Office of Oil, Gas, and Minerals (OOGM), Department of Environmental Quality (DEQ), issued a Violation Notice pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, for the following well and associated surface facility:

| Well Name and Number | Permit Number | Township | County |
|----------------------|---------------|----------|--------|
|----------------------|---------------|----------|--------|

| Facility Name and Number | MIR Facility Number | Township | County |
|--------------------------|---------------------|----------|--------|
|--------------------------|---------------------|----------|--------|

The Violation Notice required _____ (_____) to resolve the alleged violations by _____. On _____, OOGM staff re-inspected the Subject Well and associated surface is and determined that _____ failed to resolve the following violations that were listed in the Violation Notice.

- 1.
- 2.
- 3.

As a result, the matter was referred to the Compliance and Enforcement Unit (CEU) for escalated enforcement action. Accordingly, the CEU is seeking formal resolution of the alleged violation by _____. Formal resolution of the alleged violation may be accomplished by one of the following:

- _____ may demonstrate that compliance has been achieved;
- _____ may present factual information in writing that should be considered regarding the alleged violation; or

- may schedule a meeting with the CEU to discuss options for satisfactorily resolving the alleged violation.

Be advised that failure to timely and adequately resolve or address the violation cited in this Enforcement Notice may result in further enforcement proceedings including, but not limited to, referral of the matter to the Department of Attorney General for commencement of civil litigation. Be further advised that this Enforcement Notice does not preclude or limit the Department of Environmental Quality's ability to initiate any other enforcement action under state or federal law as appropriate.

If you have any questions, please contact me at the number listed below.

Sincerely,

Permits and Technical Services Section
Office of Oil, Gas, and Minerals

Enclosure

cc: Mr. Adam W. Wygant, DEQ
Mr. Rick Henderson, DEQ
, DEQ
, Cadillac District Office, DEQ
, Cadillac District Office, DEQ

EQ 7351 Opportunity to Show Compliance Meeting for Part 615

Dear _____ :

SUBJECT: Opportunity to Show Compliance Meeting; Compliance Case No.

Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.61501 et seq., and Sections 61505, 61506, 61516 and 61519 of Part 615 and the Administrative Procedures Act, 1969 PA 306, as amended, MCL 24.201 et seq. require the Office of Oil, Gas, and Minerals (OOGM) to offer an Opportunity to Show Compliance prior to taking action that involves the suspension, revocation, annulment, or cancellation of a permit to drill or operate.

The OOGM believes that _____ is in violation of Part 615 at the following well and associated surface facility:

| Well Name & Number | Permit Number | Township | County |
|--------------------|---------------------|----------|--------|
| | | | |
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

A Violation Notice was issued to _____ on _____ by the Cadillac District Office. The Violation Notice required _____ to achieve full compliance with Part 615 by _____. _____ failed to achieve full compliance with Part 615 by this deadline.

An Enforcement Notice was issued to _____ on _____ by the OOGM. The Enforcement Notice required _____ to achieve formal resolution of the violations by _____. _____ failed to achieve full compliance with Part 615 by this deadline.

The OOGM alleges that _____ continues to be in violation of the following Administrative Rules promulgated under Part 615.

1. Administrative Rule 324. _____ requires _____ to _____. Based upon a review of all available information, _____ has failed to _____. Therefore, _____ is in violation of Administrative Rule 324. _____.
2. Administrative Rule 324. _____ requires _____ to _____. Based upon a review of all available information, _____ has failed to _____. Therefore, _____ is in violation of Administrative Rule 324. _____.

An Opportunity to Show Compliance meeting will be held on _____, at _____ in the Conference Room located on the _____ Floor, _____ Tower of Constitution Hall, 525 West

Allegan Street, Lansing, Michigan 48933. A map is included that can be used to locate Constitution Hall in downtown Lansing. Photo identification is required to enter the building from the public entrance that is located on the east side of building.

If [redacted] achieves full compliance with the alleged violations prior to the date of the informal opportunity to show compliance meeting, and the OOGM confirms that compliance has been achieved, the meeting may be cancelled.

In the event that an informal opportunity to show compliance meeting is held, there shall be no sworn testimony or formal cross-examination of the participants. Anyone who is a part of the meeting may ask or answer questions. [redacted] may make a record of the meeting for its own use. However, record cannot be utilized by the OOGM or [redacted] as evidence or as part of the administrative record in any subsequent formal hearings.

Failure of [redacted] to demonstrate full compliance with Part 615 may result in additional escalated enforcement action, which may include hold permit status, fines, and/or penalties.

If you have any questions, please contact me by phone at 517-284-6837, by e-mail at pettitj@michigan.gov, or by mail at Department of Environmental Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909.

Sincerely,

Joe Pettit
Compliance and Bonding Specialist
Office of Oil, Gas, and Minerals

Enclosure

cc: [redacted], DEQ
[redacted], DEQ



STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

CERTIFIED MAIL

Dear _____ :

SUBJECT: Opportunity to Show Compliance Meeting
Compliance Case No.

Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.61501 et seq., and Sections 61505, 61506, 61516 and 61519 of Part 615 and the Administrative Procedures Act, 1969 PA 306, as amended, MCL 24.201 et seq. require the Office of Geological Survey (OGS) to offer an Opportunity to Show Compliance prior to taking action that involves the suspension, revocation, annulment, or cancellation of a permit to drill or operate.

The OGS believes that _____ is in violation of Part 615 at the following well and associated surface facility:

| Well Name | Well Number | Permit Number | Section, Town, Range | Township | County |
|---------------|-----------------|---------------------|---------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| Facility Name | Facility Number | MIR Facility Number | Section, Town, Range | Township | County |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

A Violation Notice was issued to _____ on _____ by the Cadillac District Office. The Violation Notice required _____ to achieve full compliance with Part 615 by _____. _____ failed to achieve full compliance with Part 615 by this deadline.

An Enforcement Notice was issued to _____ on _____ by the Compliance and Enforcement Unit. The Enforcement Notice required _____ to achieve formal resolution of the violations by _____. _____ failed to achieve full compliance with Part 615 by this deadline.

The Compliance and Enforcement Unit allege that _____ continues to be in violation of the following Administrative Rules promulgated under Part 615.

1. Administrative Rule 324. _____ requires _____ to _____. Based upon a review of all available information, _____ has failed to _____. Therefore, _____ is in violation of Administrative Rule 324. _____.
2. Administrative Rule 324. _____ requires _____ to _____. Based upon a review of all available information, _____ has failed to _____. Therefore, _____ is in violation of Administrative Rule 324. _____.

An Opportunity to Show Compliance meeting will be held on _____, at _____ in the Conference Room located on the _____ Floor, _____ Tower of Constitution Hall, 525 West Allegan Street, Lansing, Michigan 48933. A map is included that can be used to locate Constitution Hall in downtown Lansing. Photo identification is required to enter the building from the public entrance that is located on the east side of building.

If _____ achieves full compliance with the alleged violations prior to the date of the informal opportunity to show compliance meeting, and the OGS confirms that compliance has been achieved, the meeting may be cancelled.

In the event that an informal opportunity to show compliance meeting is held, there shall be no sworn testimony or formal cross-examination of the participants. Anyone who is a part of the meeting may ask or answer questions. _____ may make a record of the meeting for its own use. However, record cannot be utilized by the OGS Compliance and Enforcement Unit or _____ as evidence or as part of the administrative record in any subsequent formal hearings.

Failure of _____ to demonstrate full compliance with Part 615 may result in additional escalated enforcement action, which may include hold permit status, fines, and/or penalties.

If you have any questions or concerns prior to the date of the informal opportunity to show compliance meeting, please contact me.

Sincerely,

Compliance and Enforcement Unit
Office of Geological Survey

Enclosure

cc: Mr. Thomas Godbold, DEQ
_____, Cadillac District - DEQ
_____, Cadillac District - DEQ

EQ 7352 Compliance Determination Memo

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: _____, Compliance and Bonding Specialist
Permitting and Technical Services Section
Office of Oil, Gas, and Minerals

FROM: _____, Chairperson

SUBJECT: Opportunity to Show Compliance Meeting
Case No.:

A Notice of Opportunity to Show Compliance Meeting was sent to _____ on _____.

On _____, an informal Opportunity to Show Compliance Meeting was held on _____ to allow _____ to demonstrate compliance with Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the promulgated rules.

Based on the information presented at the meeting, I find that _____ is in compliance with Part 615.

EQ 7360 Notice of Determination Generic

REGISTERED MAIL

Dear _____ :

SUBJECT: NOTICE OF DETERMINATION ; Compliance Case No. _____

_____ is the permittee of record for the following well and associated surface facility:

| Well Name & Number | Permit Number | Township | County |
|--------------------|---------------------|----------|--------|
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

The Office of Oil, Gas, and Minerals (OOGM) has determined that _____ failed to _____.

Therefore, pursuant to Section 61506 of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), the OOGM is issuing this Notice of Determination (notice) and ordering _____ to _____.

If _____ desires to challenge this notice, _____ may file a petition by _____, in accordance with Administrative Rule 1202, requesting a hearing before the Supervisor of Wells in order to demonstrate why _____ should not be required to complete the activities described in this notice. Alternatively, _____ may voluntarily enter into a Stipulation and Consent Agreement with the OOGM by _____.

If _____ fails or neglects to complete the activities as described in this notice, then pursuant to Section 61519 of Part 615, the OOGM may utilize public funds to perform the activities necessary to enforce this notice.

Please note that pursuant to Section 61519 of Part 615 that _____ and _____ are jointly and severally liable for any expenses incurred by the OOGM to enforce this notice. In the event that the OOGM incurs expenses and files a claim against _____ and _____, the claim shall be paid by the _____ or _____ within 30 days. If the claim is not paid within 30 days, then the OOGM, acting for and in behalf of the state, may bring suit against _____ or _____, jointly or severally, for the collection of the claim in any court of competent jurisdiction in the county of Ingham.

Also, please be advised that failure to comply with this notice may subject _____ to enforcement under Section 61520 of Part 615, or other sanctions.

If you have any questions, please contact Mr. Joe Pettit at 517-284-6837, pettitj@michigan.gov, or Department of Environment Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909-7756.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals

cc: Surety
 , DEQ
 , DEQ

EQ 7361 Notice of Determination Violation of Agreement

REGISTERED MAIL

Dear _____ :

SUBJECT: NOTICE OF DETERMINATION; Compliance Case No. _____

On _____, _____ entered into a Stipulation and Consent Agreement (Agreement) with the Office of Oil, Gas, and Minerals (OOGM) pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.61501 et seq. regarding the following well and associated surface facility.

| Well Name & Number | Permit Number | Township | County |
|--------------------|---------------------|----------|--------|
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

By entering into the Agreement, _____ waived its right to a formal administrative hearing or other administrative relief to which it may otherwise have been entitled. Both parties agreed that failure of _____ to comply with any of the agreed upon provisions and procedures would provide further cause for the Supervisor of Wells to issue an Order.

The OOGM has determined that _____ has failed to comply with Paragraph _____ in the Agreement which required _____ to _____. Specifically, _____ has failed to _____.

Therefore, pursuant to Section 61519 of Part 615, the OOGM is ordering _____ to _____ by _____.

Pursuant to Section 61519 of Part 615, if _____ fails or neglects to complete the activities as described in this notice by _____, then the OOGM may utilize public funds to perform the activities necessary to enforce this notice. _____ and _____ are jointly and severally liable for any expenses incurred by the OOGM to enforce this notice. In the event that the OOGM incurs expenses and files a claim against _____ and _____, the claim shall be paid by the _____ or _____ within 30 days. If the claim is not paid within 30 days, then the OOGM, acting for and in behalf of the state, may bring suit against _____ or _____, jointly or severally, for the collection of the claim in any court of competent jurisdiction in the county of Ingham.

Also, please be advised that failure to comply with a Notice of Determination may subject _____ to enforcement under Section 61520 of Part 615, or other sanctions.

If you have any questions, please contact Mr. Joe Pettit at 517-284-6837, pettitj@michigan.gov, or Department of Environmental Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals

cc: Surety
, DEQ
, DEQ

EQ 7362 Stipulation and Consent Agreement

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF OIL, GAS, AND MINERALS

In the matter of:

Case Number: _____

Date Executed: _____

In particular, the following well and associated surface facility hereinafter referred to as the "Subject Well":

, Permit Number _____, Section _____, T _____, R _____
Field, _____ Township, _____ County, Michigan

STIPULATION AND CONSENT AGREEMENT

This is a Stipulation and Consent Agreement (Agreement), by and between _____ (_____), and the Department of Environmental Quality (Department)(**DEQ –find replace**), by and through Harold R. Fitch, Assistant Supervisor of Wells and Director, Office of Oil, Gas, and Minerals (OOGM).

In consideration of the mutual promises and undertakings set forth below, the parties stipulate and agree as follows:

1. The Department is charged with enforcement of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.61501 et seq. (NREPA), and the rules promulgated thereunder.
2. The Department is charged with enforcement of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.20101 et seq., and the rules promulgated thereunder.
3. Pursuant to Part 615, _____ is the permittee of record and is responsible for the Subject Well.
4. The Subject Well is regulated under Part 615 and the rules promulgated thereunder. For purposes of the Agreement, _____ will not raise a jurisdictional defense in any state enforcement of this Agreement.
5. By entering into this Agreement, _____ waives its right to a formal administrative hearing or other administrative relief to which _____ may otherwise be entitled under Part 615.
 - A. The appropriate forum for any civil court proceedings is the Circuit Court of the County of Ingham, State of Michigan.
6. As long as _____ has obligations under this Agreement, _____ shall provide a copy of this Agreement to any prospective successor in interest prior to transfer of ownership of any property or interest owned by _____ in the Subject Well.

7. Both parties agree under Part 615, the Agreement set forth herein is necessary to prevent waste, to alleviate pollution, impairment, and destruction of the State of Michigan's natural resources. Failure of _____ to comply with any of the agreed upon provisions and procedures shall:
 - A. Be a violation of Part 615 and may subject _____ to civil and/or criminal enforcement actions.
 - B. Provide sufficient reason to withhold the issuance or transfer of any drilling permits that may have outstanding with OOGM.
 - C. Provide further cause for the Supervisor of Wells to issue an Order requiring suspension of operations of the Subject Well, and order the Subject Well plugged, if required.
 - D. Authorize the State of Michigan to take any action it deems necessary in accordance with the law to prevent waste and protect the public's health, safety and welfare, and the environment.
8. Subsequent to execution of this Agreement, compliance violations in the (Enforcement Notice) shall be considered resolved.
9. Subsequent to execution of this Agreement, _____ shall be released from Hold Permit Status.
10. The Subject Well is not in compliance with Part 615 and _____ desires to make certain that the Subject Well is in compliance. Toward that end, the parties agree and stipulate to abide by the following:
 - A. By _____, _____ shall
 - B. By _____, _____ shall
 - C. _____ shall submit written notification of completed activities to the OOGM _____ District Supervisor at _____, _____, _____, _____.
11. Any delay in compliance with the terms and conditions set forth in this Agreement attributable to a "Force Majeure" shall not be deemed a violation of this Agreement. *Force Majeure* includes an occurrence or nonoccurrence arising from causes beyond the control of _____ and without the fault of _____, such as an act of God. *Force Majeure* does not include, among other things, unanticipated or increased costs, changed financial circumstances, or failure to obtain a permit or license as a result of actions.
 - A. _____ shall notify the District/Unit Supervisor by written notice within ten (10) calendar days and shall describe, in detail, the anticipated length of delay for each specific obligation that will be impacted by the delay, the cause or causes of delay, the measures taken by _____ to prevent or minimize the delay, and the timetable by which those measures shall be implemented. Written notice shall be submitted to the District/Unit Office, Office of Oil, Gas, and Minerals, (P.O. Box 30256, Lansing, MI 48909-7756)
 - B. The Supervisor of Wells or designee may grant a reasonable extension to a deadline in the Agreement if it is determined that the delay in compliance will result in the conditions

of the Agreement being met. (Upon receipt of a delay and request for extension, the OOGM may grant a reasonable extension to a deadline in order to achieve compliance.)

12. agrees to pay stipulated penalties at the following rate per well for failure to meet any deadlines or perform any activities listed in this Agreement.
 - A. Fifty Dollars (\$50.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, up to and including the 31st day. The maximum penalty per well for the first month is calculated as the number of days in the month multiplied by \$50.00. Example: 31 days x \$50.00 = \$1,550.00 per well in penalties for the first month.
 - B. One Hundred Dollars (\$100.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, after the 31st day. The maximum penalty per well for each month thereafter is calculated as the number of days in the month multiplied by \$100.00. This amount is then added to the preceding month's total. Example: a two month penalty is calculated as 31 days x \$100.00 = \$3,100.00 per well in penalties plus that of the preceding first month \$1,550.00 = \$4,650.00 per well.
 - C. The maximum penalty for failure to meet the requirements in this Agreement is \$50,000.00 per well.
 - D. Payment of a penalty does not release from the responsibility or liability for complying with the requirements of the NREPA and the promulgated rules.
 - E. Payments shall be made payable to the State of Michigan within 30 days of any missed deadline. Submit payments to:

Michigan Department of Environmental Quality
Administration Division (Financial and Business Services Division)
P.O. Box 30473
Lansing, Michigan 48909-7973

13. If fails to meet the conditions of this Agreement, the Supervisor of Wells may issue a Notice of Determination requiring any Subject Well that is not in compliance with a deadline within this Agreement to be cased, repaired, or properly plugged and abandoned.
14. Pursuant to Section 61519 of Part 615, if fails to comply with the requirements set forth in the Notice of Determination within 30 days, the Supervisor of Wells may immediately case, repair, or plug a Subject Well that is in violation of the requirements set forth in the Notice of Determination and claim the bond without further administrative action.
 - A. In the event , the owner, or operator, or surety fail to pay a claim within 30 days, the Supervisor of Wells may bring suit against , the owner, the operator, or surety, jointly and severally for collection of the claim.
15. This Agreement shall terminate upon written request of and written approval from the Department. Department approval shall be based upon showing that it has fully complied with all provisions of this Agreement and has paid in full all stipulated penalties owed to the State of Michigan under this Agreement.

16. Nothing in this Agreement shall, in any manner, restrict or limit the nature or scope of response actions that the Department may take in fulfilling its responsibilities under state and federal law.

IT IS SO AGREED:

Dated: _____

’
- -

The foregoing instrument was acknowledged before me this _____ day of _____, _____ by _____ on behalf of the _____.

Notary Public
_____ County, _____ (State)
My Commission Expires _____

Dated: _____

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
P.O. Box 30256
Lansing, MI 48909-7756
517-284-6823

MODEL CONSENT ORDER DOCUMENT

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings)
Against ,)
A Corporation organized under the laws of the)
State of Michigan and doing business in) OOGM No. ____-20__
 Township, County)
State of Michigan)

STIPULATION FOR ENTRY OF FINAL ORDER
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality (“DEQ”) Office of Oil, Gas, and Minerals (“OOGM”) against , a Michigan Corporation, doing business at Township, County, State of Michigan. The DEQ alleges that the Company has violated . Specifically, . All of the alleged violations are specified in a Notice of Violation (“NOV”) sent to the Company on . and DEQ stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (“Consent Order”).

, and DEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451, (“Act 451”), as amended, MCL 324.101 et seq is an act to control pollution in this State.
2. Article II, Pollution Control, Part 615 of Act 451 (“Part 615”), MCL 324.61501 et seq provides for oil and gas control regulations in this State.
3. The Department of Environmental Quality (“DEQ”) is authorized pursuant to Section 61503 of Part 615 to administer and enforce all provisions of Part 615. Section 61503 of Part 615 provides the authority to the Director of the DEQ to delegate powers and duties.
4. The Director has delegated authority to the Assistant Supervisor of Wells to enter into this Consent Order pursuant to Letter-OOGM-615-01, effective date October 1, 1995, revised October 2, 2012.
5. The termination of this matter by a Consent Order pursuant to Section 61506 of Part 615 is proper and acceptable.
6. Article II, Pollution Control, Part 625 of Act 451 (“Part 615”), MCL 324.62501 et seq provides for mineral well control regulations in this State.
7. The Department of Environmental Quality (“DEQ”) is authorized pursuant to Section 62503 of Part 625 to administer and enforce all provisions of Part 625. Section 61503 of Part 625 provides the authority to the Director of the DEQ to delegate powers and duties.

8. The Director has delegated authority to the Assistant Supervisor of Wells to enter into this Consent Order pursuant to Letter-OOGM-625-01, effective date April 9, 2009, revised October 2, 2012.
9. The termination of this matter by a Consent Order pursuant to Section 62508 of Part 625 is proper and acceptable.
10. Article II, Pollution Control, Part 201 of Act 451 ("Part 615"), MCL 324.62501 et seq provides for environmental remediation control regulations in this State.
11. The Department of Environmental Quality ("DEQ") is authorized pursuant to Section 20134 of Part 201 to administer and enforce all provisions of Part 201. Section 20134 of Part 201 provides the authority to the Director of the DEQ to delegate powers and duties.
12. The Director has delegated authority to the Chief of the Office of Oil, Gas, and Minerals to enter into this Consent Order pursuant to Letter-OOGM-201-05, effective date December 14, 1995 revised October 1, 2012.
13. The termination of this matter by a Consent Order pursuant to Section 20134 of Part 201 is proper and acceptable.
14. Upon execution of this Consent Order, compliance violations alleged at the Opportunity to Show Compliance meeting held on _____, shall be considered resolved and _____ shall be released from Hold Permit Status.
15. _____ and the DEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by _____ that the law has been violated.
16. This Consent Order becomes effective on the date of execution ("effective date of this Consent Order") by the Assistant Supervisor of Wells.
17. _____ shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM

The wells listed below are not in compliance with Part 615 and _____ desires to return the wells and associated facilities to compliance.

| Well Name | Permit Number | Section, Town, Range | Township | County |
|-----------|---------------|-------------------------|----------|--------|
|-----------|---------------|-------------------------|----------|--------|

Toward that end, _____ and DEQ agree and stipulate to abide by the following:

18. On and after the effective date of this Consent Order, shall .
19. On and after the effective date of this Consent Order, shall .
20. On and after the effective date of this Consent Order, shall .

