

27.23-13 - Oil and Gas Well Site Applications, State-Owned Lands (Issued: 07/11/2005)

Supersedes

- DNR Department Procedure 2313.13 - Oil and Gas Well Site Applications, State-Owned Lands, Issued 03/11/1999.

NOTE: The content of this document has not been revised since Issued 03/11/1999.

The only change involves the conversion and numbering to the current DNR Policies & Procedures Manual Structure.

Approval Signatures

- John M. Robertson, Chief, Forest Management Division
- Rodney A. Stokes, Chief, Parks and Recreation Division
- Kelley D. Smith, Chief, Fisheries Division
- Rebecca A. Humphries, Chief, Wildlife Division
- Arminda S. Koch, Chief, Land and Mineral Services Division
- George E. Burgoyne, Jr., Resource Management Deputy

POLICY:

It shall be the policy of the Natural Resources Commission (NRC) to manage State-owned minerals in a manner that protects and enhances the public trust. Surface and mineral ownership may be consolidated when it is in the best interests of the State. Minerals shall be developed in an orderly manner to optimize revenue consistent with other public interest and natural resource values.

PURPOSE:

This procedure was written to ensure that oil and gas development on State-owned surface is accomplished in a consistent manner Statewide. The Department of Natural Resources (DNR) relies on oil and gas revenue for the purchase of recreation land.

To provide for consistent and timely review of use permit applications, applicants will be encouraged to submit preliminary applications for Department review prior to submission of the drilling permit application(s) or project plans. Development plans must be submitted for Department review for Antrim Gas Test Phase projects, Antrim Gas Development Phase projects and all other hydrocarbon development on State land.

The Land Manager is the Department representative in charge of reviewing drilling permit applications and use permits involving the use of State-owned surface lands.

The Land Manager is the primary liaison with the Department of Environmental Quality (DEQ), Geological Survey Division Area Geologist (Geologist). Responsibility for local implementation of the pertinent Memorandum of Understanding No. 4 between the Department and DEQ ([Appendix C](#)) is with the Land Manager.

The Land Managers are identified as follows:

- a. For Southern Lower Peninsula counties – Wildlife Management Unit Supervisor (coordinate with Fisheries and Parks and Recreation representatives).
- b. For Northern Lower Peninsula counties – Forest Unit Manager (coordinate with Wildlife Management Unit Supervisor, Fisheries Biologist and Parks and Recreation representative). Exception: For State lands other than State Parks in Mason, Mecosta, Newaygo and Oceana Counties the Wildlife Management Unit Supervisor will be the primary coordinator.
- c. For Upper Peninsula counties – same as Northern Lower Peninsula.

PRELIMINARY APPLICATION: (Optional)

WHO

DOES WHAT

Applicant

1. Contacts the Land Manager by telephone or in writing prior to performing a survey and submitting a drilling permit application to discuss proposal to determine if general locations for well sites, access roads, surface facilities and/or salt water disposal wells are acceptable.

Land Manager

2. Reviews submitted information and advises applicant of any known obstacles to proposal, such as nonleasable classification, management plan restrictions, etc.

Applicant

3. Submits written request, project plan, and application fee to the Land Manager. This must include the following:
 - a. Antrim Type Gas Projects: All detailed information needed to meet the “Requirements for an Antrim Gas Project Plan on State Lands, TEST PHASE or DEVELOPMENT PHASE” which is detailed in [Appendix A](#). Surveyor quality data is not required for any preliminary application.
 - b. Other Proposed Wells (Niagaran, Prairie Du Chien, Richfield, and all other formations): Detailed project information and maps to meet the PRELIMINARY APPLICATION portion of “Requirements for Well Sites Other Than Antrim on State Lands” per [Appendix B](#).
 - c. Submit the appropriate application fee for each well site requested per Department Fee Schedule. This application fee is intended to cover both the preliminary and final applications.

