

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Primacy/MiSTAR Informational Session Part I

Jason Mailloux Gas Storage and Underground Injection Control Unit 517-245-2195 [<u>maillouxj@michigan.gov</u> August 22, 2022



Introduction

 Adam Wygant – Oil, Gas, and Minerals Division Director and State Geologist



Agenda

- Current Status
- Path Forward
- Class II Organization/Contacts
- Part 615 Administrative Rules
- Reporting requirements
- Michigan's State Tracking and Reporting (MiSTAR) system



Primacy

- The US Environmental Protection Agency may grant primary authority and enforcement responsibility or "primacy" for implementing underground injection control (UIC) to states that apply under the Safe Drinking Water Act (SDWA)
- Michigan has demonstrated that its Class II program will be equally effective (SDWA 1425) in ensuring that underground injection activities do not endanger underground sources of drinking water (USDW)



Current Status

- EPA has primacy for Class II wells until August 29, 2022
- Reporting to EPA and State of Michigan to continue through August
 - EGLE-OGMD-UIC@michigan.gov





STATE OF MICHIGAN

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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February 19, 2019

Dear Sir/Madame:

SUBJECT: Class II Injection Wells – Reporting and Notification Requirements

Michigan's oil and gas regulations were revised in June 2018 including regulations pertaining to Class II injection wells in anticipation of our state's assumption of primacy from the EPA. While progress continues towards obtaining primacy, the EGLE Oil, Gas, and Minerals Division (OGMD) is implementing new workflows to streamline the reporting and notification requirements required of permittees per existing Part 615 Class II well regulations. Accordingly, a designated email address inbox (EGLE-OGMD-UIC@Michigan.gov) and an OGMD staff person (Larry Organek, Engineer) have been assigned for notifications and reporting purposes. These new workflows are being enacted to ensure that compliance with specific notification and reporting requirements are satisfied.

Under the revised regulations, permittees shall adhere to the following requirements for notifications and reporting for Class II injection wells:

- Notification of Loss of Mechanical Integrity (Rule 324.811(1) and (2)) Permittees shall provide written notice by email to EGLE-OGMD-UIC@Michigan.gov or provide notice by phone at (517) 243-5402. Written notice to the email address above satisfies both the initial notification and written notice requirements. When using email notifications, permittees should indicate in the subject line of the email the well name/number and permit number and indicate in the body of the email the reason that loss of MI was suspected or determined.
- 2. Notification of Mechanical Integrity Testing (Rule 324.806(2) and 808(2)) Permittees shall provide written notice by email to EGLE-OGMD-UIC@Michigan.gov or provide notice by phone at (517) 243-5402. This notification should occur following confirmation of the time and date that the MIT has been scheduled with the EPA. Permittees must provide notice to OGMD at least five days in advance of the test date. When using email notifications, permittees should indicate in the subject line of the email the well name/number and permit number and indicate the time and date of the scheduled test within the body of the email. The OGMD staff may choose to witness the test.
- Mechanical Integrity (SAPT) Results (Rule 324.806(3) and 808(3)) Permittees shall submit test results by email to EGLE-OGMD-UIC@Michigan.gov or test results may be submitted to our postal mail address: EGLE-OGMD, P.O. Box 30256, Lansing, MI, 48909-7756. The OGMD will continue to accept test results on either the EPA form or OGMD form number EQP 7606 (rev. 02/2019).
- Monthly and Annual Monitoring Reports (Rule 324.810 (3) and (4)) Permittees shall submit monthly and/or annual monitoring reports by email to EGLE-OGMD-UIC@Michigan.gov or monitoring reports may be submitted to our postal mail

CONSTITUTION HALL • 525 WEST ALLEGAN STREET • P.O. BOX 30473 • LANSING, MICHIGAN 48909-7973 Michigan.gov/EGLE • 800-862-9278 Mr. Page 2 February 19, 2019

> address: EGLE-OGMD, P.O. Box 30256, Lansing, MI, 48909-7756. The OGMD will continue to accept monitoring reports on either the EPA form or OGMD form number EQP 7609 (rev. 02/2019). Please ensure that state issued permit numbers and well names and numbers are on these reports (See attached spreadsheet).