GENERAL PROVISIONS

21. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.
22. Upon completion of the activity associated with a specific deadline, shall submit a notification of completed deadlines for those activities in Compliance Program to the Compliance & Enforcement Unit Supervisor. A copy of the notification should also be sent to the OOGM District Supervisor.
23. Within 30 days after the effective date of this Consent Order, shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and delivered to the Michigan Department of Environmental Quality, Financial & Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909, a settlement amount of , which includes OOGM costs for investigation and enforcement. This total settlement amount shall be paid within 30 days of the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the Agreement Identification No. OOGM- on the face of the check. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on by law.
24. On and after the effective date of this Consent Order, if fails to comply with paragraph , , or of this Consent Order, shall pay stipulated fines of \$100.00 per violation per day up to \$50,000.00 per well. On and after the effective date of this Consent Order, if fails to comply with any other provision of this Consent Order, the Company shall pay stipulated fines of \$50.00 per violation up to \$2,500.00 per well. Stipulated fines submitted under this Consent Order shall be by check, payable to the "State of Michigan" within 30 days of demand and shall be delivered to the Michigan Department of Environmental Quality, Financial & Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909. To ensure proper credit, all payments shall include the Agreement Identification No. OOGM- on the face of the check. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.
25. The OOGM, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable state law, rule, regulation, permit, or DEQ administrative order. However, the OOGM is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.
26. To insure timely payment of the settlement amount assessed in paragraph and any stipulated fines assessed pursuant to paragraph of this Consent Order, shall pay an

interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest penalty shall be determined at a interest rate equal to 1% plus the average interest rate paid at auctions of 5-year United States treasury notes during the 6 months immediately preceding July 1 and January 1, as certified by the state treasurer, and compounded annually, using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by shall be made to the State of Michigan in accordance with paragraph of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by before any remaining balance is applied to subsequent payment amount or interest penalty.

27. waives its right to a formal administrative hearing or other administrative relief to which may otherwise be entitled. also agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph . also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph of this Consent Order. In addition, agrees that said fines have not been assessed by the DEQ pursuant to Section 20139 of Part 201 and therefore are not reviewable under Section 20139 of Part 201.
28. reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by DEQ of stipulated fines is made. The appropriate forum for any civil court proceedings is the Circuit Court of the County of Ingham, State of Michigan.
29. Failure of to comply with the provisions set forth in this Consent Order shall provide sufficient reason for OOGM to withhold the issuance or transfer of any drilling permits that may have outstanding.
30. Failure of to comply with the provisions set forth in this Consent Order shall provide sufficient reason for OOGM to order the suspension of production operations at all well sites permitted to .
31. Failure of to comply with the provisions set forth in this Consent Order shall provide sufficient reason for the Assistant Supervisor of Wells to issue a Notice of Determination pursuant to Section 61519 of Part 615. If fails to comply with the requirements set forth in a Notice of Determination within 30 days, then the Assistant Supervisor of Wells may immediately complete the required activities and claim the conformance bonds without any further administrative action. The claim shall be paid by the owner, or operator, or surety within 30 days, or the Supervisor of Wells may bring civil suit against , or surety, jointly and severally for the collection of the claim.
32. This Consent Order shall remain in full force and effect for a period of at least three (3) years. Thereafter, the Consent Order may be terminated only upon the issuance of a written notice of termination issued by the OOGM Chief. Prior to issuance of a written notice of termination, shall submit a request consisting of a written certification that has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facility; and, (iv) such information as may be requested by the OOGM Chief. Termination of this Consent Order

shall be executed upon completion of the terms and conditions of this contract and will not be unreasonably withheld.

33. In the event _____ sells or transfers _____, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within 30 calendar days, _____ shall also notify the OOGM Compliance & Enforcement Unit Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. The purchaser and/or transferee of this Consent Order must agree, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the OOGM Compliance & Enforcement Unit Supervisor within 30 days of assuming the obligations of this Consent Order.
34. Section 61506 of Part 615 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order. The undersigned certifies that he/she is fully authorized by _____ to enter into this Consent Order and to execute and legally bind _____ to it.

Name and Title (Printed)

Signature

Date

The above signatory subscribed and sworn to before me this _____ day of _____, 200____.

Notary Public

Harold R. Fitch
Chief & Assistant Supervisor of Wells
Office of Oil, Gas, and Minerals
Department of Environmental Quality

Alan F. Hoffman, Section Head
Environmental Regulation Section
Environment, Natural Resources, and
Agriculture Division
Department of Attorney General

Date

Date

FINAL ORDER

The Chief of the Office of Oil, Gas, and Minerals having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the

Department of Environmental Quality pursuant to the provisions of Part 615 and otherwise being fully advised on the premises, HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the DEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Harold R. Fitch, Chief
Office of Oil, Gas, and Minerals

Date

EQ 7363 Stipulation and Consent Agreement Amendment

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF OIL, GAS, AND MINERALS

In the matter of:

Case Number: _____

Date Executed: _____

In particular, the following well and associated surface facility hereinafter referred to as the "Subject Well":

, Permit Number _____, Section _____, T _____, R _____
Field, _____ Township, _____ County, Michigan

AMENDMENT TO STIPULATION AND CONSENT AGREEMENT

This Amended Stipulation and Consent Agreement (Agreement), by and between _____ (_____) and the Department of Environmental Quality (Department), by and through Harold R. Fitch, Assistant Supervisor of Wells and Director, Office of Oil, Gas, and Minerals (OOGM), sets forth changes to the original agreement executed on _____.

In consideration of the mutual promises and undertakings set forth below, the parties stipulate and agree as follows:

1. Paragraph _____ of the Agreement is amended by replacement with the following language:
 - A. _____
2. _____ agrees to pay stipulated penalties at the following rate per well for failure to meet any deadlines or perform any activities listed in the Agreement.
 - A. Fifty Dollars (\$50.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, up to and including the 31st day. The maximum penalty per well for the first month is calculated as the number of days in the month multiplied by \$50.00. Example: 31 days x \$50.00 = \$1,550.00 per well in penalties for the first month.
 - B. One Hundred Dollars (\$100.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, after the 31st day. The maximum penalty per well for each month thereafter is calculated as the number of days in the month multiplied by \$100.00. This amount is then added to the preceding month's total. Example: a two month penalty is calculated as 31 days x \$100.00 = \$3,100.00 per well in penalties plus that of the preceding first month \$1,550.00 = \$4,650.00 per well.

- C. The maximum penalty for failure to meet the requirements in this Agreement is \$50,000.00 per well.
- D. Payment of a penalty does not release _____ from the responsibility or liability for complying with the requirements of the NREPA and the promulgated rules.
- E. Payments shall be made payable to the State of Michigan within 30 days of any missed deadline. Submit payments to:

Michigan Department of Environmental Quality
 Administration Division
 P.O. Box 30473
 Lansing, Michigan 48909-7973

Upon the signature of the parties below, this Amendment shall be deemed incorporated into the Agreement and made an enforceable part thereof.

Dated: _____

Telephone: - -

The foregoing instrument was acknowledged before me this _____ day of _____, _____ by _____ on behalf of the _____.

 Notary Public
 _____ County, _____ (State)
 My Commission Expires _____

Dated: _____

 Harold R. Fitch
 Assistant Supervisor of Wells
 and Chief,
 Office of Oil, Gas, and Minerals
 P.O. Box 30256
 Lansing, MI 48909-7756
 517-284-6823

EQ 7364 Transfer Settlement Agreement

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF OIL, GAS, AND MINERALS

In the matter of:

Case Number: _____
Date Executed: _____

In particular, the following well and associated surface facility hereinafter referred to as the "Subject Well":

, Permit Number _____, Section _____, T _____, R _____
Field, _____ Township, _____ County, Michigan

TRANSFER SETTLEMENT AGREEMENT

This is a Transfer Settlement Agreement (Agreement), by and between _____ (_____) and the Department of Environmental Quality (Department), by and through Harold R. Fitch, Assistant Supervisor of Wells and Director, Office of Oil, Gas, and Minerals (OOGM). This Agreement fulfills the written agreement requirement of R 324.206(8) of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.61501 et seq.

In consideration of the mutual promises and undertakings set forth below, the parties stipulate and agree as follows:

1. The Department is charged with enforcement of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.61501 et seq., and the rules promulgated thereunder.
2. The Department is charged with enforcement of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.20101 et seq., and the rules promulgated thereunder.
3. The Department is authorized to act under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.3101 et seq., and the rules promulgated thereunder.
4. By entering into this Agreement, _____ waives its right to a formal administrative hearing or other administrative relief to which _____ may otherwise be entitled. The appropriate forum for any civil court proceedings is the Circuit Court of the County of Ingham, State of Michigan.
5. The Subject Well is regulated under Part 615 and the rules promulgated thereunder. For purposes of this Agreement, _____ will not raise a jurisdictional defense in any state enforcement of this Agreement.

6. As long as _____ has obligations under this Agreement, _____ shall provide a copy of this Agreement to any prospective successor in interest prior to transfer of ownership of any property or interest owned by _____ concerning the Subject Well.
7. Both parties agree under Part 615, the Agreement set forth herein is necessary to prevent waste, to alleviate pollution, impairment, and the destruction of the State of Michigan's natural resources. Failure of _____ to comply with any of the agreed upon provisions and procedures shall:
 - A. Be a violation of Part 615 and may subject _____ to civil and/or criminal enforcement actions.
 - B. Provide sufficient reason to withhold the issuance or transfer of any drilling permits that may have outstanding with the OOGM.
 - C. Provide further cause for the Supervisor of Wells to issue an Order requiring suspension of operations of the Subject Well, and order the Subject Well plugged, if required.
 - D. Authorize the State of Michigan to take any action it deems necessary, in accordance with the law to prevent waste and protect the public's health, safety and welfare, and the environment.
8. Pursuant to Part 615, the permittee of record is responsible for the Subject Well.
 - A. **By** _____, _____ shall submit a properly signed and dated transfer of permit request application form and conformance bond for the Subject Well listed above to the Permits and Bonding Unit, OOGM.
 - B. Subsequent to the execution of this Agreement by the Supervisor of Wells, the permit to drill and operate will be transferred to _____.
9. The Subject Well is not in compliance with Part 615, and _____ desires to make certain that the Subject Well is in compliance. Toward that end, the parties agree and stipulate to abide by the following:
 - A. **By** _____, _____ shall
 - B. **By** _____, _____ shall
 - C. _____ shall submit written notification of completed activities to the OOGM _____ District Supervisor at _____, _____, _____.
10. Any delay in compliance with the terms and conditions set forth in this Agreement attributable to a "*Force Majeure*" shall not be deemed a violation of this Agreement. *Force Majeure* includes an occurrence or nonoccurrence arising from causes beyond the control of _____ and without the fault of _____, such as an act of God. *Force Majeure* does not include, among other things, unanticipated or increased costs, changed financial circumstances, or failure to obtain a permit or license as a result of actions.
 - A. _____ shall notify the Compliance and Enforcement Unit by written notice within ten (10) calendar days and shall describe, in detail, the anticipated length of delay for each

specific obligation that will be impacted by the delay, the cause or causes of delay, the measures taken by to prevent or minimize the delay, and the timetable by which those measures shall be implemented. Written notice shall be submitted to the District/ Unit, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909-7756.

- B. The Supervisor of Wells or designee may grant a reasonable extension to a deadline in the Agreement if it is determined that the delay in compliance will result in the conditions of the Agreement being met.
11. agrees to pay stipulated penalties at the following rate per well for failure to meet any deadlines or perform any activities listed in the Agreement.
- A. Fifty Dollars (\$50.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, up to and including the 31st day. The maximum penalty per well for the first month is calculated as the number of days in the month multiplied by \$50.00. Example: 31 days x \$50.00 = \$1,550.00 per well in penalties for the first month.
 - B. One Hundred Dollars (\$100.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, after the 31st day. The maximum penalty per well for each month thereafter is calculated as the number of days in the month multiplied by \$100.00. This amount is then added to the preceding month's total. Example: a two month penalty is calculated as 31 days x \$100.00 = \$3,100.00 per well in penalties plus that of the preceding first month \$1,550.00 = \$4,650.00 per well.
 - C. The maximum penalty amount for failure to meet the requirements in the Agreement is \$50,000.00 per well.
 - D. Payment of a penalty does not release from the responsibility or liability for complying with the requirements of the NREPA and the promulgated rules.
 - E. Payments shall be made payable to the State of Michigan within 30 days of any missed deadline. Submit payments to:

Michigan Department of Environmental Quality
Administration Division
P.O. Box 30473
Lansing, Michigan 48909-7973
 - F. If fails to meet the conditions of this Agreement, the Supervisor of Wells may issue a Notice of Determination requiring any Subject Well that is not in compliance with a deadline within this Agreement to be cased, repaired, or properly plugged and abandoned.
 - G. Pursuant to Section 61519 of Part 615, if fails to comply with the requirements set forth in the Notice of Determination within 30 days, the Supervisor of Wells may immediately case, repair, or plug a Subject Well that is in violation of the requirements set forth in the Notice of Determination and claim the bond without further administrative action.

i. In the event _____, the owner, or operator, or surety fail to pay a claim within 30 days, the Supervisor of Wells may bring suit against _____, the owner, the operator, or surety, jointly and severally for collection of the claim.

12. This Agreement shall terminate upon written request of _____ and upon written approval from the Department. Department approval shall be based upon _____ demonstrating that it has fully complied with all provisions of this Agreement and has paid in full all stipulated penalties owed to the State of Michigan under this Agreement.

13. Nothing in this Agreement shall, in any manner, restrict or limit the nature or scope of response actions that the Department may take in fulfilling its responsibilities under state and federal law.

IT IS SO AGREED:

Dated: _____

telephone: - -

The foregoing instrument was acknowledged before me this _____ day of _____, _____ by _____ on behalf of the _____.

Notary Public
_____ County, _____ (State)
My Commission Expires _____

Dated: _____

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
P.O. Box 30256
Lansing, MI 48909-7756
517-284-6823

EQ 7365 Transfer Settlement Agreement Amendment

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF OIL, GAS, AND MINERALS

In the matter of:

Case Number:
Date Executed:

In particular, the following well and associated surface facility hereinafter referred to as the "Subject Well":

, Permit Number , Section , T , R
Field, Township, County, Michigan

AMENDMENT TO TRANSFER SETTLEMENT AGREEMENT

The Department of Environmental Quality (Department) and () previously entered into to a Transfer Settlement Agreement (Agreement) on . The Department and agree to the following amendment to that Agreement:

1. Paragraph of the Agreement is amended by replacement with the following language:
 - A.
2. agrees to pay stipulated penalties at the following rate per well for failure to meet any deadlines or perform any activities listed in the Agreement.
 - A. Fifty Dollars (\$50.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, up to and including the 31st day. The maximum penalty per well for the first month is calculated as the number of days in the month multiplied by \$50.00. Example: 31 days x \$50.00 = \$1,550.00 per well in penalties for the first month.
 - B. One Hundred Dollars (\$100.00) per day for each day a stipulated deadline or activity for a Subject Well is missed, after the 31st day. The maximum penalty per well for each month thereafter is calculated as the number of days in the month multiplied by \$100.00. This amount is then added to the preceding month's total. Example: a two month penalty is calculated as 31 days x \$100.00 = \$3,100.00 per well in penalties plus that of the preceding first month \$1,550.00 = \$4,650.00 per well.
 - C. The maximum penalty amount for failure to meet the requirements in the Agreement is \$50,000.00 per well.
 - D. Payment of a penalty does not release from the responsibility or liability for complying with the requirements of the NREPA and the promulgated rules.

E. Payments shall be made payable to the State of Michigan within 30 days of any missed deadline. Submit payments to:

Michigan Department of Environmental Quality
Administration Division
P.O. Box 30473
Lansing, Michigan 48909-7973

Upon the signature of the parties below, this Amendment shall be deemed incorporated into the Agreement and made an enforceable part thereof.

Dated: _____

Telephone: - -

The foregoing instrument was acknowledged before me this _____ day of _____, _____
by _____ on behalf of the _____.

Notary Public
_____ County, _____ (State)
My Commission Expires _____

Dated: _____

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
P.O. Box 30256
Lansing, MI 48909-7756
517-284-6823

EQ 7366 Unsigned Agreement Cover Letter

Dear _____ :

SUBJECT: **STIPULATION AND CONSENT AGREEMENT**

Compliance Case No.

Enclosed are two copies of the proposed Stipulation and Consent Agreement for the following well and associated surface facility.

| Well Name | Well Number | Permit Number | Location | Township | County |
|---------------|-----------------|---------------------|------------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| Facility Name | Facility Number | MIR Facility Number | Location | Township | County |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

Please sign and date both copies, have them notarized, and return both copies within 14 days. Upon receipt, the Agreement will be executed and a copy will be returned to you for your files.

Thank you for your cooperation. Please contact me if you have any questions.

Sincerely,

Adam W. Wygant, Supervisor
Permits and Technical Services Section
Office of Oil, Gas, and Minerals
517-284-6823

Enclosures

cc: Mr. Rick Henderson, DEQ
Mr. Mark Snow, DEQ
_____, Cadillac District - DEQ
_____, Cadillac District - DEQ

EQ 7367 Executed Agreement Cover Letter

Dear _____ :

SUBJECT: **STIPULATION AND CONSENT AGREEMENT**

Compliance Case No.

Enclosed is a copy of the executed Stipulation and Consent Agreement for the following well and associated surface facility.

| Well Name | Well Number | Permit Number | Location | Township | County |
|---------------|-----------------|---------------------|------------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| Facility Name | Facility Number | MIR Facility Number | Location | Township | County |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

Thank you for your cooperation. Please contact me if you have any questions.

Sincerely,

Adam W. Wygant, Supervisor
Permits and Technical Services Section
Office of Oil, Gas, and Minerals
517-284-6823

Enclosures

cc: Mr. Rick Henderson, DEQ
Mr. Mark Snow, DEQ
_____, Cadillac District - DEQ
_____, Cadillac District - DEQ

EQ 7368 Overdue Agreement Cover Letter

Dear _____ :

SUBJECT: **STIPULATION AND CONSENT AGREEMENT**

Compliance Case No. _____

On _____, the Compliance and Enforcement Unit (CEU) of the Office of Oil, Gas, and Minerals (OOGM) sent you two copies of an unsigned Stipulation and Consent Agreement for the following well and associated surface facility.

| Well Name | Well Number | Permit Number | Location | Township | County |
|---------------|-----------------|---------------------|---------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| Facility Name | Facility Number | MIR Facility Number | Location | Township | County |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

The cover letter asked you to sign both copies of the Agreement, have your signature notarized, and return both copies by _____. As of the date of this letter, the Compliance and Enforcement Unit has not received signed copies of the Agreement. If the CEU does not receive copies of the signed Agreement by _____, appropriate escalated enforcement action will be taken.

Please contact me if you have any questions.

Sincerely,

Adam W. Wygant, Supervisor
Permits and Technical Services Section
Office of Oil, Gas, and Minerals
517-284-6823

Enclosures

cc: Mr. Rick Henderson, DEQ
Mr. Mark Snow, DEQ
_____, Cadillac District - DEQ

, Cadillac District – DEQ

EQ 7370 Notice of Missed Deadlines

Dear _____ :

SUBJECT: NOTICE OF MISSED DEADLINES; Compliance Case No.

On _____, _____ entered into a Stipulation and Consent Agreement (Agreement) with the Office of Oil, Gas, and Minerals (OOGM) pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), MCL 324.61501 et seq. to resolve violations at the following wells:

| Well Name & Number | Permit Number | Township | County |
|-------------------------------|----------------------------|-----------------|---------------|
| | | | |
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

Staff from the Cadillac District Office inspected the _____ on _____ and determined that _____ failed to fulfill the requirements in Paragraph _____ in the Agreement.

Accordingly, _____ is liable for stipulated penalties as set forth in the Agreement. The Agreement provides for the accrual of stipulated penalties for noncompliance with the obligations set forth in the Agreement. Penalties will accrue at the rate of Fifty Dollars (\$50) per day for each day a deadline or activity is missed from day 1 through day 30; and One Hundred Dollars (\$100) per day for each day a deadline or activity is missed after 30 days. Stipulated penalties will accrue from the date of the deadline in the Agreement until such time that full compliance is achieved. Once compliance has been achieved, a Demand for Payment of Stipulated Penalties will be sent to _____.

If you have any questions, please contact me at 517-284-6837, pettitj@michigan.gov, or Department of Environmental Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909.

Sincerely,

Joe Pettit
Permitting and Technical Services Section
Office of Oil, Gas, and Minerals
517-284-6837

Enclosure

cc: , DEQ
, DEQ

EQ 7371 Demand for Stipulated Penalties

SUBJECT: DEMAND FOR STIPULATED PENALTIES; Compliance Case No.

This letter serves as formal notification to of its obligations relating to the Stipulations and Consent Agreement (Agreement) entered on regarding the following wells:

| Well Name & Number | Permit Number | Township | County |
|--------------------|---------------------|----------|--------|
| | | | |
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

On , the Office of Oil, Gas, and Minerals (OOGM) sent a Notice of Missed Deadlines. The terms and conditions of the Agreement provided for the accrual of stipulated penalties for noncompliance. Penalties accrued at the rate of Fifty Dollars (\$50) per day for each day a deadline or activity is missed from day 1 through day 30; and One Hundred Dollars (\$100) per day for each day a deadline or activity is missed after 30 days.

failed to meet the deadline in Paragraph , which required to by . fulfilled this requirement on . This represents days of noncompliance. This equates to \$ in Stipulated Penalties.