Land Manager

4. Upon receipt of the preliminary application and application fee, reviews for completeness in accordance with [Appendix A](#) or [Appendix B](#).
5. If incomplete, advises the Applicant what information is missing and requests submission.
6. Reviews the complete preliminary application and development plan with other resource managers, the Geologist, and other agencies as appropriate to obtain recommendations on the acceptability of the plan.
7. Modifications to the preliminary plan are agreed to by the Land Manager and other resource managers

Applicant

8. Modifies the preliminary development plan as appropriate and submits the well site permit application(s).

APPLICATION: (REQUIRED)

WHO

DOES WHAT

Applicant

1. Submits to the Land Manager a written request for surface use permits (well site permits and associated access roads,) with copies of all detailed information, surveys, and plans required under one of the following:
 - a. Requirements for an Antrim Gas Project Plan on State Lands, Test or Development Phase ([Appendix A](#)).
 - b. Requirements for well sites other than Antrim on State lands ([Appendix B](#)).

Requests should be submitted at the same time applicant submits the Drilling Permit Application(s) to DEQ, GSD.

2. Requests Special Use Agreement(s) from Land Manager for any proposed surface facility and salt water disposal well(s) ([Appendix A](#) and [B](#)). This includes expansions to existing well sites.

NOTE: For any well site or surface use permit application, the Applicant must submit the appropriate application fee, unless previously paid pursuant to PRELIMINARY APPLICATION 3.c., above.

3. Submits application to Land and Mineral Services Division (LMSD) for pipeline/flowline easements per Department Procedure 4605.5.

Land Manager

4. Upon receipt of the application and application fee, reviews for completeness in accordance with [Appendix A](#) or [Appendix B](#).
5. If incomplete, advises the Applicant what information is missing and requests submission.
6. Reviews the application and development plan for well sites, access roads, central processing facility and salt water disposal well with other resource management staff, the Geologist, and other agencies as appropriate to obtain recommendations on the acceptability of the plan.
7. Modifications to the plan are agreed to by the Land Manager and other resource managers and provided to Applicant.
 - a. Sends recommendations concerning the central processing facilities and salt water disposal well applications to the Land Managing Division Office.
8. Conducts the Drilling Permit Application review in conjunction with GSD-DEQ under M.O.U. No. 4 ([Appendix C](#)). The Land Manager and other resource personnel jointly review permit applications with the Geologist. Advises the Geologist if there are any

resource or other reasons the drilling permit application should be denied, location modified, or special conditions applied.

9. Works with the Applicant and Geologist to modify locations if needed.

Applicant

10. Modifies development plan if appropriate and resubmits.

Land Manager

11. Surface Use Permits (Well Site Permits) are offered to the Applicant for approved well site and access road locations. They are conditioned on and subject to issuance of a Drilling Permit by GSD-DEQ.

The Land Managing Division Office offers a Special Use Agreement for the facility and/or salt water disposal site to the Applicant for approved location(s).

APPENDIX A

Requirements for an Antrim Gas Project Plan on State Lands

TEST PHASE

Project Plan Requirements for a test phase for a geographic area have been developed in recognition that prior to a test program an operator may not have sufficient information to develop a full project plan. A certain amount of data is available and must be provided to the various Divisions of the Departments to allow them to perform a comprehensive review to the extent possible. These requirements will be applicable for a test project consisting of no more than **5 production wells, 1 disposal well, gathering lines and a test production facility**. This Project Plan is expected to contain enough information for the various Division personnel to evaluate the effects of the minimum impact required for the test as well as to obtain a general overview for the potential of the full project should one materialize.

Five copies of the plan are required (2 Geological Survey Division, 2 Forest Management Division, 1 Wildlife Division).

Part I of the Antrim Project Test Phase Plan shall consist of a scaled drawing (surveyor quality data is not required) using a **USGS Topographic Map, or equivalent**, as a base upon which are depicted the following:

- a. The anticipated or proposed unitized area outline if the project moves forward.
- b. Government (State, Federal, local) and private surface and mineral ownership. Indicate lease classification on map, (i.e. development, non-development, development with restrictions). It is not necessary to indicate the specific restrictions.
- c. County roads, trail roads and bridges.
- d. Designated recreational trails (i.e. snowmobile, off-road vehicles, hiking, etc.).
- e. Waterways, wetland areas and bodies of water.
- f. Residences and buildings.
- g. Recreational areas and historical landmarks.
- h. Existing pipelines, existing utility corridors and railroad right-of-ways.
- i. Approximate location (survey quality data is not required) of the test production wells, disposal well and test facility. Proposed names and numbers for the wells should be indicated.