5. Annual Chemical Injectate Analysis (Rule 324.810(8))

Permittees shall submit annual chemical injectate analysis reports by email to EGLE-OGMD-UIC@Michigan.gov or analysis reports may be submitted to our postal mail address: EGLE-OGMD, P.O. Box 30256, Lansing, MI, 48909-7756. Please note that the annual chemical injectate analysis are due by March 1, 2019. Please ensure that state issued permit numbers and well names and numbers are on these reports (See attached spreadsheet).

Any other methods for notifications or reporting will not be accepted unless express permission for an alternative has been granted by the Supervisor.

If you have any questions, please contact Mr. Larry Organek, at (517) 243-5402; organekl@michigan.gov; or Department of Environmental Quality, OGMD, P. O. Box 30256, Lansing, Michigan 48909-7756; or you may contact me. The OGMD appreciates your adherence to these new workflows and thanks you in advance for your continued cooperation in meeting all Class II injection well requirements.

Sincerely,

Mark J. Snow, Acting Manager Permits and Technical Services Section Oil, Gas, and Minerals Division 517-230-8233

cc: Larry Organek, EGLE

Attachment: Operator Specific Mechanical Integrity (SAPT) Information Spreadsheet

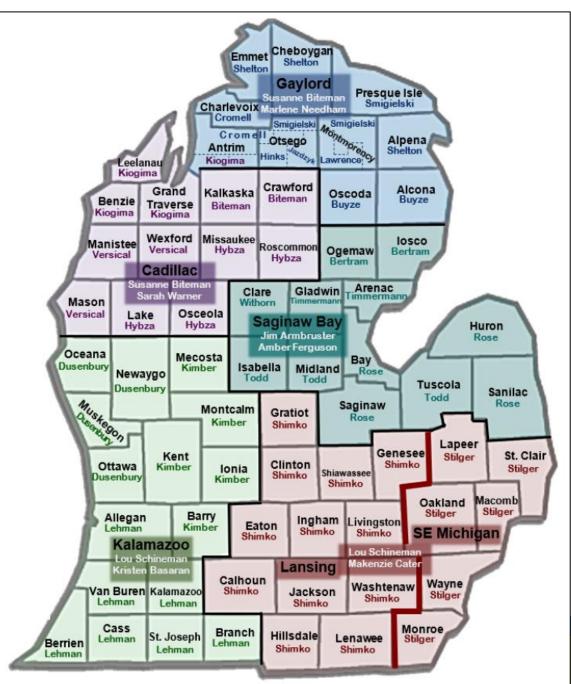
Path forward

- On August 29, 2022, Michigan will assume primacy for Class II wells except:
 - Wells in Indian Country
 - Wells with ongoing enforcement actions by the EPA, until resolution of the action as determined by the EPA
- Final Rule:
 - <u>https://www.federalregister.gov/documents/2022/07/28/2022-16017/state-of-michigan-underground-injection-control-uic-class-ii-program-primacy-approval</u>
- EPA Response to Comments
 - <u>https://www.epa.gov/uic/state-michigan-uic-class-ii-program-approval-final-rule</u>



Contact List

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- Larry Organek Engineer, GS UIC
 - organekl@michigan.gov, 517-243-5402
- <u>Eric Kimber</u> Geology Specialist, Lansing, Kalamazoo, SE Michigan
 - <u>Kimbere@michigan.gov</u>, 269-491-4106
- <u>Ben Hinks</u> Geology Specialist, Cadillac and Gaylord
 - Hinksb@michigan.gov, 989-370-4980
- <u>Coty Withorn</u> Geology Specialist, Saginaw Bay
 - Withornc@michigan.gov, 989-295-6244



Permitting and Bonding

- Kevin Carey Unit Supervisor, 989-370-1257, <u>CAREYK3@michigan.gov</u>
- Jennifer Ferrigan Bond Specialist, 517-290-6982, FERRIGANJ2@michigan.gov
- Ashley Neill Permit Coordinator, 517-290-2647, NEILLA@michigan.gov
- Kevin Siesel Permit Coordinator, 517-512-3688, <u>SIESELK@michigan.gov</u>



- Part 8. Injection Wells
 - Rules that are in effect now
 - Rules that apply to Class II primacy transition
 - Rules that are effective upon the date of primacy



R 324.814 Class II primacy transitional requirements for supervisor and owneroperators.