Payments shall be made payable to the State of Michigan and submitted to the Cashier's Office by . To ensure proper credit, all payments made pursuant to this Agreement must include the name " " and the Payment Identification Number and mailed to the address below:

Michigan Department of Environmental Quality
Administration Division
P.O. Box 30657
Lansing, MI 48909-8175

Failure to submit timely payment may result in sanctions by the Michigan Department of Treasury or a civil lawsuit by the Department of Environmental Quality with assistance from the Department of Attorney General.

If you have any questions, please contact me at 517-284-6837, pettitj@michigan.gov, or Department of Environmental Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909.

Sincerely,

Joe Pettit
Permitting and Technical Services Section
Office of Oil, Gas, and Minerals
517-284-6837

Enclosure

cc: , DEQ
, DEQ

EQ 7372 Notice of Hold Permit Status

CERTIFIED MAIL

Dear _____ :

SUBJECT: **NOTICE OF HOLD PERMIT STATUS**
Compliance Case No.

The Supervisor of Wells has determined that _____ is not in compliance with Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, et seq., and rules promulgated thereunder.

Section 61525(1) of Part 615 states that a permit to drill shall not be issued to any owner or his authorized representative who does not comply with the rules and requirements or orders made and promulgated by the Supervisor. A permit shall not be issued to any owner or his authorized representative who has not complied with or is in violation of this act, or any of the rules, requirements or orders issued by the supervisor or the department...

Effective immediately, final approval and issuance of any permits, which _____ may have outstanding with the Office of Oil, Gas, and Minerals under Part 615 will be withheld until _____ has complied with Part 615 and the Administrative Rules.

If you have any questions, please contact Mr. Adam W. Wygant, Permits and Technical Services Section Supervisor at 517-241-1504; wyganta@michigan.gov; or DEQ, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909-7756.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
517-284-6823

cc: Mr. Adam W. Wygant, DEQ
Mr. Rick Henderson, DEQ
Ms. Mark Snow, DEQ
_____, Cadillac District - DEQ
_____, Cadillac District – DEQ

EQ 7373 Revocation of Hold Permit Status

Dear _____ :

SUBJECT: REVOCATION OF HOLD PERMITS STATUS; Compliance Case No.

On _____, the Office of Oil, Gas, and Minerals (OOGM) issued a Notice of Hold Permit Status to _____. The OOGM has determined that _____ has achieved compliance with Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Accordingly, the Hold Permit Status has been revoked effective immediately.

Final approval and issuance of permits and permit transfers from the OOGM may now proceed in the normal manner.

If you have any questions, please contact Mr. Joe Pettit at 517-284-6837, pettitj@michigan.gov, or Department of Environment Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909-7756.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
517-284-6823

cc: Surety
_____, DEQ
_____, DEQ

EQ 7374 Notice of Suspension of Operations – Failure to Comply

CERTIFIED MAIL

Dear _____ :

SUBJECT: **NOTICE OF SUSPENSION OF OPERATIONS**
Compliance Case Number _____

This is notice that the Supervisor of Wells is ordering the immediate suspension of all operations at the following well:

| Well Name | Well Number | Permit Number | Section, Town, Range | Township | County |
|-----------|-------------|---------------|---------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

Section 61506(q) of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, et seq. states that the Supervisor of Wells may *require the immediate suspension of drilling or other well operations if there exists a threat to public health or safety.*

Administrative Rule 324.1301(b) states that the Supervisor of Wells *may order the suspension of any or all components of the oil and gas operations when a violation exists. The suspension time shall continue until a correction is made and a violation no longer exists under Section 61516 of Part 615. The Supervisor of Wells may also prohibit the purchaser from taking oil, gas, or brine from the lease during the required suspension time.*

The Supervisor of Wells has determined that _____ is in violation of _____.

Therefore, in accordance with Section 61506(q) of Part 615 and Administrative Rule 324.1307 the Supervisor of Wells is ordering the immediate suspension of all components of the oil and gas operations at the above listed well, including the removal or sale of oil, gas, or brine.

Please be advised that failure to comply with a Notice of Suspension of Operations may subject to enforcement under Section 61520 of Part 615, or other sanctions.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
517-284-6823

cc: All Oil Carriers
Any and all interested parties in well
Mr. Adam W. Wygant, DEQ
Mr. Rick Henderson, DEQ
Mr. Mark Snow, DEQ
 , Cadillac District - DEQ
 , Cadillac District – DEQ

EQ 7375 Notice of Suspension of Operations – Failure to Transfer

CERTIFIED MAIL

Dear _____ :

SUBJECT: **NOTICE OF SUSPENSION OF OPERATIONS**
Compliance Case No.

_____ is the permittee of record for the following well and associated surface facility:

| Well Name | Well Number | Permit Number | Section, Town, Range | Township | County |
|-----------|-------------|---------------|---------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

Administrative Rule 324.207 of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act (NREPA), P.A. 451, as amended, states that *if a permittee of a well conveys his or her rights as an owner of a well to another person, or ceases to be the authorized representative of the owner of a well, and a request for the transfer of the permit under R 324.206(6) has not been approved, then, in addition to other enforcement actions, failure to comply shall be cause for immediate suspension of any and all components of the oil and gas operations on the well, including the removal or sale of oil, gas, or brine.*

Staff of the Office of Oil, Gas, and Minerals (OOGM), Cadillac District Office, provided information to the Supervisor of Wells that demonstrates the following:

1. On _____, _____ conveyed all legal rights as owner and/or operator of the above listed well to another person.
2. An application to transfer ownership of the above listed permit has not been submitted to OOGM as required by R 324.206(6).
3. A conformance bond has not been submitted to OOGM as required by R 324.206(6).

Therefore, in accordance with Administrative Rule 324.207, the Supervisor of Wells is ordering the immediate suspension of all components of the oil and gas operations at the above listed well, including the removal or sale of oil, gas, or brine.

Furthermore, shall submit a request to transfer ownership of permit listed above within 30 days of this notice. If a request to transfer ownership of above listed well has not been received within 30 days of this notice, then the Assistant Supervisor of Wells will place on Hold Permit Status until the matter is formally resolved.

Please be advised that failure to comply with a Notice of Suspension of Operations may subject to enforcement under Section 61520 of Part 615, or other sanctions.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
517-284-6823

cc: Mr. Adam W. Wygant, DEQ
Mr. Rick Henderson, DEQ
Mr. Mark Snow, DEQ
 , Cadillac District - DEQ
 , Cadillac District – DEQ

EQ 7376 Notice of Illegal Oil and Gas

CERTIFIED MAIL

GulfMark Energy, Inc.
4400 Post Oak Pkwy., Suite 2700
Houston, Texas 77027

Sunoco Logistics Partners, L.P.
907 South Detroit
Tulsa, Oklahoma 74102

To whom it may concern:

SUBJECT: **NOTICE OF ILLEGAL OIL AND GAS**

Pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), please be advised that the Supervisor of Wells has made a declaration of illegal oil and gas. _____ is the permittee of record of the well. The declaration covers the following well and is effective immediately:

| Well Name | Well Number | Permit Number | Section, Town, Range | Township | County |
|-----------|-------------|---------------|---------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

If you do business with _____ or service the above named well, be advised that any oil or gas being produced is illegal oil which was produced in violation of Part 615, and cannot be sold, nor transported, pursuant to Section 61515 of Part 615, which states in part:

“ . . . It shall be unlawful for any person to sell, purchase, acquire, transport, refine, process or otherwise handle or dispose of any illegal oil or gas in whole or in part, or any illegal product of oil or gas . . . ”

Enclosed is a copy of the _____ Notice of Suspension of Operations that was sent to _____, ordering said company to immediately suspend operations at the above referenced well.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
517-284-6823

cc: Mr. Adam W. Wygant, DEQ
Mr. Rick Henderson, DEQ

Mr. Mark Snow, DEQ
 , Cadillac District - DEQ
 , Cadillac District – DEQ

EQ 7377 Revocation of Suspension of Operations

CERTIFIED MAIL

Dear _____ :

SUBJECT: **REVOCAION OF SUSPENSION OF OPERATIONS**
Compliance Case Number _____

On _____, the Office of Oil, Gas, and Minerals (OOGM), Department of Environmental Quality (DEQ), sent a Notice of Suspension of Operations to _____ for the following well:

| Well Name | Well Number | Permit Number | Section, Town, Range | Township | County |
|-----------|-------------|---------------|---------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

On _____, the OOGM _____. Accordingly, the Suspension of Operations for these wells has been terminated effective immediately. Production and sales may now resume.

If you have any questions, please contact Mr. Joe Pettit at 517-284-6837, pettij@michigan.gov, or Department of Environment Quality, OOGM, P.O. Box 30256, Lansing, Michigan 48909-7756.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
517-284-6823

cc: All Oil Carriers
Any and all interested parties in well
Mr. Adam Wygant, DEQ
Mr. Rick Henderson, DEQ
Ms. Mark Snow, DEQ
_____, Cadillac District – DEQ

, Cadillac District - DEQ

EQ 7378 Revocation of Illegal Oil and Gas

GulfMark Energy, Inc.
4400 Post Oak Pkwy., Suite 2700
Houston, Texas 77027

Sunoco Logistics Partners, L.P.
907 South Detroit
Tulsa, Oklahoma 74102

To whom it may concern:

SUBJECT: REVOCATION OF NOTICE OF ILLEGAL OIL

On _____, the Office of Oil, Gas, and Minerals (OOGM), Department of Environmental Quality (DEQ), sent a Notice of Illegal Oil on _____ for the following well:

| Well Name & Number | Permit Number | Township | County |
|-------------------------------|----------------------------|-----------------|---------------|
| | | | |
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

On _____, the OOGM _____. Accordingly, the Notice of Illegal Oil has been terminated effective immediately. Production and sales may now resume.

If you have any questions, please contact Mr. Joe Pettit at 517-284-6837, pettitj@michigan.gov, or Department of Environment Quality, OOGM, P.O. Box 30256, Lansing, Michigan 48909-7756.

Sincerely,

Harold R. Fitch
Assistant Supervisor of Wells
and Chief,
Office of Oil, Gas, and Minerals
517-284-6823

cc: Surety
 , DEQ
 , DEQ

**STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF OIL, GAS, AND MINERALS**

ADMINISTRATIVE COMPLAINT

In the matter of the following subject well and associated surface facility permitted to _____.

| Well Name | Well Number | Permit Number | Section, Town, Range | Township | County |
|---------------|-----------------|---------------------|---------------------------|----------|--------|
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |
| Facility Name | Facility Number | MIR Facility Number | Section, Town, Range | Township | County |
| | | | S _____, T _____, R _____ | | |
| | | | S _____, T _____, R _____ | | |

Compliance Case No.: _____/

This Administrative Complaint is submitted pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) and the administrative rules promulgated thereunder. Specifically, R 324.1210(1) states that staff of the Supervisor of Wells, through the Department of Attorney General, may file an administrative complaint setting forth the nature of violations of Part 615 and specifically citing the alleged violations. Accordingly, the Office of Oil, Gas, and Minerals (OOGM) of the Department of Environmental Quality (DEQ) alleges the following:

1. _____ is the permittee of record for Permit Number _____. The well known as the _____ was drilled to a total depth of _____ feet and completed as a oil well in the Michigan Stray Formation. Permit Number _____ is covered by Conformance Bond No. _____, in the amount of \$ _____. Refer to Attachments #1 and #2, respectively.
2. Staff of the OOGM Cadillac District Office issued a Notice of Noncompliance to _____ on _____. Refer to Attachment #3. _____ failed to comply with Part 615 by the deadline established in the Notice of Noncompliance.
3. Staff of the OOGM Compliance and Enforcement Unit issued a Notice of Violation to _____ on _____. Refer to Attachment #4. _____ failed to comply with Part 615 prior to the scheduled Opportunity to Show Compliance Meeting.
4. An Opportunity to Show Compliance Meeting was held on _____. On _____, a Compliance Determination Memorandum was issued to the Supervisor of the OOGM Administrative Section by the chair-person of the Opportunity to Show Compliance Meeting. Refer to _____.

Attachment #5. The chair-person concluded that _____ failed to comply with Part 615 at the -----
-- well.

5. The OOGM Cadillac District Office performed compliance inspections after the Compliance Determination Memorandum was issued and concluded that _____ failed to comply with Part 615 at the _____ well. Refer to Attachment #6.

6. _____ continues to be in violation of Part 615 and the Administrative Rules. Specifically, _____ is in violation of the following Administrative Rules:

- a. R 324. _____, which requires _____ to _____.
- b. R 324. _____, which requires _____ to _____.
- c. R 324. _____, which requires _____ to _____.

Complaint Prepared By: _____

Dated: _____

Compliance and Bond Specialist
Office of Oil, Gas, and Minerals
Department of Environmental Quality
P. O. Box 30256
Lansing, Michigan 48909-7756

**STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF OIL, GAS, AND MINERALS**

ADMINISTRATIVE RELIEF SUMMARY

In the matter of the following subject well and associated surface facility permitted to _____.

| Well Name & Number | Permit Number | Township | County |
|--------------------|---------------------|----------|--------|
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

Compliance Case No.: _____/

This Administrative Relief Summary is submitted pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) and the administrative rules promulgated thereunder. Specifically, R 324.1210(1) states that staff of the Office of Oil, Gas, and Minerals (OOGM), through the Department of Attorney General (DAG), may file an administrative complaint to set forth the nature of the violations and specifically cite the alleged violations.

The Enforcement Section, Resource Management Division, of the Department of Environmental Quality (DEQ), requests that the DAG file a petition for hearing requesting that the Supervisor of Wells schedule an administrative hearing pursuant to Administrative Rules 324.1210(2) and 324.1205(1)(b). As petitioner of the Administrative Hearing, the Enforcement Section requests that the DAG seek the administrative relief outline below.

In the event that _____ does not file an answer to the Notice of Hearing and Administrative Complaint with the Supervisor of Wells not less than five days before the date set for the hearing, as required by Administrative Rule 324.1204(6), then the DAG may file a motion with the Supervisor of Wells requesting that the matter proceed in accordance with Administrative Rules 324.1205(1)(c) and 324.1205(2).

In the event that _____ files an answer to the Notice of Hearing and Administrative Complaint, but fails to appear at the Administrative Hearing, then the DAG may make a motion requesting that the matter proceed in accordance with Administrative Rules 324.1205(1)(c) and 324.1205(2).

The Enforcement Section requests that the DAG seek an Administrative Order requiring to _____ do the following:

1. Require _____ to _____.
2. Require _____ to _____.

3. Require to pay an administrative penalty in the amount of .

a. Statutory Penalty

Section 61522 of Part 615 authorizes the Supervisor of Wells to impose administrative penalties of not more than \$1,000.00 per day per violation. failed to comply with Administrative Rule 324. from until . This represents days of noncompliance. This equates to a penalty in the amount of \$.

Section 61522 of Part 615 authorizes the Supervisor of Wells to impose administrative penalties of not more than \$1,000.00 per day per violation. failed to comply with Administrative Rule 324. from until . This represents days of noncompliance. This equates to a penalty in the amount of \$.

Total Statutory Penalty = \$

b. Economic Benefit

Economic benefit is based on the economic savings from delayed and/or avoided costs required to comply with the regulations and any benefits other than cost savings. The greatest economic benefit comes from abandoning a well and avoiding the costs of plugging the well and restoring the well site. The Enforcement Section calculated the economic benefit component of the penalty using the USEPA BEN Model using the following assumptions:

- failed to comply with Administrative Rule 324. since .
- will achieve full compliance with Administrative Rule 324. by .
- will incur costs of approximately \$ in order to achieve full compliance with Administrative Rule 324. .
- The Economic Benefit realized by for violating Administrative Rule 324. was determined to be approximately \$.

- failed to comply with Administrative Rule 324. since .
- will achieve full compliance with Administrative Rule 324. by .
- will incur costs of approximately \$ in order to achieve full compliance with Administrative Rule 324. .
- The Economic Benefit realized by for violating Administrative Rule 324. was determined to be approximately \$.

Total Economic Benefit = \$

c. Duration of Violations

For the purposes of determining the duration of a violation, violations should be assumed to be continuous from the first provable date of the violation until the source demonstrates compliance. The following penalties should be used in determining the duration component of a penalty.

| Months | Penalty |
|---------------|----------------|
| 0-12 | \$ 500.00 |
| 13-24 | \$ 1,000.00 |
| 25-36 | \$ 1,500.00 |
| 37-48 | \$ 2,000.00 |
| 49-60 | \$ 3,000.00 |
| > 61 | \$ 5,000.00 |

Duration of Violations = \$

d. Size of Violator

The size of the violator is determined from an individual's or company's net worth. In the case of a company with more than one facility, the size of the violator is determined based on the company's entire operation, not just the violating facility.

| Net Worth | Penalty |
|---------------------------|----------------|
| < \$ 250,000 | \$ 250.00 |
| \$ 250,001 - \$ 500,000 | \$ 500.00 |
| \$ 500,001 - \$ 750,000 | \$ 750.00 |
| \$ 750,001 - \$ 1,000,000 | \$ 1,000.00 |
| > \$ 1,000,001 | \$ 3,000.00 |

Size of Violator = \$

e. Penalty Summary Table

| Description | Amount |
|--------------------------------|---------------|
| a. Total Statutory Penalty | \$ |
| b. Total Economic Benefit | \$ |
| c. Duration of Violations | \$ |
| d. Size of Violator | \$ |
| Total Penalty Requested | |
| | \$ |

Prepared By: _____

Dated: _____

Office of Oil, Gas, and Minerals
 Department of Environmental Quality
 P. O. Box 30256
 Lansing, Michigan 48909-7756

EQ 7399 Case Closed

Dear _____ :

SUBJECT: CASE CLOSURE; Compliance Case No. _____

The Office of Oil, Gas, and Minerals (OOGM) has verified that _____ has achieved full compliance with Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, at the following well and affected surface facility:

| Well Name & Number | Permit Number | Township | County |
|--------------------|---------------------|----------|--------|
| | | | |
| | | | |
| Facility Name | MIR Facility Number | Township | County |
| | | | |
| | | | |
| | | | |

Accordingly, the OOGM has closed Compliance Case _____.

Please note that the Department retains jurisdiction to pursue any further actions should the facts and circumstances warrant. Compliance in this matter in no way affects your responsibility to comply with any other applicable state, federal, or local laws or regulations.

If you have any questions, please contact me by phone at 517-284-6837, pettitj@michigan.gov, or Department of Environmental Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909-7756.

Sincerely,

Joe Pettit
Permitting and Technical Services Section
Office of Oil, Gas, and Minerals
517-284-6837

cc: _____, DEQ
_____, DEQ



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF CRIMINAL INVESTIGATIONS

CRIMINAL COMPLAINT INVESTIGATION REQUEST

INSTRUCTIONS: Any Department of Environmental Quality (DEQ) employee should immediately complete Section 1 upon receipt of information indicating that a felony criminal violation of any DEQ-administered regulation has occurred. This form is also to be used for referring suspected misdemeanor violations for criminal investigation in accordance with division/office priorities. Forward this form to your local DEQ Office of Criminal Investigations (OCI) Investigator for completion of Section 2. If you have questions about completion of this form, contact your district OCI Investigator or the OCI Headquarters at 517-335-3434.

***NOTIFY YOUR IMMEDIATE SUPERVISOR OF ALL CRIMINAL INVESTIGATION REFERRALS.**

| SECTION 1 (to be completed by DEQ employee receiving complaint information) COMPLAINT INFORMATION | | |
|---|----------------------------|---|
| 1. COMPLAINANT NAME <i>(person originally reporting incident to DEQ)</i> | | |
| 2. COMPLAINANT ADDRESS <i>(street, city, state, zip code)</i> | | 3. COMPLAINANT TELEPHONE NUMBER <i>(include area code)</i> () - |
| 4. DATE COMPLAINT RECEIVED | 5. TIME COMPLAINT RECEIVED | 6. COUNTY OF COMPLAINT LOCATION |
| 7. COMPLAINT LOCATION <i>(including street address, if known)</i> | | |
| 8. NATURE OF COMPLAINT | | |
| DID YOUR DIVISION RESPOND TO THIS COMPLAINT? <input type="radio"/> YES <input type="radio"/> NO IF YES, COMPLETE BOX 9; IF NO, SKIP BOX 9. | | |
| 9. PROVIDE INFORMATION ABOUT YOUR RESPONSE | | |
| A. NAME AND TELEPHONE NUMBER OF STAFF RESPONDING | | |
| B. SITE OBSERVATIONS <i>(attach another sheet if necessary)</i> | | |
| 10. VIOLATION(S) SUSPECTED <i>(place justification for violation(s) on a separate sheet)</i> | | |
| <input type="radio"/> PART NUMBER _____ <input type="radio"/> MCL _____ | | |
| 11. I REQUEST THE OCI TO: <i>(Use additional sheets if necessary)</i> | | |
| 12. NAME OF DEQ EMPLOYEE COMPLETING SECTION 1 <i>(type or print)</i> | | 13. DIVISION |
| 14. SIGNATURE OF EMPLOYEE'S IMMEDIATE SUPERVISOR | | 15. DATE |
| SECTION 2 (to be completed by the OCI) OCI FOLLOW-UP AND INVESTIGATOR RECOMMENDATION | | |
| 16. DATE COMPLAINT RECEIVED BY OCI | | 17. TIME COMPLAINT RECEIVED BY OCI |
| 18. COMPLAINANT CONTACTED <i>(name, or anonymous ID number)</i> | | |
| 19. COMPLAINANT'S ADDRESS <i>(if anonymous, leave blank)</i> | | |
| 20. COMPLAINANT'S PHONE NUMBER () - | 21. DATE OF CONTACT | 22. TIME OF CONTACT |
| 23. LOCATION | | |
| 24. OBSERVATIONS | | |
| 25. NAME OF OCI INVESTIGATOR COMPLETING FORM <i>(type or print)</i> | | 26. DATE OCI RETURNED FORM TO DIVISION |
| 27. DOES THIS MATTER WARRANT FURTHER ACTIVITY BY OCI? <input type="radio"/> YES <input type="radio"/> NO IF YES, COMPLETE BOX 28; IF NO, COMPLETE BOX 29. | | 28. CASE # ASSIGNED <i>(if you answered "yes" in Box 27)</i> |
| 29. EXPLAIN WHY NO FURTHER ACTIVITY IS NECESSARY <i>(if you answered "no" in Box 27) (use additional sheets if necessary)</i> | | |

Appendix C

Escalated Enforcement Options

Withholding of Permits


Suspension of Operations

Notice of Determination

Stipulation and Consent Agreement

Referrals to the Department of Natural Resources, Law Enforcement Division, Environmental
Investigation Section

Referral to the Department Attorney General

| | | | |
|--|--|-------------------|--|
|  | Office of Oil, Gas, and Minerals | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| | POLICY AND PROCEDURES | | |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: WITHOLDING OF PERMITS | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.07 | Page: 20 of 32 | |

ISSUE:

A Notice of Hold Permit letter is an enforcement tool utilized to achieve compliance from a permittee who has been determined to be not in compliance as a result of an OTSCM or by other compliance activities. The purpose of the Notice of Hold Permit is to compel the owner or operator to return to compliance by preventing them from obtaining new permits. This can be an effective enforcement tool for companies who are actively applying for permits. This enforcement tool is less effective for companies that are not actively applying for permits.