- j. Proposed access and flowline routes. Highlight any stream or wetland crossings.

Part II of the Antrim Project Test Phase Plan shall consist of a written response to the following items:

- a. Specify the typical size of the well pad (i.e. 180 feet x 200 feet, 200 feet x 200 feet, etc.).
- b. The number of Government and private mineral acres and the Government and private surface acres in the proposed or anticipated project area. (Note: Majority mineral ownership should be used as a guide in the selection of a Central Production Facility test site. The site should be selected based on environmental, resource management and engineering considerations, as well as the potential for long term use as a facility site.)
- c. Probable destination and route of the pipeline to carry the produced gas after compression and dehydration.
- d. Intended lift system to be used for test wells, (i.e., gas lift, pump jack, rotating pump;) power supply (i.e., gas engine, electric motor). If electric power will be used, where will it come from? What type of muffler will be used on gas engines?
- e. Specify all stream and wetland crossings needed and the crossing methods to be used for pipelines and roads for the test wells and facility.
- f. Impact on existing road system and plans to limit damage for the test phase (NOTE: Normal access road width is up to 20 feet). Are the bridges which will be used adequate? Has the County Road Commission been contacted as required by the local county?
- g. How will wells be accessed during test period, how often, typical type of vehicle? Will roads be plowed regularly during winter testing?
- h. Are there any specific lease restrictions on State leases and how will they be addressed?
- i. Present a proposed timetable with anticipated dates of drilling, completion work, start of production testing. If test is expected to last a certain length of time, how long?
- j. If the test is unsuccessful, when will plugging and cleanup operations be conducted? If the test is successful, when should development be expected to start?
- k. Specify if the chosen test facility site is likely to be the permanent facility site. If not, specify the likely permanent sites to the extent possible.

DEVELOPMENT PHASE

Five copies of the plan are required (2 Geological Survey Division, 2 Forest Management Division, 1 Wildlife Division).

Part I of the Antrim Project Development Phase Plan shall consist of a scaled drawing (surveyor quality data is required except when submitting a preliminary application for review) using a **USGS Topographic Map, or equivalent**, as a base upon which are depicted the following:

- a. The unitized area outline.
- b. Government (State, Federal, local) and private surface and mineral ownership. Indicate lease classification on map, (i.e., development, nondevelopment, development with restrictions). It is not necessary to indicate the specific restrictions.
- c. County roads, trail roads and bridges.
- d. Designated recreational trails (i.e., snowmobile, off-road vehicles, hiking, etc.).
- e. Waterways, wetland areas and bodies of water.
- f. Residences and buildings.
- g. Recreational areas and historical landmarks.
- h. Existing pipelines, wells, test facilities, existing utility corridors and railroad right-of-ways.
- i. Location (survey quality data is required) of the production wells, disposal well(s) and permanent facility. Proposed names and numbers for the wells should be indicated.
- j. Proposed access and flowline routes. Highlight any stream or wetland crossings.
- k. Location of sales pipeline.
- l. Utility access routes for wells and facility.

Part II of the Antrim Project Development Phase Plan shall consist of a written response to the following items:

- a. The number of wells in the project and the well density, i.e. acres per well. If the project will not be drilled to maximum density initially, how many additional wells could be drilled in the future within the present unitized boundaries.
- b. Specify the typical size of the well pad (i.e., 180 feet x 200 feet, 200 feet x 200 feet, etc.).
- c. The number of Government and private mineral acres and the Government and private surface acres in the proposed or anticipated project area. (Note: Majority mineral ownership should be used as a guide in the selection of a Central Production Facility (CPF) site and disposal well

site(s). The site(s) should be selected based on environmental, resource management and engineering considerations.)