Rule 814. (1) Transitional requirements for the supervisor include all of the following:

(a) Upon the date of primacy, the supervisor shall do the following:

(i) Accept all Class II well permits, including rule authorized wells, issued under the authority of the USEPA administered underground injection control program. These wells are currently permitted under Part 615, and are deemed to meet the requirements of Part 615. Existing permit terms under Part 615 remain in effect.

(ii) Accept records from the USEPA of all Class II wells, including rule authorized wells.

(iii) Accept maximum injection pressures established by permits issued by USEPA including maximum injection pressures issued for rule authorized wells,

(iv) Accept mechanical integrity test data and test schedules for all existing Class II wells and rule authorized wells.



(b) Within 30 days following the date of primacy, an owner or operator shall do the following:

(i) Transfer pending applications submitted for Class II wells under the USEPA underground injection control program to the Michigan Department of Environmental Quality, Oil, Gas, and Minerals Division, P.O. Box 30256, Lansing, Michigan 48909, for final review and permitting decisions.

(ii) File or transfer a conformance bond pursuant to R 324.212.



R 324.815 Class II permit modifications.

Rule 815. (1) Modifications to a Class II permit issued pursuant to R 324.206 may be considered major modifications and subject to requirements of R 324.802 and R 324.803. Minor modifications are not subject to requirements of R 324.802 and R 324.803.

(2) Minor modifications include activities such as the following:

(a) Correcting typographical errors.

(b) Requiring more frequent monitoring or reporting by the permittee.

(c) Changing an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement.

(d) Change in ownership or operational control of a facility where the supervisor determines that no other change in the permit is necessary.

(e) Changing quantities or types of fluids injected which are within the capacity of the facility as permitted and, in the judgment of the supervisor, would not interfere with the operation of the facility or its ability to meet conditions described in the permit and would not change its classification.

(f) Changes in construction requirements approved by the supervisor or authorized representative of the supervisor, including remedial cementing or adding perforations to the approved injection interval.

(g) Amendment of a plugging and abandonment plan when approved by the supervisor or authorized representative of the supervisor.

(3) The provisions of this rule are effective only upon the date of primacy.

- R 324.801 Definitions
- R 324.802 Application for permit to drill, convert, and operate injection well
- R 324.803 Class II well notification, public comment, and public hearing



R 324.802 Application for permit to drill, convert, and operate injection well.

Rule 802. In addition to requirements in R 324.201, the following additional information shall 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:

(a) Notification information including the following:

(i) The name and address of the permittee of each oil, gas, and injection well and permitted location or locations within 1,320 feet of the proposed injection well location.

(ii) The name and address of the last surface owner or owners of record within 1,320 feet of a proposed Class II well location as reasonably determined by the records of the register of deeds office or equalization records.

(b) Required plat pursuant to R 324.201, that also shows the following:

(i) The location and total depth of the proposed injection well.

(ii) Each oil, gas, injection, and abandoned well and permitted location or locations within 1,320 feet of the proposed injection well location, including dry holes and wells that have been plugged and abandoned.

(iii) The surface owner or owners of record of the land on which the proposed injection well is to be located.

(iv) Each permittee of a well or permitted well location within 1,320 feet of the proposed injection well.

(v) Fresh water, irrigation, and public water supply wells within 1,320 feet of the proposed injection well.

EGLE

(c) If a well is proposed to be converted to an injection well, all requirements of R 324.201(1) and R 324.201(2) apply, and the applicant must submit 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). Pursuant to R 324.204 any well to be converted for liquid hydrocarbon storage is a proposed Class II well and subject to this subdivision.

(d) 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 into an underground source of drinking water through inadequately plugged, sealed, or completed wells.



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

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

(ii) The geological formation name or names, true vertical depth, thickness, and lithology of the injection interval, and the confining interval.

(iii) The geological formation name or names and the top and bottom depths of all underground sources of drinking water to be penetrated.

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

(v) The size of the casing and tubing and the estimated depth of the packer if applicable.