Administrative Rule 324.205 promulgated pursuant to Part 615 of the NREPA provides the authority for the OOGM to issue a Notice of Hold Permit. Rule 205 states that the OOGM shall not issue or transfer a permit to a person who has been determined to be in violation.

Administrative Rule 299.2324 promulgated pursuant to Part 625 of the NREPA provides the authority for the OOGM to issue a Notice of Hold Permit. Rule 2324 states that the OOGM shall not issue or transfer a permit to a person who has been determined to be in violation.

PROCEDURES:

| Step | Who | Does What |
|------|--|--|
| 1. | Compliance and Bonding Specialist/ Compliance Coordinator | Prepares Form <u>EQ 7372 Notice of Hold Permit</u> . |
| 2. | SEMA/Secretary | Proofs letter. |
| 3. | FOS/PTSS Supervisor | Reviews letter, makes appropriate comments. |
| 4. | SEMA/Secretary | Finalizes letter for Office Chief's signature and mails. |
| 5. | PTSS Supervisor/Designate | Updates the MIR Database to place permittee on "holds permit status." |
| 6. | Permits and Bonding Unit (PBU) Staff | Withholds permits from the permittee who is on permits hold status until informed in writing by the PTSS that permittee is eligible for permits. |
| 7. | District/Unit Supervisor | Sends notice to PTSS Supervisor and Compliance Specialist when the permittee has achieved compliance at the well site. |
| 8. | PTSS Supervisor | Notifies PBU and District staff that compliance has been achieved and the permittee has been removed from holds permit status; and updates the MIR Database. |
| 9. | Compliance and Bonding Specialist | Prepares Form <u>EQ 7373 Revocation of Hold Permit</u> . |


OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.07

Subject: WITHHOLDING OF PERMITS

Page 21 of 32

| Step | Who | Does What |
|------|-----------------|--|
| 10. | SEMA/Secretary | Proofs letter. |
| 11. | PTSS Supervisor | Reviews letter, makes appropriate comments. |
| 12. | SEMA/Secretary | Finalizes letter for Office Chief's signature and mails. |

| | | | |
|--|---|-------------------|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: SUSPENSION OF OPERATIONS | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.08 | Page: 22 of 32 | |

ISSUE:

A Notice of Suspension of Operations letter is an enforcement tool utilized to achieve compliance. A Notice of Suspension of Operations compels compliance because it prevents an owner or operator from generating revenue from a well that is in violation. The Notice of Suspension of Operations also prevents oil gatherers from picking up or selling oil from a well that is in violation. This action has a significant impact on an owner or operator and typically results in a prompt response by the owner or operator.

A Notice of Suspension of Operations may be utilized under the following scenarios:

1. There has been a failure to transfer permit
2. There is a threat to public health and safety
3. The owner or operator has been determined to be in violation as the result of an opportunity to show compliance meeting.

Section 61506(l) of Part 615 of the NREPA provides for a suspension of operations when a condition exists that causes or results or threatens to cause or result in waste.

Administrative Rule 324.207 promulgated pursuant to Part 615 of the NREPA is the basis for issuance of a Notice of Suspension of Operations for failure to request a transfer of permit.

Section 61506(q) of Part 615 of the NREPA and Administrative Rule 324.1014(1) promulgated pursuant to Part 615 of the NREPA provide the authority and process for the OOGM to issue a Notice of Suspension of Operations if a threat to public health and safety exists.

Administrative Rule 324.1301(b) is the basis for issuance of a Notice of Suspension of Operations when a violation exists.

The OOGM will issue a Notice of Suspension of Operations immediately upon discovering a failure to transfer permit in accordance with Administrative Rule 324.207.

The OOGM will issue a Notice of Suspension of Operations immediately upon discovering a threat to public health and safety.

The OOGM may issue a Notice of Suspension of Operations after a permittee is found to be not in compliance as the result of an OTSCM.

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE


Number: OOGM-601.08

Subject: SUSPENSION OF OPERATIONS

Page 23 of 32

PROCEDURES:

| Step | Who | Does What |
|------|-----------------------------------|--|
| 1. | Compliance and Bonding Specialist | Prepares suspension of operations letter and letter to purchasers, for Office Chief's signature, notifying them of illegal production status. |
| 2. | PTSS and/or FOS Supervisor | Reviews letters, makes appropriate comments or revisions. |
| 3. | SEMA/Secretary | Proofs letters and forwards to Office Chief. |
| 4. | Office Chief | Signs letters. |
| 5. | Compliance and Bonding Specialist | <ul style="list-style-type: none"> A. Updates the MIR Database (declaration of illegal production). B. If permittee fails to come into compliance, prepare Form <u>EQ 7380 Administrative Complaint</u> and proceed to Administrative Hearing (if required). C. If permittee comes into compliance or enters a Form <u>EQ 7362 Stipulated Consent Agreement (SCA)</u>, prepare memo to the Office Chief, recommending withdrawal of suspension of operations status. D. Prepare letter to permittee, releasing suspension of operations status to be signed by Office Chief. E. Prepare letter to purchasers, for Office Chief's signature, notifying them of approval to resume purchase of product. |
| 6. | SEMA/Secretary | Finalizes letters for Office Chief. |
| 7. | Office Chief | Signs letters. |
| 8. | Compliance and Bonding Specialist | Updates the MIR Database. |

| | | | |
|--|---|-------------------|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: NOTICE OF DETERMINATION | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.09 | Page: 24 of 32 | |

PURPOSE:

A Notice of Determination (NOD) is an administrative enforcement tool issued by the Office Chief to an owner or operator of an oil, gas, or mineral well. A NOD notifies an owner or operator that the OOGM has determined that there is an ongoing violation. A NOD includes an administrative directive that requires the owner or operator to achieve compliance by a specified deadline. A NOD provides legal notice to the owner, operator and surety that the OOGM may take action that will result in a claim against the conformance bond. A NOD must be sent to the owner, operator and surety by Registered Mail per statutory requirement.

A NOD may be issued to an owner or operator under the following situations:

1. An owner or operator of an oil, gas or mineral well has been determined to be in violation of the statute or administrative rules as the result of an Opportunity to Show Compliance meeting and resulting compliance determination memo.
2. An owner or operator of an oil, gas, or mineral well has violated the terms and conditions set forth in a SCA.

Sections 61506(a) and 61519 of Part 615 of the NREPA provide the authority for the OOGM to issue a NOD to the owner or operator of an oil or gas well.

Section 62515 of Part 625 of the NREPA provides that authority for the OOGM to issue an NOD to the owner or operator of a mineral well.

If it is determined that a NOD is necessary to address violations, then the following procedural steps shall be implemented.

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.09

Subject: NOTICE OF DETERMINATION

Page 25 of 32

PROCEDURES:

| Step | Who | Does What |
|------|---|--|
| 1. | Compliance and Bonding Specialist | <ul style="list-style-type: none"> A. Obtain list of identified violations from professional staff and Compliance Coordinator. B. Prepare draft NOD using Form <u>EQ 7360 Notice of Determination Generic</u> or <u>EQ 7361 Notice of Determination Violation of Agreement</u>, as applicable. C. Provide draft NOD to District/Unit Supervisor, Compliance Coordinator, and Professional Staff for review via e-mail and incorporate comments as appropriate. D. Provide draft NOD to Section Supervisors via e-mail and incorporate comments as appropriate. E. Prepare a public notice for the DEQ Calendar using form <u>EQ 6560 DEQ Calendar Public Notice</u>. F. Prepare a public notice for the <u>Michigan Oil and Gas News</u> using Form <u>EQ 6557 Public Notice</u>. G. Provide final draft NOD, public notice for the DEQ Calendar, and public notice for the <u>Michigan Oil and Gas News</u> to SEMA/Secretary. |
| 2. | SEMA/Secretary | Finalize NOD and provide NOD, public notice for the DEQ Calendar, and public notice for the <u>Michigan Oil and Gas News</u> to PTSS Supervisor for final review and approval. |
| 3. | PTSS Supervisor | Review and Approve final NOD, public notice for the DEQ Calendar, and public notice for the <u>Michigan Oil and Gas News</u> and give to the Office Chief for signature. |
| 4. | Office Chief | Review, approve and sign NOD, public notice for the DEQ Calendar, and public notice for the <u>Michigan Oil and Gas News</u> . |
| 5. | SEMA/Secretary | Ensure that NOD is mailed to owner, operator and surety via Registered Mail. |
| 6. | Compliance and Bonding Specialist | <ul style="list-style-type: none"> A. Update the MIR Database compliance chronology. B. Send public notice for the DEQ Calendar to designated DEQ representative. C. Send public notice for the <u>Michigan Oil and Gas News</u> to the designated representative at the <u>Michigan Oil and Gas News</u>. D. Send the public notice for the <u>Michigan Oil and Gas News</u> to the OOGM Web Page Administrator. |
| 7. | OOGM Web Page Administrator | Upload public notice to OOGM Web Page. |
| 8. | Professional Staff and Compliance Coordinator | <ul style="list-style-type: none"> A. Monitor the compliance deadline in the NOD and perform inspections and evaluations as necessary to determine compliance status. B. If the owner or operator fails to achieve compliance by the |


OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.09

Subject: NOTICE OF DETERMINATION

Page 26 of 32

| Step | Who | Does What |
|------|-----|---|
| | | deadline specified in the NOD, implement the Funding Referral Process pursuant to Parts 615, 616, and 625 of the NREPA. |

| | | | |
|--|--|-------------------|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: STIPULATION AND CONSENT AGREEMENT (SCA) AND TRANSFER SETTLEMENT AGREEMENTS (TSA) | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.10 | Page: 27 of 32 | |

PURPOSE:

Stipulation and Consent Agreements or Transfer Settlement Agreements (SCA/TSA's) are administrative enforcement tools that are executed between the OOGM and an owner or operator of an oil, gas, or mineral well. An SCA/TSA resolves violations by setting forth an administratively enforceable schedule for the owner or operator to achieve compliance with statutory requirements and/or administrative rules.

The SCA/TSA's are utilized to resolve violations under the following scenarios:

1. An owner or operator of an oil, gas, or mineral well wishes to voluntarily resolve violations under a prescribed compliance schedule.
2. A request for transfer of permit has been submitted and the permit cannot be transferred due to unsatisfactory conditions.

Administrative Rule 324.206(8) promulgated pursuant to Part 615 of the NREPA states that if the permittee of a well is under notice because of unsatisfactory conditions at the well site involved in the transfer, then the permit for the well shall not be transferred until the permittee has completed the necessary actions or the acquiring person has entered into a written agreement to correct all of the unsatisfactory conditions.

Supervisor of Wells Letter 2000-2 provides clarification and defines "unsatisfactory conditions."

Administrative Rule 299.2325 promulgated pursuant to Part 625 of the NREPA states that a permit for a mineral well shall not be transferred to a person who is in violation of the part, rules, permit conditions, instructions, or orders, until the person has corrected the violation or the supervisor of mineral wells has accepted a compliance schedule and a written agreement has been reached to correct the violations.

If it is determined that a SCA/TSA is necessary to resolve violations, then the following procedural steps shall be implemented.

OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.10

Subject: STIPULATION AND CONSENT AGREEMENTS (SCA) AND TRANSFER SETTLEMENT AGREEMENT (TSA)

Page 28 of 32

PROCEDURES:

| Step | Who | Does What |
|------|--|--|
| 1. | Compliance and Bonding Specialist/ Compliance Coordinator | <p>A. Obtain list of identified violations from Professional Staff and Compliance Coordinator</p> <p>B. Draft SCA/TSA using Form <u>EQ 7362 Stipulation Consent Agreement</u> or <u>EQ 7364 Transfer Settlement Agreement</u>. Negotiate specific terms and administrative penalties with the owner or operator who will be entering into the SCA.</p> <p>C. Provide negotiated draft SCA/TSA to District Supervisor, Compliance Coordinator, and Professional Staff for review via e-mail and incorporate comments as appropriate.</p> <p>D. Provide negotiated draft SCA/TSA to Section Supervisors via e-mail and incorporate comments as appropriate.</p> <p>E. Provide final draft SCA/TSA to SEMA/Secretary.</p> |
| 2. | SEMA/Secretary | Finalize SCA/TSA and provide copy to PTSS Supervisor for final review and approval. |
| 3. | FOS/PTSS Supervisor | Review and Approve final draft SCA/TSA and give to the Office Chief for review and approval. |
| 4. | Office Chief | Review and Approve final draft SCA/TSA and return to Compliance and Bonding Specialist. |
| 5. | Compliance and Bonding Specialist/Compliance Coordinator | <p>A. Provide the proposed SCA/TSA by e-mail or other means to the owner or operator and obtain verbal acceptance.</p> <p>B. Prepare an Unsigned SCA/TSA Cover Letter using Form <u>EQ 7366 Unsigned Settlement Agreement Cover Letter</u> and send proposed SCA/TSA to the owner or operator.</p> <p>C. Receive signed SCA/TSA from owner or operator and review to ensure that the SCA/TSA was not altered and that the SCA/TSA was notarized.</p> <p>D. Give signed SCA/TSA to SEMA/Secretary.</p> |
| 6. | SEMA/Secretary | Obtain Office Chief signature and return SCA/TSA to Compliance and Bonding Specialist. |
| 7. | Compliance and Bonding Specialist/Compliance Coordinator | <p>A. Prepare an Executed SCA/TSA Cover Letter using Form <u>EQ 7367 Executed Settlement Agreement Cover Letter</u> and send executed SCA/TSA to the owner or operator.</p> <p>B. Update the MIR Database compliance chronology.</p> |
| 8. | Professional Staff and Compliance Coordinator | Monitor the compliance deadlines and perform inspections and evaluations as necessary to determine compliance. If violations of the SCA/TSA are identified, document the violations in the MIR Database and prepare and issue Form |


OFFICE OF OIL, GAS, AND MINERALS
POLICY AND PROCEDURE

Number: OOGM-601.10

Subject: STIPULATION AND CONSENT AGREEMENTS (SCA) AND TRANSFER SETTLEMENT AGREEMENT (TSA)

Page 29 of 32

| Step | Who | Does What |
|------|--|--|
| | | <u>EQ 7370 Notice of Missed Deadlines</u> . Update the MIR Database compliance chronology. |
| 9. | Compliance and Bonding Specialist/Compliance Coordinator | <p>A. If violations of the SCA/TSA are not resolved, take the appropriate enforcement action depending on the nature of the violation. More than one enforcement action may be taken.</p> <ol style="list-style-type: none"> 1. Prepare Form <u>EQ 7372 Notice of Hold Permits</u> following said procedures. 2. Prepare Form <u>EQ 7374 Notice of Suspension of Operations</u> following said procedures. 3. Prepare Form <u>EQ 7361 Notice of Determination Generic</u> following said procedures. <p>B. Update the MIR Database compliance chronology</p> <p>C. Upon resolution of violations, issues Form <u>EQ 7399 Case Closed</u> and terminates SCA/TSA. Update the MIR Database compliance chronology.</p> |


| | | |
|--|--|---|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: REFERRALS TO THE DEPARTMENT OF NATURAL RESOURCES, LAW ENFORCEMENT DIVISION, ENVIRONMENTAL INVESTIGATION SECTION Program Name: COMPLIANCE AND ENFORCEMENT Number: OOGM-601.11 | Page: 30 of 32 Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |

PURPOSE:

Staff of the OOGM may encounter violations that appear to be committed knowingly, intentionally, or through gross negligence. These violations are suspected misdemeanors or felonies, which require prompt referral to the EIS, Law Enforcement Division of the DNR through established criteria and procedures.

PROCEDURES:

| Step | Who | Does What |
|------|-----------------------------------|--|
| 1. | Professional Staff | A. Obtain evidence of suspected criminal violation. B. Discuss suspected criminal violation with the immediate District, Unit, or Section Supervisor, and proceed after Supervisor Approval. C. Complete Form <u>EQ 9107 EIS Criminal Complaint Investigation Request</u> and sign the form. D. Obtain signature of Immediate Supervisor and submit Form <u>EQ 9107 EIS Criminal Complaint Investigation Request</u> , along with supporting documentation to the Office Chief. |
| 2. | Office Chief | Reviews request and determines whether or not to refer case to DNR EIS. If it is to be referred, makes referral to DNR Law Chief. Notifies District/Unit Supervisor and Compliance and Bonding Specialist of decision. |
| 3. | Compliance and Bonding Specialist | A. Update the MIR Database compliance chronology to reflect Form <u>EQ 9107 EIS Criminal Complaint Investigation Request</u> . B. Retain a copy of Form <u>EQ 9170 EIS Criminal Complaint Investigation Request</u> for district case tracking. C. If there are ongoing or pending civil or administrative actions, immediately notify DNR EIS and refer to DEQ Policy and Procedure No. 04-004, Parallel Proceedings. |


| | | | |
|---|--|--|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | | DEPARTMENT OF ENVIRONMENTAL QUALITY |
| | Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: REFERRALS TO THE DEPARTMENT OF ATTORNEY GENERAL Program Name: COMPLIANCE AND ENFORCEMENT Number: OOGM-601.12 | Page: 31 of 32 |

PURPOSE:

The DEQ staff often work closely with attorneys on the Department of Attorney General's (DAG's) staff in situations where the DEQ requires legal advice or representation. In order to make the best use of staff's time in the DEQ and the DAG, and to establish clear lines of communication and authority, it is necessary to establish procedures and criteria for referring matters to the DAG.

PROCEDURES:

| Step | Who | Does What |
|------|---|--|
| 1. | Professional Staff and/or Compliance and Bonding Specialist | A. Finds evidence of apparent civil violation of statute administered by the DEQ. B. Discuss suspected civil violation with the immediate District, Unit, or Section Supervisor. District and Unit Supervisors shall discuss with Section Supervisor. C. Prepare Forms <u>EQ 1083 Referral Memo to Deputy Director</u> and <u>EQ 0184 Referral Letter to Department of Attorney General</u> . |
| 2. | Section Supervisors | Receives information from step 1 and determines if information should be forwarded to the Office Chief. If, in the judgment of the Section Supervisors, a referral to the DAG is appropriate, directs Compliance and Bonding Specialist to prepare briefing materials Form <u>EQ 0186 Referral Briefing for Office Chief</u> . |
| 3. | Office Chief | Receives information from step 2 and considers information and recommendation that civil action be taken against alleged violator. If, in the judgment of the Office Chief, a referral to the DAG is appropriate, signs the Form <u>EQ 1083 Referral Memo to Deputy Director</u> with recommendation to the Deputy Director for Programs and Regulations. If not appropriate, in the judgment of the Office Chief, refers the information back to the Compliance and Bonding Specialist for further review or clarification. |
| 4. | Compliance and Bonding Specialist | Provides detailed information from the Office file(s) to the DAG staff once referral is sent. |

| | | | |
|--|---|--|--|
|  | Office of Oil, Gas, and Minerals POLICY AND PROCEDURES | DEPARTMENT OF ENVIRONMENTAL QUALITY | |
| Original Effective Date: February 7, 2014 Revised Date: Reformatted Date: | Subject: FORMS USED | | Category: <input checked="" type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive |
| | Program Name: COMPLIANCE AND ENFORCEMENT | | |
| | Number: OOGM-601.13 | Page: 32 of 32 | |

FORMS USED

EQ 0183 Referral Memo to Deputy Director
EQ 0184 Referral Letter to Department of Attorney
EQ 0186 Referral Briefing
EQ 6560 DEQ Calendar Public Notice
EQ 6557 Public Notice
EQ 7329 Compliance Communication Letter
EQ 7330 Violation Notice
EQ 7347 Case Referral Check List
EQ 7348 Opportunity to Show Compliance Meeting for Part 615

- Chairperson's Instructions OTSCM
- Opportunity to Show Compliance Memo

EQ 7349 Escalated Enforcement Referral Memo
EQ 7350 Enforcement Notice
EQ 7351 Opportunity to Show Compliance Meeting
EQ 7352 Compliance Determination Memo
EQ 7360 Notice of Determination Generic
EQ 7361 Notice of Determination Violation of Agreement
EQ 7362 Stipulation and Consent Agreement

- Model Consent Order Document

EQ 7363 Stipulation and Consent Agreement Amendment
EQ 7364 Transfer Settlement Agreement
EQ 7365 Transfer Settlement Agreement Amendment
EQ 7366 Unsigned Settlement Agreement Cover Letter
EQ 7367 Executed Settlement Agreement Cover Letter
EQ 7368 Overdue Agreement Cover Letter
EQ 7370 Notice of Missed Deadlines
EQ 7371 Demand for Stipulated Penalties
EQ 7372 Notice of Hold Permit Status
EQ 7373 Revocation of Hold Permit Status
EQ 7374 Notice of Suspension of Operation Failure to Comply
EQ 7375 Notice of Suspension of Operation Failure to Transfer
EQ 7376 Notice of Illegal Oil and Gas
EQ 7377 Revocation of Suspension of Operation
EQ 7378 Revocation of Illegal Oil and Gas
EQ 7380 Administrative Complaint
EQ 7381 Administrative Relief
EQ 7399 Case Closed
EQ 9107 EIS Criminal Complaint Investigation Request

**Memorandum of Agreement between Michigan Department of Environmental
Quality and the United States Environmental Protection Agency, Region V**

**UNDERGROUND INJECTION CONTROL PROGRAM
MEMORANDUM OF AGREEMENT**

Between

THE STATE OF MICHIGAN

and

**THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

I. General

This Memorandum of Agreement (“Agreement”) establishes policies, responsibilities and procedures pursuant to Section 1425 of the Safe Drinking Water Act (“SDWA” or “the Act”) for the State of Michigan Underground Injection Control Program (“State UIC program”) as authorized by Part C of SDWA (P.L. 93-523 as amended; 42 U.S.C. 300f et seq.).