- d. If salt water disposal wells are needed other than at the CPF, specify how many and where they will be located.
- e. Specify at least one alternative CPF site in case the primary site is determined to be unsuitable. A brief discussion of the advantages of the primary site should be included. If the primary CPF site is different than the test site, explain why.
- f. How many wells will the CPF be designed to handle, and how many additional wells could it serve?
- g. Specify any proposed water pumping stations along the flowlines and any booster compressor sites planned.
- h. Intended lift system to be used for the wells, i.e., (gas lift, pump jack, rotating pump;) power supply (i.e., gas engine, electric motor). If electric power will be used, where will it come from? What type of muffler will be used on gas engines?
- i. Specify all stream and wetland crossings needed and the crossing methods to be used for pipelines and roads for the wells and facility.
- j. Impact on existing road system and plans to limit damage for the development phase (NOTE: Normal access road width is up to 20 feet). Are the bridges that will be used adequate? Has the County Road Commission been contacted as required by the local county?
- k. How will wells be accessed? How often and what typical type of vehicle? Will roads be plowed regularly during the winter?
- l. Are there any specific lease restrictions on State leases and how will they be addressed?
- m. Destination of the pipeline to carry the produced gas after compression and dehydration, if outside the boundary of the unitized area.
- n. Present a proposed timetable with anticipated dates of drilling, completion work, start of production.
- o. If the project size is expanded at a later date the original plan must be updated to indicate all the changes expected.

APPENDIX B

Requirements for Well Sites other than Antrim on State Lands

1. Preliminary permit applications should contain the following:

A map or plan that shows all of the following (surveyor quality data is not required):

The proposed well location and bottom hole location description.

A proposed route and explanation of how the well location will be reached.

Footages from the nearest section, quarter section, and drilling unit lines.

Information relative to the approximate distances and directions from the proposed well to special hazards or conditions, including all of the following:

Surface waters and other environmentally sensitive areas within 1,320 feet of the proposed well. Environmentally sensitive areas identified by the Department pursuant to applicable State and Federal laws and regulations.

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

Wetlands, as identified by the provisions of sections 30301 to 30323 of Act 451 of 1994, as amended (the act), within 1,320 feet of the proposed well.

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

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

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.

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.

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.

Identification of the existing local zoning designation of the surface location of the well.

2. Permit Application Requirements:

The requirements for a Drilling Permit Application as contained in R324.201, Rule 201 of Part 615 of Act No. 451 of 1994 as amended.

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.

APPENDIX C
DNR/DEQ - Memorandum of Understanding
27-4 - Oil and Gas Permits

**MEMORANDUM OF UNDERSTANDING BETWEEN THE DEPARTMENT OF ENVIRONMENTAL
QUALITY AND THE DEPARTMENT OF NATURAL RESOURCES RELATING TO OIL AND GAS
PERMITS**

AMENDED TRANSITION AGREEMENT #27, MOU #4

The Department of Environmental Quality (DEQ) and the Department of Natural Resources (DNR) jointly enter into this Memorandum of Understanding (MOU) relating to the exchange of information and recommendations associated with the processing of oil and gas permit applications pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The purpose of this MOU is to establish procedural protocols for 1) ensuring a smooth, efficient oil and gas permit application review process while resolving disagreements to the greatest extent possible; 2) the DEQ to assist the DNR in proprietary decision-making and management responsibilities for State-owned lands under DNR jurisdiction by providing oil and gas permit application information to the DNR; and 3) the DNR to assist the DEQ in oil and gas permit issuance decision-making by providing natural resource impact information to the DEQ.