(f) Information showing that injection of fluids into the proposed injection interval will not exceed the injection interval fracture pressure gradient and information showing that injection into the injection interval will not initiate new fractures or propagate existing fractures in the overlying confining interval.

(g) For Class II wells, proposed operating data, including all of the following:

(i) The maximum anticipated daily injection rate expressed as barrels per day or thousand cubic feet per day.

(ii) The types of fluids to be injected. Hydraulic fracturing utilizing diesel fuels in the hydraulic fracturing fluid is subject to Class II regulations. Notwithstanding the provisions of R 324.1406(2), the use of diesel fuels in a proposed hydraulic fracturing fluid is not protected from disclosure.

(iii) Maximum anticipated injection pressure, expressed as psig at the well head, and calculations used to derive that value.

(iv) 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, specific gravity, and a determination of the concentration of calcium, sodium, magnesium, chloride, sulfate, sulfide, carbonate, total iron, barium, and bicarbonate. However, if the fluid to be injected is fresh water, then an analysis is not required.

(v) The geological name of the injection interval and the vertical distance separating the top of the injection interval from the base of the deepest underground source of drinking water.

(h) For a proposed injection well to dispose of oil or gas field waste, or both, into an interval 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. The supervisor may schedule a hearing to determine the need or desirability of granting permission for the proposed injection well.

(i) Identification and description of all faults, structural features, karst, mines, and lost circulation zones within the area of review that can influence fluid migration, well competency, or induced seismicity. The applicant shall include a plan for mitigating risks of identifiable features.

(j) A proposed plugging and abandonment plan and schematic.

(k) Information demonstrating that construction of the well will prevent the movement of fluid that causes endangerment to an underground source of drinking water.

- R 324.803 Class II well notification, public comment, and public hearing
 - The provisions of this rule are effective only upon the date of primacy
 - Applies to any injection well that requires a new permit



R 324.803 Class II well notification, public comment, and public hearing.

Rule 803. (1) Within 10 days after receipt of a Class II well permit application the supervisor shall mail notice to each surface owner of record and well permittee of each oil, gas, and injection well within 1,320 feet of the proposed injection well, to the township supervisor or municipal manager where the well is located, and shall post the notice on the department website concurrently with the weekly permit list publishing which is posted on the department website and available by email list server. All of the following information must be included on the notice:

(a) Date of notice.

(b) Applicant's name and address.

(c) Proposed well location, listing the county, township, range, section, and distance from nearest road intersections.

(d) Geological formation name and depth of injection interval.

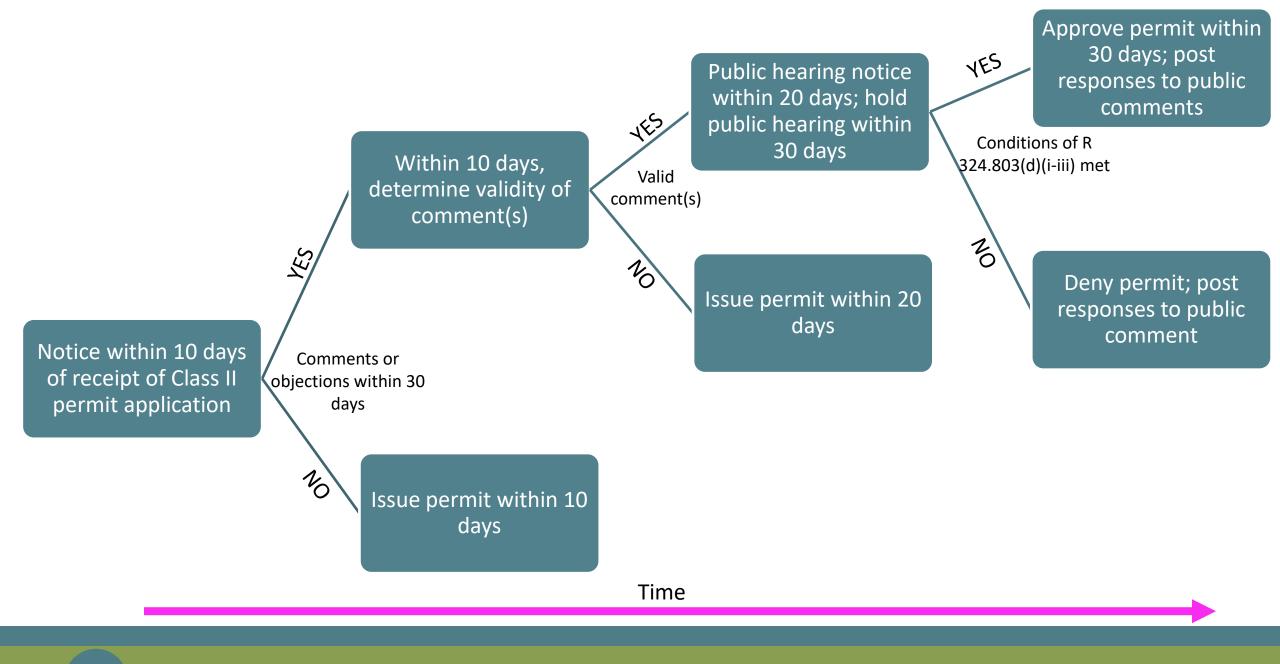
(e) Maximum anticipated injection pressure, expressed as psig at the well head.