This Agreement is entered into by the State of Michigan and signed by Dan Wyant, Director of the Department of Environmental Quality, (hereafter, “the State” or “the Department”) with the United States Environmental Protection Agency, Region 5, and signed by Susan Hedman, Regional Administrator (hereafter, “EPA” or “Regional Administrator”). This Agreement shall become effective when approved by both the Department and the Regional Administrator.

A. Lead Agency Responsibilities

The lead agency, the Office of Oil, Gas, and Minerals (OOGM) of the Department, as designated by the Governor of the State, is also the lead agency to coordinate the State program. This lead agency shall coordinate the State program to facilitate communication between the EPA and the State agencies having program responsibilities. These responsibilities shall include, but not be limited to, the submission of grant applications, reporting and monitoring results, and annual report requirements. The Department is responsible for and has authority over all Class II injection wells.

B. Review and Modifications

This Agreement shall be reviewed annually as part of the annual program grant and State/EPA Agreement (“SEA”) process. The annual program grant and the SEA shall be consistent with this Agreement and may not override this Agreement.

This Agreement may be modified upon the initiative of the State or the EPA. Modifications must be in writing and must be signed by the Department and the Regional Administrator. Modifications become effective when signed by both parties. Modifications may be made by revision prior to the effective date of this Agreement or subsequently by addenda attached to this Agreement and consecutively numbered, signed, and dated.

Conformance with Laws and Regulations

The Department shall administer the State Underground Injection Control (UIC) program consistent with the State's submission for program approval, this MOA, the SDWA, current federal regulations, promulgated minimum requirements, priorities established as part of the annually approved state UIC grant, state and federal law, and any separate working agreements which shall be entered into with the Regional Administrator as necessary for the full administration of the State UIC program.

C. Responsibilities of Parties

Each of the parties has responsibilities to assure that all applicable UIC requirements are met. The parties agree to maintain a high level of cooperation and coordination between State and EPA staffs in a partnership to assure successful and effective administration of the State UIC program. In this partnership, the Regional Administrator will provide to the Department necessary technical and policy assistance on program matters.

The Regional Administrator is responsible for keeping the Department apprised, in a timely manner, of the meaning and content of federal guidelines, technical standards, regulations, policy decisions, directives, and any other factors which might affect the State UIC program. The strategies and priorities for issuance, compliance, monitoring and enforcement of permits, and implementation of technical requirements shall be established in the State's program description, the annual SEA, or in subsequent working agreements. If requested by either party, meetings will be scheduled at reasonable intervals between the State and EPA to review specific operating procedures, resolve problems, or discuss mutual concerns involving the administration of the State UIC program.

D. Sharing of Information

The Department shall promptly inform EPA of any proposed, pending, or enacted modifications to laws, regulations, or guidelines, and any judicial decisions or administrative actions, which might affect the State UIC program and the State's authority to administer the program. The Department shall promptly inform EPA of any resource allocation changes (for example, personnel budget, equipment, etc.) which might affect the State's ability to administer the program.

Any information obtained or used by the State under its UIC program shall be available to EPA upon request without restriction. If the information has been submitted to the State under a claim of confidentiality, the State must submit that claim to EPA when providing EPA such information. Any information obtained from the State and subject to a claim of confidentiality will be treated in accordance with 40 CFR Part 2. If EPA obtains information from the State that is not claimed to be confidential, EPA may make that information available to the public without further notice.

EPA shall furnish the State the information in its files not submitted under a claim of confidentiality which the State needs to implement its approved program. EPA shall furnish to

the State information submitted to EPA under a claim of confidentiality which the State needs to implement its UIC program subject to conditions in 40 CFR Part 2.

E. Duty to Revise Program

As provided in 40 CFR 145.32, when a controlling Federal or State statutory or regulatory authority is modified and EPA determines that a State UIC program revision may be necessary, the State shall submit within 270 days either notice to EPA showing that the State program meets the revised or added requirements, or may demonstrate that the State program meets the requirements of Section 1421(b) of the SDWA and represents an effective program under Section 1425(b). The state may make this alternative showing under Section 1425 of the SDWA, but still must do this within 270 days after receiving notification of said revisions from the EPA.

F. Definition and Exemption of USDW's

The State agrees to define an "Underground Source of Drinking Water" (USDW) in a manner that is consistent with the intent of Section 146.3 of the UIC regulations. The State has determined, as explained in its program description, that the State program will not allow USDW exemptions.

G. Duration of MOA

This Agreement will remain in effect until such time as State primacy enforcement responsibility is returned to EPA by the State, or withdrawn by EPA in accordance with the provisions of 40 CFR 145.34.

H. General Provisions

Nothing in this Agreement is intended to affect any State UIC program requirement, including any standards or prohibitions established by State or local law, as long as the State or local requirements do not prevent the State UIC program from meeting the requirements of Section 1421(b) of the SDWA and representing an effective program under Section 1425(b) of the SDWA.

Nothing in this Agreement shall be construed to limit the authority of the EPA to take action in accordance with applicable regulations pursuant to Sections 1421, 1422, 1424, 1425, 1426, 1431 or other sections of the SDWA.

This MOA does not create any right or benefit, substantive or procedural, enforceable by law or equity, by persons who are not party to this agreement, against the Department of Environmental Quality or EPA, their officers or employees, or any other person. This MOA does not direct or apply to any person outside of the Department of Environmental Quality and EPA.

II. Permitting

A. General

The State is responsible for expeditiously reviewing permit applications drafting, circulating, issuing, modifying, reissuing, and terminating UIC permits and shall do so in accordance with the State UIC program. The Department shall review and issue permits based on the requirements of the State UIC program. Permits shall be issued which comply with the provisions of the approved State UIC program.

B. Transfer of Responsibility from EPA

The Regional Administrator shall transfer from EPA to the State all issued permits and pending permit, applications and any other information relevant to program operation not already in the possession of the State, including all enforcement actions, when the State assumes primacy for the program. [Need to make sure EPA permits are enforceable by State to the extent necessary beyond existing State permits.]

C. Compliance Schedule and Reports

The State agrees to establish compliance schedules in permits where appropriate and to require periodic reporting on compliance with compliance schedules and other permit conditions.

III. Compliance Monitoring

A. General

The State shall operate a timely and effective compliance monitoring system to track compliance with program requirements. For purposes of this Agreement, the terms “compliance monitoring” or “compliance evaluation” shall refer to all efforts associated with determining compliance with State UIC program requirements.

B. Compliance Schedule

The State agrees to maintain procedures to receive, evaluate, retain, and investigate all notices and reports that are required by the State program. These procedures shall also include the necessary elements to investigate the failure of persons required to submit such notices and reports. The State shall initiate appropriate compliance actions when required information is not received or when the reports are not submitted.

C. Review of Compliance Reports

The State shall conduct a timely and substantive review of all such reports to determine compliance status. The State shall operate a system to determine if: (1) the required reports are submitted; (2) the submitted reports are complete and accurate; and (3) the State UIC program

requirements are met. The reports and notices shall be evaluated for compliance status in accordance with the State UIC program requirements.

D. Inspection and Surveillance

The Department agrees to have inspection and surveillance procedures to determine compliance or noncompliance with the applicable requirements of the State program. Inspections and other methods of surveillance shall be utilized to identify persons who have not complied with program requirements. Any compilation, index, or inventory obtained for such facilities or activities shall be made available to the Regional Administrator upon written request. The Department shall conduct inspections of the facilities and activities subject to regulatory requirements. These compliance monitoring inspections shall be performed to assess compliance with all State program requirements. These inspections shall be conducted to determine compliance or noncompliance, to verify the accuracy of information submitted in reporting forms and monitoring data, and to verify the adequacy of sampling, monitoring, and other methods to provide the information.

E. Authority to Enter

The Department (and other State designees) engaged in compliance monitoring and evaluation shall have the authority to enter any site or premises subject to regulation or to review and copy the records of relevant program operations where such records are kept.

F. Admissibility

Any investigatory inspections shall be conducted and samples and other information collected in a manner to provide evidence admissible in an enforcement proceeding or in court.

IV. Enforcement

A. General

The State is responsible for taking timely and appropriate enforcement action against persons in violation of State UIC program requirements. This includes violations detected by State or federal inspections.

Failure by the State to initiate appropriate enforcement action against a substantive violation may be the basis for EPA's determination that the State has failed to take timely enforcement action. Such a determination may result in EPA filing an action to enforce the State's rules in accordance with Section 1423 of the SDWA.

B. Enforcement Mechanisms

The State has the mechanism to restrain immediately and effectively any person engaging in any unauthorized activity or operation, which is endangering or causing damage to public health or the environment as applicable to the program requirements. The State has the means to sue in

courts of competent jurisdiction to prohibit any threatened or continuing violation of any State UIC program requirement. Additionally, the State has the mechanism to access or sue to recover in court civil penalties and criminal remedies consistent with 40 CFR 145.13.

C. EPA Enforcement

Nothing in this Agreement shall affect EPA's authority or responsibility to take enforcement actions under Sections 1423 and 1431 of the SDWA. The State has primary enforcement responsibility for the State UIC program. EPA will not take enforcement actions without providing prior notice to the State and otherwise complying with sections 1423 and 1431 of the SDWA and all applicable regulations.

D. Assessment of Fines

The State agrees to assess civil penalties in amounts appropriate to the violation in accordance with the State UIC program.

V. EPA Oversight

A. General

EPA shall oversee the State's administration of the UIC program on a continuing basis to assure that such administration is consistent with this MOA, the State UIC grant application, and all applicable requirements embodied in current regulations and federal law.

In addition to the specific oversight activities listed in this section, EPA may from time to time request specific information, and the State agrees to submit and provide access to files necessary for evaluating the Department's administration of the State UIC program.

B. Program Reports

The State shall submit program reports to the Regional Administrator in accordance with Section 144.8. The reports are to be submitted quarterly using the approved reporting forms specified by EPA. For purposes of reporting noncompliance, the State and EPA shall use EPA Ground Water Program Guidance #58.

C. Inspection and Surveillance by EPA

Provisions may be made within the context of the MOA for EPA to select facilities and activities within the State for EPA inspection. EPA should conduct such inspections jointly with the State. The Regional Administrator may also choose to conduct inspections independently of the State's schedule. In such cases, the EPA shall notify the State as least seven (7) days before any inspection that EPA determines to be necessary to allow coordination of scheduling and allow joint inspection. However, if an emergency exists or it is impossible to give such advance notification, the Regional Administrator may waive advance notification and instead provide immediate notification of the intent to inspect a facility and shall allow the State to accompany EPA on any such inspection.

D. Annual Performance Evaluation

EPA shall conduct performance evaluations of the State program using program reports and other requested information to determine State program consistency with the program submission, the SDWA, and applicable regulations. With the availability of audio, video and other electronic means of communication, it shall not be necessary for EPA and the Department to meet in person during the annual evaluation.

EPA shall submit a summary of the evaluation findings to the State outlining any deficiencies in program performance and recommendations for improving State operations. The report also might provide guidance for the development of an upcoming grant application. The State shall have thirty (30) days from the date of receipt to concur with or comment on the findings and recommendations.

VI. Signatures

Michigan Department of Environmental Quality

By _____
Dan Wyant, Director
Date _____

U.S. Environmental Protection Agency, Region 5

By _____
Susan Hedman, Regional Administrator
Date _____

**Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals,
Quality Assurance Project Plan for CLASS II Underground Injection Control**

To be Inserted with Final Application

**Michigan Department of Environmental, Office of Oil, Gas, and Minerals
Underground Injection Control Forms**

**RECORD OF WELL COMPLETION**

By authority of Part 615 or Part 625 of Act 451 PA 1994, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment.

(Submit within 60 days of well completion.)

Part 615 Oil/Gas Well Part 625 Mineral Well

| | | | |
|--|------------------------|--|-------------------------|
| Permit number/deepening permit no. | | API number | |
| Type of well (after completion) | | | |
| Well name & number | | | |
| Name and address of permittee | | | |
| Directionally drilled (check one) <input type="checkbox"/> Yes <input type="checkbox"/> No | | Previous permit numbers | |
| Total depth of well M.D. _____ T.V.D. _____ | | | |
| Surface location ¼ of _____ ¼ of _____ ¼ Section _____ T _____ R _____ | | Subsurface location (if directionally drilled) ¼ of _____ ¼ of _____ ¼ Section _____ T _____ R _____ | |
| Township _____ County _____ | | Township _____ County _____ | |
| Footages: North/South _____ East/West _____ Ft. from _____ line and _____ Ft. from _____ line of Sec. | | Footages: North/South _____ East/West _____ Ft. from _____ line and _____ Ft. from _____ line of Sec. | |
| Part 615 - oil/gas wells | | Part 625 - mineral wells | |
| Date well completed | Producing formation(s) | Injection formation(s) | Date of first injection |
| | | | Disposal formation(s) |
| | | | Solution formation(s) |

COMPLETION INTERVALS(S)

| Date | Number holes | Perforation or open hole interval | Open | |
|------|--------------|-----------------------------------|------|----|
| | | | Yes | No |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

STIMULATION BY ACID OR FRACTURING

| Date | Interval treated | Materials and amount used |
|------|------------------|---------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PRODUCTION TEST DATA

| Oil Bbls/day | Gravity °API | Condensate Bbls/day | Gas MCF/day | Water Bbls/day | H ₂ S Grains/100 ft ³ | B.H.P. and depth |
|--------------|--------------|---------------------|-------------|----------------|---|------------------|
| | | | | | | |

CERTIFICATION "I state that I am authorized by said owner. This report was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."

| | | |
|--------------------------------|-----------|------|
| Name and title (print or type) | Signature | Date |
|--------------------------------|-----------|------|

Mail original to Office of Oil, Gas, and Minerals, Michigan Department of Environmental Quality, P.O. Box 30256, Lansing, MI 48909-7756.
Or submit via email to deq-geologicalrecords@michigan.gov.



APPLICATION FOR PERMIT TO:

DRILL DEEPEN CONVERT AND OPERATE A WELL

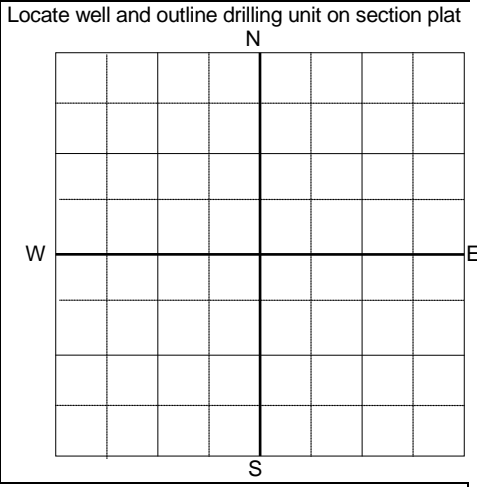
By authority of Part 615 or Part 625 of Act 451 PA 1994, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment.

1a. Part 615 Supervisor of Wells
Oil and Gas
Brine Disposal
Hydrocarbon Storage
Injection for Secondary Recovery

1b. Part 625 Mineral Wells
Waste Disposal
Brine Production
Processed brine disposal
Storage
Test, fee sched. on rev.

1c. Fee enclosed
Yes
No, revision of application
No, leg of horz drainhole

2. List all previous permit numbers
3. Fed. ID. No. (do not use SSN)
4. Conformance bond
5. Attached/On file
6. Bond number
7. Bond amount
8. Applicant (name of permittee as bonded)
9. Address
10. Lease or well name (be as brief as possible)
11. Surface owner
12. Surface location
13. If directional, bottom hole location
14. The surface location for this well is
15. Is this a directional well?
16. The bottom hole location (whether straight or directional) of this well is
17. Kind of tools
18. Is sour oil or gas expected?
19. Base of lowest known fresh water aquifer
20. Intended total depth
21. Formation at total depth
22. Producing/injection formation(s)
23. Objective pool, field, or project



24. PROPOSED DRILLING, CASING AND CEMENTING AND SEALING PROGRAM
Table with columns: HOLE (Depth, Geol. Formation, Bit Dia.), CASING (O.D. Size, Wt/Ft, Grade, Condition, Depth), CEMENT (Sacks, T.O.C., W.O.C.), MUD (Wt., Vis.)

25. DETAIL CEMENTING PROGRAM. IDENTIFY ALL CEMENT CLASSES, ADDITIVES, AND VOLUMES (IN CU. FT.) FOR EACH CASING STRING.
Surface
Intermediate
Production/Injection

26. Send correspondence and permit to
Name
Address
E-mail
Phone

CERTIFICATION "I state that I am authorized by said applicant. This application was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."
27. Application prepared by (print or type) Phone
28. Signature Date

Enclose the receipt of electronic payment or a check made payable to State of Michigan. The permit fee is \$300 for Part 615 wells; \$2,500 for a Part 625 waste disposal well; \$500 for brine production, processed brine disposal, or storage well.
DEQ Cashier use only.

Office of Oil, Gas, and Minerals Use Only
Table with columns: Permit number, API number, Date issued, Owner number