Responsibilities of the DEQ

1. The Geological Survey Division (GSD) shall provide a copy of the "Weekly Permit List" to the DNR, Real Estate Division (RED) and shall provide ongoing access to the list electronically to others within the DNR.
2. Upon receipt and logging in of a permit application submitted pursuant to Part 615 of the NREPA, the GSD shall provide the DNR, Forest Management Division with a copy of all well drilling permit application documents when the proposed well site is to be located on any State-owned surface.
3. The GSD shall seek a resource evaluation from the appropriate DNR manager on public or private lands that are suspected or known to:
 - a. Contain threatened or endangered species.
 - b. Be in a special ecological area, such as an old growth, prairie, or quiet area.
 - c. Be in a special wildlife habitat area, such as a deer yard, heron rookery, or warbler nesting.
 - d. Be in a special DNR land or fisheries management area, such as the Jordan Valley Management Area, Hunt Creek Fisheries Research Area, Pigeon River Country Forest Area, or blue ribbon trout stream corridor.
4. Upon receipt and logging in of a permit application, GSD will provide the DNR thirty (30) calendar days to complete their review of the application, as provided in Item #4 under "Responsibilities of the DNR." The permit decision(s) will not be made until the thirty (30) calendar day time frame passes or until DNR provides comments, whichever comes first.
5. The GSD will provide the DNR twenty (20) calendar days from the receipt of a request to complete resource evaluation and provide recommendations per Item #5, "Responsibilities of the DNR."

6. During the DNR review periods, designated GSD District staff will work diligently with appropriate DNR managers to attempt mitigation of any natural resource impacts identified by the DNR.

Responsibilities of the DNR

1. The RED will provide on a frequent basis updated maps and access to digital data that delineates State-owned surface lands under the jurisdiction of the DNR and lands that are suspected or known to:
 - a. Contain threatened or endangered species.
 - b. Be in a special ecological area, such as an old growth, prairie, or quiet area.
 - c. Be in a special wildlife habitat area, such as a deer yard, heron rookery, or warbler nesting.
 - d. Be in a special DNR land or fisheries management area, such as the Jordan Valley Management Area, Hunt Creek Fisheries Research Area, Pigeon River Country Forest Area, or blue ribbon trout stream corridor.
2. Upon written request in memorandum format from GSD, the DNR, Wildlife Division's Michigan Natural Features Inventory will provide to the GSD permit coordinator information on the presence of threatened and endangered species, within fifteen (15) calendar days from the date of the written request.
3. The RED, after receipt of the Weekly Permit List as provided in Item #1 under "Responsibilities of the DEQ," will notify the GSD's Permits and Bonding Unit of any unleased State-owned minerals lying within the proposed drilling unit(s).
4. Within thirty (30) calendar days from the date the GSD receives and logs an oil and gas drilling permit application, as provided in Item #2 under "Responsibilities of the DEQ," the appropriate DNR manager may work with and/or provide comments/recommendations to appropriate GSD staff regarding the location of the proposed well site which is to be located on State-owned surface lands, except for those lands listed in Item #3 under "Responsibilities of the DEQ."
5. Within twenty (20) calendar days from the date the DNR receives a request from the DEQ for a resource evaluation, as provided in Item #3 under "Responsibilities of the DEQ," the appropriate DNR staff shall:
 - a. Evaluate the impact(s) of the application on surface, soils, animal, fish, or aquatic life, property, or other environmental values from the proposed oil and gas operation.
 - b. Work diligently with designated GSD District staff to suggest mitigation for serious natural resource impacts.
 - c. Provide to the designated GSD District staff, in writing, specific findings and recommendations as to the issuance of a permit.

Coordination and Resolution of Matters of Significant Disagreement

The DEQ-GSD Field Operations Supervisor and the DNR Field Operations Supervisor shall monitor the effectiveness of this MOU. If the DEQ and the DNR field staff have a significant disagreement that would adversely affect the permits, licenses, or approvals issued by the DEQ or the DNR, the issues shall be forwarded to the DEQ GSD Field Operations Supervisor and the DNR Field Operations Supervisor. If after ten (10) days there continues to be no resolution, the issues of significant disagreement and respective department positions will be brought to the attention of the designated decision-maker for resolution.

Review of the MOU

Upon written request by either party, representatives of both parties will meet within thirty (30) days of such request to review the effectiveness of this MOU and initiate any necessary alterations.

Signed by Russell J. Harding, Director, Department of Environmental Quality, on June 26, 1997

Signed by K. L. Cool, Director, Department of Natural Resources on June 30, 1997