INSTRUCTIONS FOR COMPLETING FORM 7200-1

- Line 1a/b PART 615 SUPERVISOR OF WELLS or PART 625 MINERAL WELLS. Identify which statute this well will be permitted under and what type of well it will be.
- Line 1c PERMIT FEE. For Part 615, Supervisor of Wells, the permit fee for all drilling and deepening permits is \$300. For Part 625, Mineral Wells, different fees apply to different types of wells: The permit fee is \$2500.00 for a Waste Disposal well; and \$500 for a Brine Production, Processed Brine Disposal or Storage Well. Individual test well (greater than 250' deep) permit fees are \$500. Permit fees for blanket test well permits (between 50' and 250' deep) are \$75 for 1-24 wells, \$150 for 25-49 wells, \$300 for 50-74 wells, and \$600 for 75-200 wells. No fee is required if you are revising an existing application. Make checks payable to "**State of Michigan**", bank drafts are not accepted. An application to revise the surface location of an existing permit must be accompanied by the original permit and a new fee. If application is for a leg of a horizontal drainhole, check that box. No new fee is required. See line 14 of form EQC 7200 for further instructions.
- Line 2 PRIOR PERMITS. Identify all permit numbers of any wells drilled from the same surface location.
- Line 3 FEDERAL IDENTIFICATION NUMBER. Use a federal identification number. Do not use a Social Security Number.
- Lines 4-7 BOND. If the permittee as shown on line 8 is a partnership, all persons named share equal responsibility for the well. The bond submitted must be identical to and include all parties shown on line 8 as the permittee. Separate bonds for individuals in a partnership are not accepted. The bond number (line 6) is the Surety, Certificate of Deposit or Letter of Credit number which identifies that instrument. Refer to R 324.212 for bond amounts (line 7) under Part 615. Under Part 625, bonds for a disposal, storage, or brine wells are \$30,000 for a single well or \$400,000 for blanket coverage (50 wells maximum). Refer to R299.2332 for bond amounts for Part 625 test wells. For additional information regarding bonding options and amounts contact the Permits and Bonding Unit at (517) 241-1530.
- Line 8 APPLICANT. The permittee shall be the owner of the well or an authorized representative of the owner of the well. If you are a new applicant, have changed address, or changed officers, or changed corporate structure, submit form EQP 7200-13, Well Permittee Organization Report.
- Line 9 Provide the address and phone number of the permittee, this may be different than the address to mail the permit on Line 26. Check yes if the permittee authorizes the DEQ an additional 4 days to process the permit (per PA 325 of 2004). In some cases this may prevent a permit from being denied if there are corrections or revisions pending to make a permit decision. Otherwise check no.
- Line 10 LEASE or WELL NAME AND WELL NUMBER. Wherever possible a single word lease name is preferable. (1) Last names first. Use comma after the last name when a first name is used. (2) Use "&" to join names (e.g. Doe & Hall not Doe-Hall.) (3) Please do not include project names in the name of the well. Generally the first word should be chosen so that it will put the well name where one would expect to find it. (4) If the drilling unit contains State or Federally owned minerals, include "State" and Township name or "USA" in the well name (e.g. State Chester & Smith, or USA & Smith).
- Line 11 SURFACE OWNER. Identify the surface owner(s) at the well site.
- Line 12 SURFACE LOCATION. Identify the surface location of the well site by describing it in a quarter, quarter section (10 acre) spot within its township and range. Also identify the county and township name.
- Line 13 BOTTOM HOLE LOCATION. Fill in this line only if this is a directionally drilled well. Identify the location of the endpoint of the borehole in the same manner as on line 12.
- Line 14. Identify the surface location of the well measured from nearest **section lines** (as identified in line 2, form EQP 7200-2).
- Line 15. If the well is directionally drilled, identify the location of the endpoint of the well bottom hole location measured from the from nearest **section lines** (as identified in line 3 form EQP 7200-2).
- Line 16. Identify the bottom hole location of the well (same as surface location for straight holes) measured from the nearest **drilling unit lines** or **property lines** for Part 625 wells (as identified in line 4 form EQP 7200-2).
- Line 17 KIND OF TOOLS. Identify if the well will be drilled with Rotary, Cable, or Combination tools.
- Line 18 SOUR OIL OR GAS. Indicate if the well is located in an area where sour (containing hydrogen sulfide, H₂S) oil and gas is likely to be encountered. If so drilling and operation of the well must follow special requirements. For details consult the Hydrogen Sulfide Management General Provisions, R324.1101-R 324.1129. Indicate if an H₂S contingency plan is enclosed.
- Line 19 BASE OF LOWEST KNOWN FRESH WATER AQUIFER. Identify the formation and the depth where the base of the lowest known fresh water aquifer is expected to be encountered.
- Line 20 INTENDED TOTAL DEPTH. For straight holes show the total depth of the well as measured depth (MD). For directionally drilled wells identify the measured depth (MD) and true vertical depth (TVD) at total depth.
- Line 21 FORMATION AT TOTAL DEPTH. What is the geological formation at total depth of the well?
- Line 22 PRODUCING/INJECTING FORMATION. Identify the intended producing formation for oil, gas or brine wells. For injection wells, identify the intended injection interval. For storage wells, identify the storage formation. For test wells, identify the formation to be examined. Identify or discuss further in attachments if more than one target is anticipated
- Line 23 OBJECTIVE POOL, FIELD OR PROJECT. If this is an exploratory well, indicate "exploratory". If this is a development well, identify the producing field. If it is an Antrim project well identify the project or Uniform Spacing Plan (USP) name.
- Line 24 PROPOSED DRILLING, CASING, CEMENTING AND SEALING PROGRAM. Provide all casing and sealing data applicable to the proposed drilling. If the proposed program of drilling, casing, cementing, and sealing does not conform with those established by rule, or special order, then requests for exceptions must accompany an application for permit. For drilling through gas storage fields, refer to R 324.413 of Part 615. a) Depths: For directionally drilled wells use the measured depth to identify the depth of hole drilled and the depth where casing is set. b) Casing: For non-API grades of casing, provide data identifying rated or tested burst and collapse pressures. c) Cement: Identify the number of sacks of cement for each string of casing. Identify the expected depth of the top of cement behind each casing under T.O.C. Identify the number of hours cement will be left undisturbed before commencing drilling under W.O.C. d) Mud: Indicate weights and viscosities of drilling fluid during each phase of drilling. If drilling muds are not added and the drilling fluid is essentially water, indicate fresh water (FW) or salt water (SW).
- Line 25 DETAIL CEMENTING PROGRAM. Identify all cement classes, additives, and volumes (in cu. ft.) for each string of casing to be run. Identify the amount of excess cement (if any).
- Line 26 Identify the individual who can serve as a contact for the applicant and the mailing address to send the permit to.
- Line 28 At least one copy of form EQP7200-01 must have an original signature of the individual authorized by the applicant to file the application.

Permit fee is \$300 for all Part 615 wells; \$2,500 for a Part 625 waste disposal well; or \$500 for a brine production, processed brine disposal, or storage well: Part 625 Test wells are subject to the fee structure defined in Line 1C above.

| <u>ONLINE PAYMENT*</u> | <u>CHECK PAYMENT</u> | <u>OVERNIGHT/EXPRESS DELIVERY</u> |
|---|--|---|
| <p>When paying online for Part 615 permits, go to: https://www.thepayplace.com/mi/deq/oilandgas</p> <p>When paying online for Part 625 permits, go to: https://www.thepayplace.com/mi/deq/welldrillprmt</p> <p>Please enclose the receipt of electronic payment, one ORIGINAL and one COPY of the entire application and documentation to this address:</p> <p>MDEQ OFFICE OF OIL, GAS, AND MINERALS PERMITS AND BONDING UNIT PO BOX 30256 LANSING, MICHIGAN 48909-7756</p> | <p>Please mail a check payable to STATE OF MICHIGAN, one ORIGINAL and one COPY of the entire application and documentation to this address:</p> <p>MDEQ OFFICE OF FINANCIAL MANAGEMENT REVENUE CONTROL/CASHIER'S OFFICE PO BOX 30657 LANSING, MICHIGAN 48909-8157</p> | <p>Please send the online payment receipt or check payable to STATE OF MICHIGAN, one ORIGINAL and one COPY of the entire application and documentation to this address:</p> <p>MDOT ACCOUNTING SERVICES CENTER 425 WEST OTTAWA STREET LANSING, MICHIGAN 48933</p> |

*preferred method

Please see further instructions on EQC 7200 for preparing a Part 615 application and EQC 7200-3 for preparing a Part 625 application.



SURVEY RECORD OF WELL LOCATION

This information is required by authority of Part 615 Supervisor of Wells, or Part 625 Mineral Wells, of Act 451 PA 1994, as amended, in order to obtain a drilling permit.

| |
|----------------------|
| Applicant |
| Well name and number |

| | | | | | | | |
|---|--------|--------|----------------|---|---|----------|--------|
| 1a. Surface location | 1/4 of | 1/4 of | 1/4 of section | T | R | Township | County |
| 1b. If this is a directional well, bottom hole location will be | 1/4 of | 1/4 of | 1/4 of section | T | R | Township | County |

Instructions: Outline drilling unit for oil/gas wells (Part 615) or property boundary for mineral wells (Part 625) and spot well location on plat shown. Locate the well in two directions from the **nearest** section, quarter section, and unit (or property, Part 625) lines.

2. The surface location is

_____ ft. from nearest (N/S) _____ section line

_____ ft. from nearest (E/W) _____ section line

and

_____ ft. from nearest (N/S) _____ quarter section line

_____ ft. from nearest (E/W) _____ quarter section line

3. Bottom hole will be (if directional)

_____ ft. from nearest (N/S) _____ section line

_____ ft. from nearest (E/W) _____ section line

and

_____ ft. from nearest (N/S) _____ quarter section line

_____ ft. from nearest (E/W) _____ quarter section line

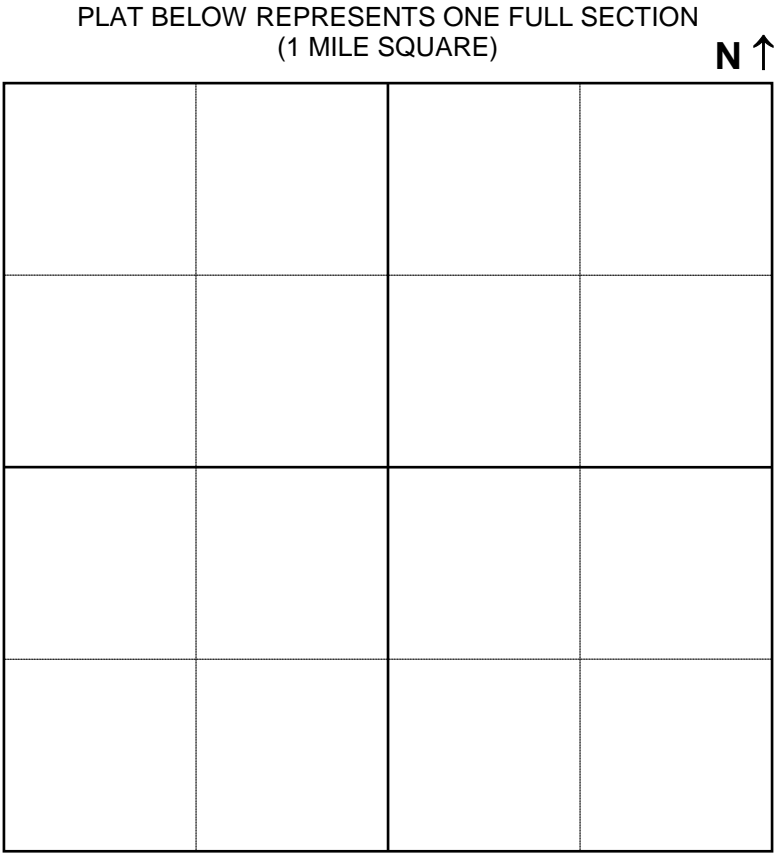
4. Bottom hole will be (directional or straight)

_____ ft. from nearest (N/S) _____ drilling unit line

_____ ft. from nearest (E/W) _____ drilling unit line

5. Show access to stake on plat and describe if it is not readily accessible.

6. Zoning Residential, effective date _____
 Initial date of residential zoning _____
 Other _____



ON SEPARATE PLAT OR PLOT PLAN, LOCATE, IDENTIFY AND SHOW DISTANCES TO:

A. All roads, power lines, buildings, residences, fresh water wells, and other man-made features, within 600 feet of the stake.

B. All lakes, streams, wetlands, drainage-ways, floodplains, environmentally sensitive areas, natural rivers, critical dune areas, and threatened or endangered species within 1320 feet of the stake.

C. All type I and IIa public water supply wells within 2000 feet and all type IIb and III public water supply wells within 800 feet of the well stake.

| | | |
|--------------------------------------|---------|----------------|
| Name of individual who surveyed site | Company | Date of survey |
| Address | | Phone |

I CERTIFY THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

| | |
|---|------|
| Signature of licensed surveyor (affix seal) | Date |
|---|------|



BOND FOR CONFORMANCE

By authority of Part 615, Supervisor of Wells, Act 451 PA 1994, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment.

| OIL AND GAS OPERATIONS BOND | |
|---|--|
| Bond number _____ | |
| <input type="checkbox"/> Single \$ _____ Well name and number _____ | <input type="checkbox"/> Blanket \$ _____ Attach initial well list |

(name and address of Principal)

_____ in the State of _____ as Principal and

(name and address of Surety)

a corporation organized and existing under the laws of the State of _____ and duly authorized to transact business in the State of Michigan, as Surety, are held and firmly bound unto the State of Michigan in the penal sum of

_____ Dollars.

The Principal named is about to commence and prosecute to final completion well(s) and operations authorized by permits issued or to be issued under Part 615, Act 451 PA 1994, as amended.

“Final completion” means the time when locating, drilling, deepening, converting, operating, producing, reworking, plugging, and proper site restoration have been performed on a well in a manner approved by the supervisor, including the filing of the mandatory records, and when the conformance bond has been released.

When the Principal complies with the provisions of the applicable provisions of Part 615, Act 451 PA 1994, as amended, in the final completion of the well(s), the Surety’s obligations can be terminated otherwise this obligation remains in full force and effect. The Surety’s liability herein is co-extensive with that of the Principal and the State of Michigan has the same remedies against the Surety as against the Principal.

This bond is executed and accepted subject to the following condition: The liability of this bond is set forth in R 324.211, R 324.213, R 324.214, and R 324.215 of the rules promulgated under section 61506 of Part 615, Supervisor of Wells, Act 451 PA 1994, as amended. (See reverse side of bond)

The Surety, by execution of the bond, accepts the liability covered by prior bond(s) _____

(number(s) and company)

and gives notice to the Supervisor of Wells of the need for terminating the prior bond(s) as listed herein with such termination to be effective as of the time that this bond becomes effective.

Signed, sealed and dated the _____ day of _____, _____

(Principal)

(Surety)

By _____
(Signature)

By _____
(Signature)

(Name and title)

(Name and title)

When the Principal or Surety executes this bond by an agent, power of attorney or other evidence of authority must accompany the bond.

| DEQ USE ONLY | | |
|---------------|-----------------------------|-----------------|
| Permit number | Issue date | |
| Type of well | Current true vertical depth | Purpose of bond |

MAIL TO:
OFFICE OF GEOLOGICAL SURVEY
MICHIGAN DEPT OF ENVIRONMENTAL QUALITY
PO BOX 30256
LANSING, MI 48909-7756

Excerpts from General Rules governing oil and gas operations (effective 9/20/96)

R 324.211 Liability on conformance bond.

Rule 211.

(1) The liability on the conformance bond is conditioned upon compliance with the act, these rules, permit conditions, instructions, or orders of the supervisor. Subject to the provisions in R 324.213, liability shall cover all operations of the permittee as follows:

- (a) Through transfer of the permit for the subject well pursuant to R 324.206(6).
- (b) Through final completion approved by the supervisor of the subject well.
- (c) Otherwise as approved by the supervisor.

(2) The supervisor shall look to the conformance bond for immediate compliance with, and fulfillment of, the full conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor. All expenses incurred by the supervisor in achievement of compliance with, and fulfillment of, all conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor shall be paid by the permittee or the surety or from cash or securities on deposit. The claim shall be paid within 30 days of notification to the permittee or surety that expenses have been incurred by the supervisor. If the claim is not paid within 30 days, the supervisor, acting for and on behalf of the state, may bring suit for the payment of the claim.

R 324.212 Conformance bond amounts.

Rule 212.

A person who drills or operates a well shall file a conformance bond with the supervisor for the following amounts, as applicable:

(a) Single well conformance bonds shall be filed in the following amounts, as applicable:

- (i) \$10,000.00 for wells up to and including 2,000 feet deep, true vertical depth.
- (ii) \$20,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.
- (iii) \$25,000.00 for wells deeper than 4,000 feet, but not deeper than 7,500 feet, true vertical depth.
- (iv) \$30,000.00 for wells deeper than 7,500 feet, true vertical depth.

(b) A person may file single well conformance bonds in an amount equal to 1/2 of the amount specified in subdivision (a) of this rule for wells where well completion operations have not commenced. A person may not file single well conformance bonds under this subdivision for more than 5 wells. A person shall file single well conformance bonds in the full amount specified in subdivision (a) of this rule or file a blanket conformance bond as specified in subdivision (c) of this rule or submit a statement of financial responsibility pursuant to R 324.210 before the commencement of well completion operations on any well.

(c) Blanket conformance bonds may be filed as an alternative to single well conformance bonds. If a blanket conformance bond is utilized, then the permittee shall provide the supervisor with a list of wells covered by the blanket conformance bond. A maximum of 100 wells may be covered by a blanket conformance bond. If the permittee has more than 100 wells in a category, then the additional wells may be covered by single well conformance bonds or additional blanket conformance bonds. Blanket conformance bonds shall be filed in the following amounts, as applicable:

- (i) \$100,000.00 for wells up to and including 2,000 feet deep, true vertical depth.
- (ii) \$200,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.
- (iii) \$250,000.00 for wells deeper than 4,000 feet, true vertical depth.

(d) A person shall not be required to file a blanket conformance bond or bonds in an aggregate amount of more than \$250,000.00. When the aggregate amount of the conformance bonds is \$250,000.00, the permittee may file 1 blanket conformance bond of \$250,000.00 to cover all of his or her wells.

R 324.213 Cancellation of conformance bonds issued by a surety.

Rule 213.

(1) A surety company may cancel a conformance bond acquired pursuant to these rules upon 90 days' notice to the supervisor of the effective date of cancellation. However, the surety company shall retain liability for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred during the time the conformance bond was in effect.

(2) Forty days before the effective date of cancellation, as provided in subrule (1) of this rule, a permittee shall secure a conformance bond from another surety company authorized to do business in the state of Michigan, deposit cash or other securities, or bring the well to final completion. Failure to comply with this subrule shall be cause for the immediate suspension of any or all components of the operations on the well.

(3) A surety company shall remain liable until the violations have been corrected and the corrections are accepted by the supervisor for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred at the well during the time the conformance bond was in effect before the effective date of cancellation.

R 324.214 Limitation of additional liability of blanket conformance bonds.

Rule 214.

A surety company may refuse to accept liability for additional wells under a blanket conformance bond by giving 10 days' notice by registered mail to the supervisor. Subject to the provisions of R 324.213, the blanket conformance bond shall continue in full force and effect as to all other wells covered by the blanket conformance bond for which permits were granted or transferred to the permittee before the effective date of the notice.

R 324.215 Release of conformance bonds; release of well from blanket conformance bond.

Rule 215.

(1) A conformance bond shall be released or a well shall be released from a blanket conformance bond, subject to the provisions of R 324.213, by the supervisor or authorized representative of the supervisor if a permittee disposes of the well and the permit for the well has been transferred to a new person pursuant to R 324.206(6) or if the well has been plugged and proper site restoration has been performed pursuant to R 324.1003, including the filing of the mandatory records.

(2) The release of the conformance bond or the release of a well from a blanket conformance bond does not release a permittee from liability for any violations of the act, these rules, permit conditions, instructions, or orders of the supervisor which occurred during the time the conformance bond was in effect and which have not been corrected and accepted by the supervisor.

(3) A conformance bond filed to comply with a permit that has become terminated shall be released if there is final completion.



WELLHEAD BLOWOUT CONTROL SYSTEM

Worksheet supplement for "Application for Permit to Drill or Deepen a Well"

This information is required by authority of Part 615 Supervisor of Wells or Part 625 Mineral Wells, Act 451 PA 1994, as amended, in order to obtain a permit.

| |
|----------------------|
| Applicant |
| Well name and number |

Max. anticipated surface pressure _____

Annular B.O.P. _____", _____ W.P.

B.O.P. _____ Rams _____", _____ W.P.
(Pipe/Blind)

B.O.P. _____ Rams _____", _____ W.P.
(Pipe/Blind)

Check Valve _____", _____ W.P.

Valve _____", _____ W.P.

Valve _____", _____ W.P.

Valve _____", _____ W.P.

Valve _____", _____ W.P.

Spool _____", _____ W.P.

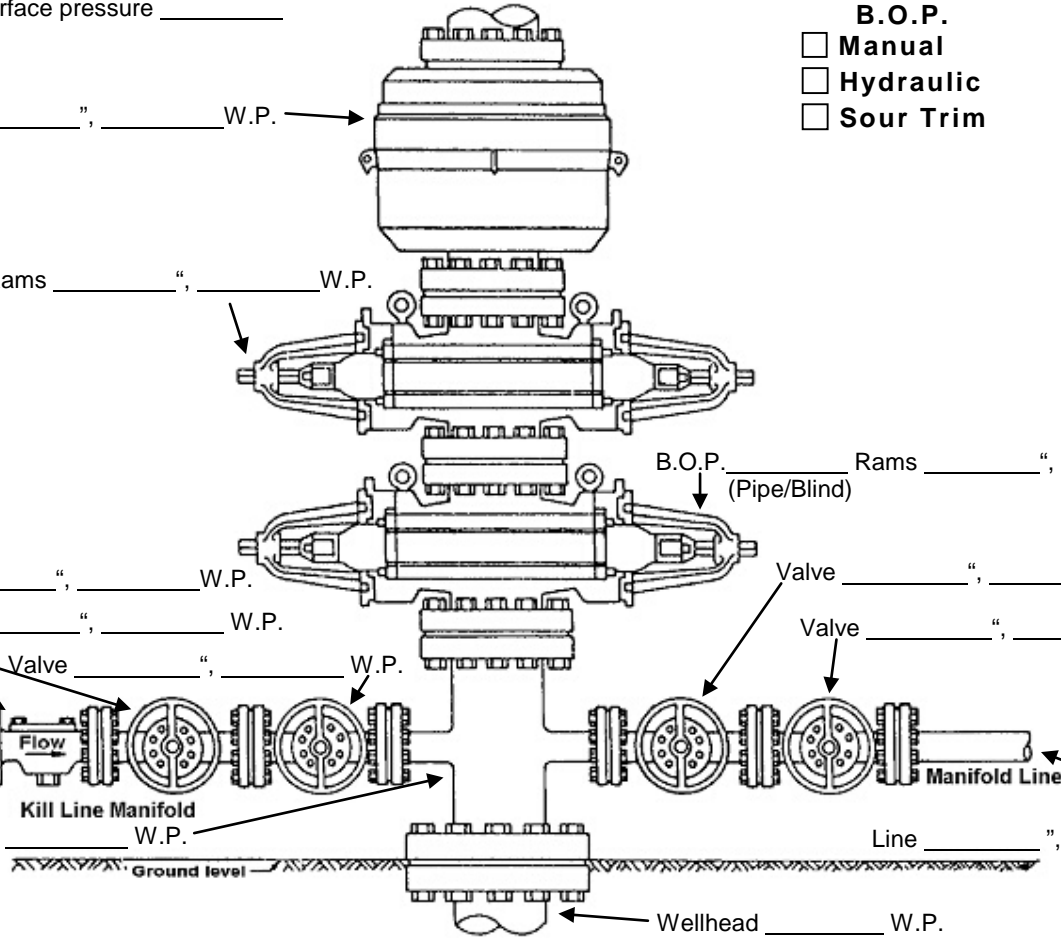
Kill Line Manifold

Line _____", _____ W.P.

Manifold Line

Wellhead _____ W.P.

- B.O.P.**
- Manual
 - Hydraulic
 - Sour Trim



Fill above blanks with applicable information. If not applicable, enter "N.A." or cross-out item shown. Describe test pressures and procedure for conducting pressure test. Identify any exceptions to R324.406 being requested.



APPLICATION TO:

- CHANGE WELL STATUS OR**
 PLUG AND ABANDON WELL

Required by authority of Part 615 Supervisor of Wells or Part 625 Mineral Wells, of Act 451 PA 1994, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment.

- Part 615 Oil or Gas Well Part 625 Mineral Well

| | | | | |
|---|---------------|-------------------------------|---------------|-----------------------------|
| Change of well status requested to: <input type="checkbox"/> Plug back <input type="checkbox"/> Perforate <input type="checkbox"/> Temporarily abandon <input type="checkbox"/> Convert to _____ <input type="checkbox"/> Other _____ | Permit number | | Type of well | |
| | API number | | | |
| Last production/injection rate and type of fluid | | Name and address of permittee | | |
| Brief description of project | | Well name and number | | Well location |
| Work to be done by | | Township | | County |
| | | Date drilling completed | | Date last produced/utilized |
| | | | Starting date | |

CASING AND CEMENTING RECORD

| Hole dia | Casing dia & wt/ft | Depths set | Cement quantity, type, additives | Cement top | Perforations |
|----------|--------------------|------------|----------------------------------|------------|--------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Formation record (formation and depth of top, oil, gas and water shows, etc.):

formation depth

Detail proposed procedures:

Name/signature (authorized representative):

Date:

FOR OFFICE OF GEOLOGICAL SURVEY USE ONLY

DEQ additional requirements:

Yes No Not applicable Production tests to commence within 10 days of completion and to be filed

Yes No Service company records are to be filed

| | | | |
|------------------|---------|----------------|-------------------|
| Approved by DEQ: | Office: | Approval date: | Termination Date: |
|------------------|---------|----------------|-------------------|

Mail original to District Office for department approval

Note: A Record of Well Plugging or Change of Well status (EQP 7200-8) and any requested service company records are to be filed within 60 days of completion at the District Office.

APPLICATION TO:

- CHANGE WELL STATUS OR**
- PLUG AND ABANDON WELL**

Permit number

API number

Well name and number

Continuation of proposed procedures



RECORD OF WELL PLUGGING OR CHANGE OF WELL STATUS

Required by authority of Part 615 Supervisor of Wells or Part 625 Mineral Wells of Act 451 PA 1994, as amended
Non-submission and/or falsification of this information may result in fines and/or imprisonment.

- Part 615 Oil/Gas Well Plugging
- Part 625 Mineral Well Change of Well Status

| | | |
|---|------------------------------|--------------------------------|
| | Permit number | Well name and number |
| API number | | |
| Name and address of permittee | | |
| Name and address of contractor/service company | Type of well | Field name |
| | Surface location | |
| | 1/4 1/4 1/4 | Sec T R |
| | Township | County |
| | Date plugging/change started | Date plugging/change completed |
| DEQ employee issuing plugging permit or approving Change of Well Status. | | Date issued |
| Any change of well status which results in a change of production or a change in injectivity must include production or injection test records. All records must include a narrative or daily chronology and signed certification noted on reverse. | | |

WELL PLUGGING (Hole conditions after plugging)

CASING

| Casing size | Where set | Amount casing pulled | Depth casing cut/perfed; or windows milled |
|-------------|-----------|----------------------|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

PLUGS

| Depth of plug | Make and type of bridge or plug | Cement plugs: type, amount of cement & mix water | Additives, type and percent | Volume and types of spacers/flushes | Wait time | Tagged Top? Y/N |
|-----------------|---------------------------------|--|-----------------------------|-------------------------------------|-----------|-----------------|
| Bottom Top | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Check if NORM or other materials were left or reinserted into wellbore. If so, describe materials fully in the Daily Chronology section on reverse.

Check if cores were taken and attach core descriptions

Mail completed original within 60 days after completion of plugging/change of a Part 615 oil/gas well or within 30 days of a Part 625 mineral well to:

OFFICE OF OIL, GAS, AND MINERALS
MICHIGAN DEPT OF ENVIRONMENTAL QUALITY
PO BOX 30256
LANSING, MI 48909-7756

COMPLETE BOTH SIDES

| | |
|------------|---------------|
| API number | Permit number |
|------------|---------------|

CHANGE OF WELL STATUS

Change was to: Convert current zone to: Remediate well: Plugback (recomplete as) Redrill:

| | | | |
|---|--|--|--|
| <input type="checkbox"/> Production | <input type="checkbox"/> Perf and test existing zone | <input type="checkbox"/> New production zone | <input type="checkbox"/> Horizontal drain hole |
| <input type="checkbox"/> Disposal | <input type="checkbox"/> Repair casing/cement | <input type="checkbox"/> Disposal | <input type="checkbox"/> Collapsed casing |
| <input type="checkbox"/> Secondary recovery | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Secondary recovery | <input type="checkbox"/> Underream open hole |
| <input type="checkbox"/> Storage | | <input type="checkbox"/> Storage | |
| <input type="checkbox"/> Other _____ | | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ |

Well casing record - BEFORE change

| Casing | | Cement | | Perforations | | | Acid or fracture treatment record |
|--------|-------|--------|------|--------------|----|------------------|-----------------------------------|
| Size | Depth | Sacks | Type | From | To | If plugged, HOW? | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Well casing record - AFTER change (Indicate additions and changes only, complete test record)

| Casing | | Cement | | Perforations | | | Acid or fracture treatment record |
|--------|-------|--------|------|--------------|----|------------------|-----------------------------------|
| Size | Depth | Sacks | Type | From | To | If plugged, HOW? | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

BEFORE CHANGE

AFTER CHANGE

| | | | | | | | |
|-------------|--------------|--------------------|----------|-------------|--------------|--------------------|----------|
| Total depth | Completed Fm | Well completed for | | Total depth | Completed Fm | Well completed for | |
| BOPD | MCFGPD | Inj Rate | Pressure | BOPD | MCFGPD | Inj Rate | Pressure |

DAILY PRODUCTION TEST RECORD

DAILY INJECTION TEST RECORD Injection well Brine disposal

| Date | Oil (bbls) | Water (bbls) | Gas (Mcf) | Pressure | | Date | Bbls water or Mcf gas | Pressure | | Specific gravity of water |
|------|------------|--------------|-----------|----------|--------|------|-----------------------|-----------|--------|---------------------------|
| | | | | Tubing | Casing | | | Beginning | Ending | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

DAILY CHRONOLOGY

Describe in detail the daily chronology of change/plugging, include days shut down. Describe exceptions to issued plugging instructions. Describe tools, tubing, etc. left in hole and any logs run. Include dates pits filled, surface restored etc. Use additional pages as needed.

| Date | Narrative |
|------|-----------|
| | |

NOTICE: Under Part 615 Supervisor of Wells or Part 625 Mineral Wells, Act 451 PA 1994, as amended, a well owner has continuing liability for the integrity of a plugged well.

CERTIFICATION "I state that I am authorized by said owner. This report was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."

| | | |
|-----------------------------------|----------------------|------|
| Name and title (printed or typed) | Authorized signature | Date |
|-----------------------------------|----------------------|------|

NOTE: Bonds cannot be terminated until plugging is completed, cellar, rat and mouse holes, and pits filled, site leveled and cleaned and records filed.



ANNUAL CERTIFICATION FOR BLOWOUT PREVENTERS, ACCUMULATORS, PUMPS AND SECONDARY STSTEMS

By authority of Part 615 or Part 625 of Act 451 PA 1994, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment.

| |
|---|
| 1. Name & address of company owning equipment |
| Rig name & type that equipment is assigned to |

2. BLOWOUT PREVENTER ASSEMBLY COMPONENTS TESTED (If more than 2 sets of rams, use additional sheets)

| | Annular | Blind ram | Pipe ram |
|------------------|---------|-----------|----------|
| Manufacturer | | | |
| Model No | | | |
| Serial No | | | |
| Working pressure | | | |
| Test pressure | | | |
| Opening volume | | | |
| Closing volume | | | |

3. BLOWOUT PREVENTER ASSEMBLY PRESSURE TEST

| Unit | Annular | Blind rams | Pipe rams | Upper kelly ck | Lower kelly ck. | Inside BOP |
|------------------------|---------|------------|-----------|----------------|-----------------|------------|
| Pressure applied | | | | | | |
| Time held | | | | | | |
| Final pressure | | | | | | |
| Operate locking screws | | | | | | |

4. ACCUMULATOR AND BOP CONTROL MANIFOLD

| | |
|---|--|
| System pressure reducing valve <input type="checkbox"/> Yes <input type="checkbox"/> No | Annular regulating valve <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Accumulator volume & type | Bottle precharge pressure |
| No. 1 _____ psi | No. 2 _____ psi |
| No. 3 _____ psi | No. 4 _____ psi |
| No. 1 type _____ | No. 2 type _____ gpm |
| Air <input type="checkbox"/> Yes <input type="checkbox"/> No | Nirtrogen <input type="checkbox"/> Yes <input type="checkbox"/> No |
| No. of stations | Other _____ |
| Reservoir tank volume | Reservoir level |
| Total gals capacity _____ Gals/in _____ | Bottles empty _____ in |
| | Bottles full _____ in |
| | Blind ram control guard <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Controls labelled correctly <input type="checkbox"/> Yes <input type="checkbox"/> No |

5. REMOTE STATION Yes No

| | | | |
|---|---|---|---|
| Number of stations | Power supply | Location | Pressure on line _____ psi |
| Control line tested <input type="checkbox"/> Yes <input type="checkbox"/> | Blind ram control guard on <input type="checkbox"/> Yes <input type="checkbox"/> No | Labelled correctly <input type="checkbox"/> Yes <input type="checkbox"/> No | Fluid in system <input type="checkbox"/> Air <input type="checkbox"/> |

6. ACCUMULATOR PERFORMANCE TEST

| Blowout preventer unit | accumulator only pressure | | | pump only pressure | | | Accumulator recharge time | |
|------------------------|---------------------------|---------|-------|--------------------|---------|-------|---------------------------|---------|
| | Time | Initial | Final | Time | Initial | Final | Minutes | Seconds |
| Annular | | | | | | | | |
| Blind rams | | | | | | | | |
| Top pipe rams | | | | | | | | |
| Pipe rams | | | | | | | | |

7. CHECK OF ACCUMULATOR BOTTLES

| | | |
|---|---|----------------------------------|
| (Pumps/power off) Starting pressure _____ psi | After closing bottom rams _____ psi | After closing top rams _____ psi |
| After closing annular _____ psi | Calculated fluid volume remaining _____ gals to | _____ psi |

| | | |
|---|--|-----------------------------|
| 8. Visual Check Comments | | |
| 9. What two (2) types of OPERABLE secondary closing systems are installed | | |
| 10. <input type="checkbox"/> Yes <input type="checkbox"/> No Are all kill, choke valves and checks independently pressure tested to manufactureres working pressure? ANNULAR BOP, BLIND RAMS, PIPE RAMS AND ACCUMULATOR ARE CERTIFIED AS A SINGLE UNIT. ANY CHANGE TO THE COMPONENTS DESCRIBED IN 2 & 4 ABOVE WILL REQUIRE IMMEDIATE RECERTIFICATION. | | |
| 11. I hereby certify that the above are true tests and cumulatively comply with the product manufacturer's minimal operational specifications. | | |
| Independent testing company _____ | Signature of authorized representative _____ | Date of certification _____ |

Recertification is required annually. It must be posted at the rig and match the BOP equipment in use.

Mail original to: Permit and Bonding Unit, Office of Oil, Gas, and Minerals, Michigan Department of Environmental Quality, P.O. Box 30256, Lansing, MI 48909-7756; or DEQ-Oil and GasPermitApplications@michigan.gov.



WELL PERMITTEE ORGANIZATION REPORT

Required by authority of Part 615 SUPERVISOR OF WELLS and Part 625 MINERAL WELL, Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment.

PURPOSE FOR FILING: New Change of Principal or Agent Address Correction Name Change

ORGANIZATION Enter the complete organization name, plan, and current business addresses and phone number.

| | |
|--|--|
| <p>1. Company name (as shown on permit to drill)</p> <p>Mailing Address City, State, Zip</p> <p>Street Address City, State, Zip</p> <p>Phone Fed. ID No.</p> | <p>2. If organization shown in 1 is a subsidiary or an assumed name (dba), give name and address of associated or parent</p> |
|--|--|

3. Current Organization Plan (check one)

| | | | |
|--------------------------------------|--|--|--|
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Joint Venture | <input type="checkbox"/> Limited Partnership | <input type="checkbox"/> Limited Liability Company |
| <input type="checkbox"/> Partnership | <input type="checkbox"/> Trust | <input type="checkbox"/> Sole Proprietorship | <input type="checkbox"/> Other |

4. If reorganization or name change, name & address of previous organization

PRINCIPALS List all corporate officers, directors, incorporators, partners, or shareholders who have the authority to or responsibility for making operational decisions including siting, drilling, operating, producing, reworking, and plugging of wells. Attach extra sheet if needed.

| 5. Full Name | Title | Address, if different from address in 1 above |
|--------------|-------|---|
| | | |

EMPLOYEES List names of persons, employees of the organization, who are authorized to submit applications, workplans, or records pursuant to the above cited Act.

| 6. Full Name | Position | Address or Phone |
|--------------|----------|------------------|
| | | |

AGENTS List names of persons, other than employees of the organization, who are authorized to submit applications, work plans, or records pursuant to the above cited Act.

| 7. Full Name | Company | Address or Phone |
|--------------|---------|------------------|
| | | |

Certification "I state that I am authorized to make this report. This report was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."

| | | |
|---------------------|-----------|------|
| Name of a principal | Signature | Date |
| | | |

Mail original to: Permit and Bonding Unit, Office of Oil, Gas, and Minerals, Michigan Department of Environmental Quality, P.O. Box 30256, Lansing, MI 48909-7756; or DEQ-OilandGasPermitApplications@Michigan.gov.



INJECTION WELL DATA

Supplemental information for drilling or converting to an injection well
By authority of Part 615 or Part 625 of Act 451 PA 1994, as amended.
Non-submission and/or falsification of this information may result in fines and/or imprisonment.

| |
|----------------------|
| Applicant |
| Well name and number |

INSTRUCTIONS: Complete all portions of form which apply to this well. **Attach supplemental documents as needed.**

- File a separate plat which identifies the depth and location of this proposed well and all producing, abandoned, or drilling wells within 1320 feet of it. Also identify the permittee of each producing well within 1320 feet of this proposed well.
- Enclose a copy of the completion reports for all wells and the plugging records for all plugged wells shown on the plat. Identify what steps will be necessary to prevent injected fluids from migrating up or into inadequately plugged or completed wells.
- If this is an existing well to be converted to an injection well, enclose this form with an Application To Change Well Status (form EQP 7200-6). Also enclose a copy of the completion report and geologic description and electric logs for this well.
- Injection wells (except for gas storage) must receive a mechanical integrity test every 5 years pursuant to Rule 324.805.

5. Type of fluids to be injected

Brine Natural Gas (omit #7 & #12)

Fresh Water (omit #12) Other _____

6. Maximum expected injection rate _____

7. Specific gravity of injected fluid _____

8. Maximum expected injection pressure _____

9. Maximum bottom hole injection pressure _____
Show calculations _____

10. Fracture pressure of confining formation _____
Show calculations _____

11. Fracture pressure of injection formation _____
Show calculations _____

12. Chemical analysis of representative samples of injected fluid

Specific conductance _____

| | |
|----------------------|----------------------|
| Cation (mg/l) | Anions (mg/l) |
| Calcium _____ | Chloride _____ |
| Sodium _____ | Sulfate _____ |
| Magnesium _____ | Bicarbonate _____ |
| Potassium _____ | |

What was the source of this representative sample? _____

13. Is this well to be completed in a potential or previous oil or gas producing formation? Yes No

If yes, provide a list of all offset permittees and proof of service of notification of this application to all permittees by certified mail.

14. Attach proposed plugging and abandonment plan. OR Briefly list depths, volumes and types of cement and mechanical plugs and depths where casing will be recovered.

Schematic of wellbore construction

Complete bottom of diagram as needed to conform with proposed construction (e.g. show rat hole below casing, open hole completion, packer loc. etc.)

Fresh water fms., name & depth _____

Base of freshwater, name & depth _____

Surface casing _____" x _____' _____'
Amount of cement _____ sacks
T.O.C. _____

Intermediate casing (if applicable) _____" x _____' _____'
Amount of cement _____ sacks
T.O.C. _____

Long string casing _____" x _____' _____'
Amount of cement _____ sacks
T.O.C. _____

Confining formation(s) _____
Depth to top _____
Depth to base _____

Injection formation(s) _____
Depth to top _____
Depth to base _____

Tubing _____" x _____' _____'
Packer Depth _____

Bottom TD or PBDT _____ ft. _____

15. Application prepared by (print or type): _____ Date _____



ACCEPTANCE OF CERTIFICATE OF DEPOSIT AS SINGLE WELL CONFORMANCE BOND

By authority of Part 615, Supervisor of Wells, Act 451 PA 1994, as amended.

CERTIFICATE OF DEPOSIT REQUIREMENTS FOR OIL WELL BONDS

To the financial institution: The financial institution will supply its own Certificate of Deposit (CD). By signature below, the bank's issuing officer certifies that the Certificate has been issued according to the following requirements:

1. The CD must be in the sole name of: State of Michigan, Supervisor of Wells, Department of Environmental Quality **No other name may be connected with the certificate as beneficiary, payee, in care of, joint tenant, etc.**
2. The account should show the State of Michigan Federal Tax Identification Number 38-6000134 and no other.
3. In order to comply with the USA Patriot Act, authorized delegates of the Supervisor of Wells can sign and return signature cards or account cards if delivered to them. However, Department employees cannot furnish their Social Security number. An alternative identification number such as employee identification number must be utilized. **The customer shall not sign signature cards or account cards.**
4. The maturity date shall not be less than one (1) year. The certificate shall be automatically renewable.
5. Interest must be paid by check at maturity. The interest will be returned to the permittee by the Department.
6. The Department will report interest earned on the certificate to the IRS under the applicant's Federal ID Number.
7. Your financial institution must provide 1099-INT for interest earned on this certificate. All statements should be sent to the address below.
8. **The Department of Environmental Quality is the sole beneficiary of the account. Redemption and disposition is to be authorized exclusively by the Department through written instructions on Department letterhead.**
9. All customer documents relating to the CD should be provided to the Department.
10. Questions regarding these requirements may be addressed to Permits and Bonding Unit at (517) 284-6826

FINANCIAL INSTITUTION CERTIFICATION

"I state that Certificate of Deposit # _____, issued by _____

_____, has been issued according to the instructions listed above."

| | |
|------------------------------|----------------------------------|
| Issuing officer's name _____ | Address of financial institution |
| Title _____ | |
| Signature _____ | |
| Date _____ | |

ACCEPTANCE OF CERTIFICATE OF DEPOSIT AS CONFORMANCE BOND

To the permittee: Fill in the blanks below with the permittee's name, Certificate of Deposit (CD) number, CD amount, bank name, and well name and number. Sign and date where indicated. By signature below, the parties accept the following agreement:

It is agreed between the State of Michigan, Department of Environmental Quality and _____

_____ hereafter the permittee, that Certificate of,

Deposit # _____ in the amount of \$ _____, issued by _____

_____ in the name of and for the benefit of the State of Michigan, Supervisor of Wells, Department of Environmental Quality, is accepted as a conformance bond required by PART 615 SUPERVISOR OF WELLS, 1994 PA 451, as amended, Section 324.61506(p) for the well known as _____

_____ and shall be available to the State of Michigan for all purposes for which the bond is required. It is the express intent of the parties that the Certificate of Deposit is a substitute for the filing of a conformance bond. It is further agreed that the Certificate of Deposit is subject to forfeiture, claim or return in like manner as a conformance bond. The permittee retains the right to any and all interest accruing to the Certificate of Deposit.

| | |
|---|---|
| Permittee | Michigan Department of Environmental Quality |
| By _____ Date _____ Permittee's Authorized Signature | By _____ Date _____ DEQ Authorized Signature |
| Permittee's Federal ID Number _____ | |

Enclose with CD and submit to: Office of Oil, Gas, and Minerals, Michigan Department of Environmental Quality, P.O. Box 30256, Lansing, MI 48909-7756.



STATEMENT OF FINANCIAL RESPONSIBILITY

Pursuant to Part 615, Supervisor of Wells, Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Falsification of this information may result in fines and/or imprisonment

Name and Address of Company

Statement for Fiscal Year beginning: _____

Initial Statement Information Update

Instructions:

Fill in Alternative A or Alternative B using amounts from the company's independently audited, year-end financial records for the latest completed fiscal year. Attach (1) a copy of an independent certified public accountant's report on examination of the company's financial statements for the latest completed fiscal year and (2) a special report, as specified in R 324.210(2)(c), from the company's independent certified public accountant. Updated information is required to be filed within 90 days after the close of each succeeding fiscal year. See R 324.210.

Alternative A [from R 324.210(3)(a)]

| Line | | Criteria |
|------|--|--|
| 1. | Amount of coverage to be demonstrated (<i>Amount of the conformance bond required under Part 615 which this financial test proposes to replace. See R 324.212</i>) | \$ |
| 2. | Total Assets in Michigan (see R 324.210 (3)) | \$ Not less than 3 times the amount in Line 1 |
| 3. | Net Working Capital | \$ Not less than 3 times the amount in Line 1 |
| 4. | Tangible Net Worth | \$ Not less than 3 times the amount in Line 1 |
| 5. | Two of the following three ratios: | |
| 5a. | Total Liability / Net Worth | Less than 2.0 |
| 5b. | Current Assets / Current Liabilities | Greater than 1.5 |
| 5c. | (Net Income + Depreciation + Depletion + Amortization) / Total Liability | Greater than 0.1 |

Alternative B [from R 324.210(3)(b)]

| Line | | Criteria |
|------|--|--|
| 6. | Amount of coverage to be demonstrated (<i>Amount of the conformance bond required under Part 615 which this financial test proposes to replace. See R 324.212</i>) | \$ |
| 7. | Total Assets in Michigan (see R 324.210 (3)) | \$ Not less than 3 times the amount in Line 6 |
| 8. | Latest Corporate Bond Rating | Not less than BBB or Baa |
| 9. | Bond rated by | Standard and Poor's or Moody's |
| 10. | Tangible Net Worth | \$ Not less than \$2,000,000 |

The above information is to demonstrate financial responsibility for the company's fiscal year beginning _____. I state that I am an authorized representative of the company identified above. This report was prepared by myself or under my supervision and direction. The above data have been derived from the company's independently audited year-end financial records for the latest completed fiscal year. On the basis of the listed data, I attest that the company identified above has passed the financial test specified in subrule 3 of R 324.210 of Part 615, Supervisor of Wells, Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

| | | |
|-----------------------------------|-----------|------|
| Name of Authorized Representative | Signature | Date |
|-----------------------------------|-----------|------|

Mail original and attachments to:
Office of Oil, Gas, and Minerals, Michigan Department of Environmental Quality, P.O. Box 30256, Lansing, MI 48909-7756.

Excerpts from General Rules regarding oil and gas operations (effective 9/20/96)

R 324.210 Conformance bond or statement of financial responsibility requirements.

Rule 210.

- (1) A person who files an application for a permit to drill and operate a well pursuant to R 324.201, or who acquires a well pursuant to R 324.206(6), shall file a conformance bond with the supervisor on a form prescribed by the supervisor or shall submit a statement of financial responsibility pursuant to subrule (2) of this rule.
- (2) A statement of financial responsibility shall consist of the following:
 - (a) A written statement which is signed by the person, which lists data that show that the person meets the criteria specified in subrule (3) of this rule, and which states that the data are derived from an independently audited year-end financial statement.
 - (b) A copy of an independent certified public accountant's report on examination of the person's financial statements for the latest completed fiscal year.
 - (c) A special report from the person's independent certified public accountant stating that the accountant has compared the data listed in the statement provided under subdivision (a) of this subrule with the amounts in the corresponding year-end financial statement and that nothing came to the attention of the accountant which caused the accountant to believe that the financial records should be adjusted.
- (3) When a person submits a statement of financial responsibility instead of a conformance bond, a person shall meet the criteria of either subdivision (a) or (b) of this subrule, as follows:
 - (a) A person required to file the statement of financial responsibility shall have all of the following:
 - (i) Two of the following 3 ratios:
 - (A) A ratio of total liabilities to net worth of less than 2.0.
 - (B) The ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities is more than 0.1.
 - (C) A ratio of current assets to current liabilities of more than 1.5. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.
 - (ii) Net working capital and tangible net worth each of which is not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond.
 - (iii) Total assets in Michigan that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.
 - (iv) A written statement from a certified public accountant which states that no matter came to the attention of the accountant which caused him or her to believe that the financial records should be adjusted.
 - (b) A person required to file a statement of financial responsibility shall have all of the following:
 - (i) A current rating for his or her most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's.
 - (ii) A tangible net worth of not less than \$2,000,000.00.
 - (iii) Total assets in Michigan that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.
- (4) A person shall submit a statement of financial responsibility to the supervisor not less than 60 days before the date the financial assurance is scheduled to take effect.
- (5) After the initial submission of a statement of financial responsibility, the person shall send an updated statement of financial responsibility to the supervisor within 90 days after the close of each succeeding fiscal year.
- (6) If a person no longer meets the requirements of subrule (3) of this rule, he or she shall send notice to the supervisor of the intent to establish alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule. The notice shall be sent, by certified mail, within 90 days after the end of the fiscal year for which the year-end review of the financial records shows that the person no longer meets the requirements. The person shall provide the alternate financial assurance within 120 days after the end of the fiscal year.
- (7) The supervisor may, based on a reasonable belief that the person no longer meets the requirements of subrule (3) of this rule, require a report at any time from the person in addition to the information required by subrule (3) of this rule. If the supervisor finds, on the basis of a review of the report or other information, that the person no longer meets the requirements of subrule (3) of this rule, then the supervisor or authorized representative of the supervisor shall notify and inform the person. Within 30 days of the notification, the person shall provide alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule or shall bring the well to final completion. Failure to comply with this subrule shall be cause for immediate suspension of any or all components of the operations on the well.
- (8) The supervisor may require additional conformance bonds to ensure compliance with orders of the supervisor, excluding proration, compulsory pooling, or spacing orders. The conformance bond shall be in addition to the conformance bonds filed pursuant to R 324.212(a), (b), or (c) and shall be required only if the supervisor determines that the existing conformance bond is not adequate to cover the estimated cost of plugging the well and conducting site restoration or other obligations of the permittee under the order. A person is not required to file additional conformance bonds pursuant to this subrule if the person has filed a blanket conformance bond or bonds in an aggregate amount of \$250,000.00 or more, pursuant to R 324.212(d). Subject to the provisions of R 324.213, the additional conformance bond shall be released when the permittee has complied with all provisions of the orders of the supervisor.
- (9) Conformance bonds that were in effect before the effective date of these rules shall remain in effect under the conditions upon which they were filed and accepted by the supervisor. However, in place of conformance bonds that were in effect before the effective date of these rules, a permittee may file conformance bonds or submit a statement of financial responsibility pursuant to these rules for wells permitted under the act before the effective date of these rules.



SOIL EROSION & SEDIMENTATION CONTROL PLAN

By authority of Part 91, and Part 615 or Part 625 of Act 451 PA 1994, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment. Applicants for multisource commercial hazardous waste disposal wells under Part 625 are required to obtain a Part 91 permit from a county or local enforcing agency

Part 615 Oil/Gas Well Part 625 Mineral Well

1. Name and address of applicant _____

 Phone: (____) _____ Fax: (____) _____

2. Well or project name: _____
 3. Well or project location: _____
 Section(s) _____ T _____ R

4. Name and address of County or local Enforcement Agent (CEA) _____
 5. Township _____ 6. County _____

7. Date earth changes expected to start _____

8. Date of expected completion _____

9. Name and address of person responsible for earth change: _____
 Phone: (____) _____ Fax: (____) _____

10. Name and address of person responsible for maintenance: _____
 Phone: (____) _____ Fax: (____) _____

11. Send copies of supplemental plat required by Part 615, R 324.201(2)(b) or R 324.504(4), and this form and all attachments, to CEA. For Part 625 Mineral Wells, send to CEA only as instructed by OOGM staff.
 Date sent to CEA _____

EARTH CHANGE ACTIVITIES

12. Project description: (Project activities may be permitted sequentially.)

a. Number of well sites _____, _____ acres d. Flow line(s) trenched in off well site* _____ feet, _____ acres
 b. Number of surface facility sites _____, _____ acres e. Flow line(s) plowed in off well site* _____ feet, _____ acres
 c. New access roads _____ feet, _____ acres *Contact CEA for fee schedule

13. Describe sites for which permits are being sought under Part 301 (Inland Lakes & Streams) _____
 Describe sites for which permits are being sought under Part 303 (Wetlands) _____
 List file numbers if known _____

14. Attach detail map at scale of 1"=200' or larger, with contour lines at a minimum of 20' intervals OR percent slope descriptions.

15. Areas requiring control structures

Will earth changes occur in areas with slopes of 10% or greater; areas where runoff water is likely, such as runs greater than 500' of moderate slope (5% to 10%), narrow valley bottoms, etc.; areas within 500' of a lake or stream; or other areas where sedimentation to a wetland or drainage way may occur?
 Yes No

Indicate any of the following erosion control structures that will be utilized. Identify location on detail map and attach detail plan.
 Indicate on plan whether erosion control structures are temporary or permanent.
 Diversions Culverts Sediment basins Silt fences Rip-rap Berms Check dams
 Other _____

16. Site restoration

Topsoil will be segregated from subsoil and stockpiled OR No topsoil on site
 Recontour and revegetate as soon as weather permits. Seed mix _____
 Describe other proposed methods of restoration _____

17. Application prepared by (name) _____ Signature _____ Date _____

FOR USE OF COUNTY OR LOCAL ENFORCING AGENT

INSTRUCTIONS TO COUNTY OR LOCAL ENFORCING AGENT: Copies of supplemental plat required by Part 615, R 324.201(2)(b) or R 324.504(4), and this form and all attachments are provided for CEA review and informational purposes only. Submittal to CEA is not a requirement under Part 615 or 625. Part 615 and 625 Permits to Drill and Operate include erosion control plan approval for well sites, access roads, flow lines, and surface facilities. Return this form to the applicable field or district office of the Office of Oil, Gas, and Minerals (OOGM) within 30 days of receipt. OOGM will consider all comments and recommendations in reviewing the application.

17. Comments _____

Conducted on site inspection Date _____ Inspected site with representative of applicant Date _____

CEA (name) _____ Date _____

(Part B-5 continued)

c. Surface waters, floodplains, wetlands, natural rivers, critical dune areas, threatened or endangered species within 1320' and Great Lake shorelines within 1500' of the well site

d. Describe the actions to be taken to mitigate impacts to any of the items identified in Part B-5 a-c above.

6. Identify the source of fresh water used for drilling and completing this well

- "Permanent" water well, to be retained after final completion OR used for drinking water (shall be drilled and installed pursuant to Part 127 of 1979 PA 368, as amended)
- "Temporary" water well, will be plugged upon final completion and not used for drinking water (consult R 324.403 (2) for minimum construction requirements)
- Fresh water will be hauled from existing water well or municipal source (identify) _____
- No fresh water will be used in drilling this well

7. Method of Well Completion and Well Treatment (check all that may apply)

- Perforated casing
 - Acidizing
 - Open Hole
 - Hydraulic Fracturing Estimated Total Fluid Volume _____
 - Other (describe) _____
- NOTE: Fluid volumes in excess of 100,000 gallons are subject to SOW Instruction 1-2011

8. Pit location and handling and disposal of drill cuttings, muds and fluids

- Anticipated depth to groundwater _____ Method determined by _____
- On site in-ground pit, anticipated dimensions: L _____ W _____ D _____
 - Remote in-ground pit, anticipated dimensions: L _____ W _____ D _____
- Attach approval of landowner and attach survey of remote pit location
- Well drilled below base of Detroit River Anhydrite. Describe how mud and cuttings pursuant to R324.407(7)(iv) will be handled. Pit fluids below DRA disposed by _____ licensed liquid waste hauler **OR** Pit fluids below DRA disposed at the _____ disposal well. If drill cuttings & mud don't pass paint filter test, they will be disposed at _____ landfill.
 - No salt cuttings **OR**
 - Salt cuttings dissolved and disposed by _____ licensed liquid waste hauler **OR**
 - Salt cuttings hauled to _____ landfill
 - Temporary pit, cuttings and muds disposed at (identify) _____
 - No in-ground pit, cuttings and muds disposed at (identify) _____
 - Pit will be solidified.

C. IMPACTS AS A RESULT OF PRODUCTION

- 1. Kind of well** exploratory development Other (describe) _____
- Antrim project (**submit separate project EIA, form EQP 7200-21, for access roads, flow lines, and surface facilities**) where is project EIA found? _____ and complete C-2, omit C-3 and C-4

- 2. Location of surface facilities (Prior to construction, the District Geologist, pursuant to R324.1002, must also approve all surface facility secondary containment plans.)**
- Greater than 300' from wellhead. Identify facility location on attached plat and complete C-3 and C-4.
 - Less than 300' from wellhead. Identify facility location on attached plat, complete C-3, omit C-4
 - Surface facility exists or was previously approved for construction and is known as _____ complete C-3, omit C-4.
 - Surface facility location was not determined for this **exploratory** well (omit C-3 and C-4). Submit a separate request for **Surface Facility Location Approval (form 7200-22)**, which includes a Facility Plan, Environmental Impact Assessment, and Soil Erosion and Sedimentation Control Plan, to District Geologist prior to construction pursuant to R324.504.

- 3. Flow Line Environmental Impact Assessment**
- Identify flow line location and course from well to the surface facility on attached plat. Flow line route dimensions _____ feet x _____ feet / 43,560 = _____ acres. Describe the topography, drainage, soil type(s), direction and percentage of slopes, land cover and present land use along the flow line route

- 4. Surface Facility Environmental Impact Assessment**
- a. Dimensions of surface facility _____ feet x _____ feet / 43,560 = _____ acres.
 - b. Describe the topography, drainage, soil type(s), direction and percentage of slopes, land cover, and present land use
 - 1. Along access route to surface facility

Part C-4, continued

2. At surface facility site

c. Are surface facilities likely to receive oil or gas with H₂S concentration greater than 300 ppm? Yes No, if yes, R324.1106(2) applies.

d. Will surface facilities be located in residentially zoned area? Yes No, If yes, R324.506 may apply

e. Identify the distance and direction to all of the following, and identify on attached plat

1. Distance and direction to all buildings, fresh water wells, public roads, power lines and other man-made features within 600' of surface facility

2. Distance and direction to any surface waters, floodplains, wetlands, natural rivers, critical dune areas, and threatened or endangered species within 1320' and Great Lakes shorelines within 1500' of the surface facility site

3. Describe the actions to be taken to mitigate impacts to any of the items identified in Part C-4e 1 and 2 above.

4. Distance and direction to all Type I and Type IIa public water supply wells within 2000' of the surface facility site and all Type IIb and Type III wells within 800' of the surface facility

Type I is a community water supply with year-round service ≥ 15 living units or ≥ 25 residents. Type II is a non-community water supply with ≥ 15 service connections or ≥ 25 individuals for not less than 60 days per year. Average daily water production: IIA $\geq 20,000$ GPD IIB $<20,000$ GPD Type III is a public water supply which is neither type I or II.

5. Method of brine disposal

Dedicated flow line to disposal well _____, permit number _____

Transported by tanker. Other _____

6. Method of transporting hydrocarbons past the point of sale

Oil sold through transmission line Gas sold through transmission line

Oil transported by tanker for sale Gas flared on site (production restrictions may apply)

Other _____

D. MITIGATION OF IMPACTS FROM DRILLING AND/OR PRODUCTION

Describe additional measures to be taken to protect environmental and/or land use values

E. ADDITIONAL PERMITS

Identify additional permits to be sought

F. SOIL EROSION AND SEDIMENTATION PLAN

Submit a soil erosion and sedimentation plan (form 7200-18) which addresses **each** well site, surface facility, and flow line route identified in this application. (Refer to requirements under Part 91, 1994 PA 451)

G. ALTERNATE WELL AND SURFACE FACILITY LOCATIONS

Were alternate surface locations considered for this well or surface facility?

No, alternate sites did not seem necessary or more desirable

Yes, the following locations were considered

Why were they rejected in favor of the proposed location?

H. CERTIFICATION

"I state that I am authorized by said applicant to prepare this document. It was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."

Name and title (printed or typed)

Authorized Signature

Date

On the FINANCIAL INSTITUTION'S Letterhead, all of the following or equivalent*:

ISSUING FINANCIAL INSTITUTION:

*Name and
address of
financial institution*

IRREVOCABLE STANDBY LETTER OF
CREDIT NUMBER _____

DATE OF ISSUE _____

EXPIRATION DATE _____

PURPOSE: Single well conformance bond
pursuant to: PART 615 SUPERVISOR OF
WELLS, 1994 PA 451, as amended

BENEFICIARY:

Supervisor of Wells
Michigan Department of Environmental Quality
Office of Oil, Gas, and Minerals
525 West Allegan, 1st Floor, South Tower
Lansing, MI 48933

APPLICANT:

*Name and
address of
credit applicant*

We hereby issue our Irrevocable Letter of Credit # _____ in your favor on behalf of
_____, hereinafter known as the Company, for a
sum of \$ _____ and _____ /100 dollars), available by your
drafts at sight drawn on our institution _____. Drafts
must be marked "Drawn under _____ Letter of Credit
_____" dated today's date.

This letter of credit is issued to provide financial assurance to the State of Michigan for the well known
as _____.

The Supervisor of Wells may draw on this Letter of Credit in the event (1) that the Department of Environmental Quality issues a Notice of Violation indicating that the Company has failed to comply with the provisions of PART 615 SUPERVISOR OF WELLS, 1994 PA 451, as amended in the final completion of its well or wells. "Final Completion" means the locating, drilling, completing, producing, reworking, plugging, filling of pits, and clean-up of well site, including the filing of prescribed records and approval thereof by the Supervisor of Wells; or (2) that the Company fails to provide the Supervisor of Wells with an extension of this Letter of Credit or other financial assurance or (3) that the Company is adjudged insolvent or bankrupt. The Company shall be deemed, for purposes of this letter of credit, adjudged bankrupt upon any petition under Title 11 of the United States Code, filed on the Debtors behalf, and an order for relief granted by any of the United States District or Bankruptcy Courts.

If any provision of this Letter of Credit is construed as ineffective by a court of competent jurisdiction, all other provisions of this Letter of Credit shall remain in full effect and be enforceable pursuant to the effective provisions contained herein.

This letter of credit is issued subject to the International Chamber of Commerce International Standby Practices 1998 (ISP98) and as to matters not governed by the International Standby Practices, aforementioned, shall be governed by, and construed in accordance with the laws of the State of Michigan.

Partial drawings are permitted without canceling the Letter of Credit balance. This original Letter of Credit must be submitted to us together with any drawings thereunder for our endorsement of any payments affected by us and or cancellation.

We agree to replace this original letter of credit in the event that it is lost, stolen, mutilated, or destroyed with one marked as a copy or replacement.

It is a condition of this Letter of Credit that it shall be automatically extended, without amendment, for additional terms of one (1) year from the present or any future expiration date, unless at least ninety (90) days before any expiration date, we give the Supervisor of Wells and the Company written notice by certified mail, return receipt requested or hand delivery, of our election not to consider this Letter of Credit renewed for any such additional period.

In the event we give notice of our election not to consider this Letter of Credit renewed and _____ fails to replace this Letter of Credit with other financial assurances acceptable to the Department, you may draw on this Letter of Credit, up to the aggregate amount, less any prior drafts presented by the Department and paid by us, not sooner than thirty (30) days after the date of such notice by presentation of a draft marked Drawn under, _____ Letter of Credit No. _____, accompanied by a statement purportedly signed by an authorized representative of the Department reading as follows:

“The Michigan Department of Environmental Quality is making this drawing because _____, has failed to replace this Letter of Credit with other financial assurances acceptable to the Department.

We hereby engage with you that drafts in conformity with the terms of this Letter of Credit shall be duly honored upon presentation and delivery of documents as specified to our office located at _____ on or after _____, 20__, and on or before _____ 20__ or any future expiration date. The amount of each draft must be endorsed on the reverse of this Letter of Credit by the negotiating financial institution.

Financial Institution Authority signature

Financial Institution Authority Name

Financial Institution Authority Title

=====

* Please do not change the language of the letter of credit in any way. Alterations may not be acceptable to the Department.

| BENEFICIARY MAILING ADDRESS: | BENEFICIARY STREET ADDRESS: |
|--|--|
| Permits & Bonding Unit | Permits & Bonding Unit |
| Office of Oil, Gas, and Minerals | Office of Oil, Gas, and Minerals |
| Michigan Department of Environmental Quality | Michigan Department of Environmental Quality |
| PO Box 30256 | South Tower 1st Floor |
| Lansing, MI 48909-7756 | 525 West Allegan St |
| | Lansing, MI 48933 |



AUTHORIZATION TO INJECT

Office of Oil, Gas, and Minerals
Michigan Dept. of Environmental Quality
PO Box 30256
Lansing MI 48909-7756

Permittee _____

Well Name _____

Permit No. _____

UIC Permit No. _____

Surface Location: Section _____ T _____ R _____

Township _____, County _____

Authorization to inject is granted for THIRTY DAYS, expiring _____,
for the limited purpose of conducting injectivity tests.

Authorization to inject is granted for _____ YEARS expiring _____
for: brine disposal
 secondary recovery
 oil and gas field waste

This authorization is granted by R324.802 through R324.803 of rules promulgated under Part 615, Supervisor of Wells, of Act 451 PA 1994, Natural Resources and Environmental Protection Act, as amended (NREPA). If the annual report required by Rule 806 is not filed by March 1, this authorization to inject is revoked and the permittee cannot continue injection until written reauthorization by the Supervisor has been received.

| | |
|-------------------------|------|
| Approved by (signature) | Date |
| | |



INJECTION WELL OPERATING REPORT

By authority of Part 615 of Act 451 PA 1994, as amended, or Supervisor of Wells order.

Non submission and/or falsification of this information may result in suspension of operations.

This report must be filed with the Supervisor of Wells within 45 days after the end of the month of injection.

| | |
|--|--|
| Operator _____ Address _____ _____ _____ | Permit No. _____ Well name & No. _____ _____ UIC permit number _____ |
| This report is for <input type="checkbox"/> Month _____ Year _____ (use one line per week) <input type="checkbox"/> Calendar year _____ (use one line per month) | Well type: <input type="checkbox"/> Disposal <input type="checkbox"/> Secondary recovery Injection fluid: <input type="checkbox"/> Brine/water <input type="checkbox"/> Natural gas <input type="checkbox"/> H2S <input type="checkbox"/> CO2 <input type="checkbox"/> Other: _____ |

| Month or Week | Annular pressure | Injection pressure | Injection rate per day | Total volume injected | |
|-------------------------------------|------------------|--------------------|------------------------|-----------------------|-----|
| | PSIG | PSIG | Bbls or Mcf | Bbls | Mcf |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| Maximum | | | | | |
| Average | | | | | |
| Total cumulative volumes for period | | | | | |

If measured values for the fracture pressure gradient and the injection fluid specific gravity are used in determining the maximum surface injection pressure, a yearly measurement for specific gravity is to be submitted as part of your annual report. If fracture pressure gradient is assumed to be .800 lbs/ft and the specific gravity of the injected liquid is assumed to be 1.2, no yearly measurement is needed.

Measured specific gravity of injection fluid _____ date _____

Have there been any changes in characteristics or sources of fluids that are being injected?
 No Yes If yes, please explain.

CERTIFICATION "I state that I am authorized by said owner. This report was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."

 Company Representative Date

Submit to: OFFICE OF OIL, GAS, AND MINERALS
 MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 PO BOX 30256
 LANSING, MICHIGAN 48909-7756