(f) Maximum anticipated daily injection rate expressed as barrels per day or thousand cubic feet per day.

(g) Information on how to submit comments on the application to the supervisor.

(h) The following statement "Any comments or objections on an application, or a request to obtain additional information about the application, must be received by the supervisor within 30 days after the date of notice set forth herein."

(i) If substantial compliance is achieved toward notification requirements, inadvertent mistakes in noticing will not be a bar to processing of the permit.





Construction and Operation of Injection Wells

- R 324.804: Subrules (1), (5), and (6) apply after primacy, but do not apply to existing Class II wells or Rule Authorized wells
- (1) Injection of fluid into an injection well shall be through a combination of casing, tubing, cement, and packer placement that isolates the injection interval and prevents the movement of fluids into or between underground sources of drinking water, including through vertical channels adjacent to the well bore, which has mechanical integrity. Injection wells utilized for gas storage are not required to install tubing and/or a packer. In addition to cementing requirements in this rule, well casing shall be cemented pursuant to R 324.408, R 324.411, and R 324.413. The supervisor or authorized representative of the supervisor shall review cement details and any logs required for the applicant to demonstrate external mechanical integrity prior to authorization to inject. One of the following methods that demonstrates external mechanical integrity and prevention of fluid migration into or between underground sources of drinking water shall be used:
 - (a) The results of a temperature log, or noise log, or cement bond log.
 - (b) Cementing records demonstrating the presence of adequate cement to prevent a migration.
 - (c) Other methods suggested by the permittee and approved by the supervisor or authorized representative of the supervisor.



Construction and Operation of Injection Wells

- R 324.804: Subrules (1), (5), and (6) apply after primacy
- (5) In addition to R 324.408 surface casing requirements, surface casing must be set a minimum of 100 feet below the base of the glacial drift into competent bedrock or 100 feet below all underground sources of drinking water, whichever is deeper, for new Class II wells. To convert a previously drilled well into a Class II well, where existing surface casing is not 100 feet below underground source of drinking water, a demonstration of the combination of casing and cement must be made to show protection of all underground sources of drinking water.
- (6) The injection casing must have a minimum of 250 feet of cement immediately above the injection interval. If less than 250 feet of cement exists, remedial cementing must occur at a point as near to the existing cement top as possible, as determined by the supervisor or authorized representative



• R 324.805 – Temporary authority to inject

• 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. Temporary authorization to inject will only be granted if there will be no endangerment of underground sources of drinking water. Injection wells utilized for gas storage are exempt from this rule.



- R 324.806 Testing and authorization to inject before operation of Class II injection wells
- Before injecting fluid into a new Class II well:
 - Test at a pressure not less than 300 psig
 - Difference in testing pressure and tubing pressure shall be not less than 100 psig
 - Pressure change not more than 5% over 30 minutes





- R 324.806 Testing and authorization to inject before operation of Class II injection wells
 - MIT notification at least 5 days in advance
 - Within 14 days of test, MIT report
 - Before commencement of injection, a permittee shall receive authorization to inject (ATI)





Authorization to Inject/Cease injection

- All Class II wells are under Authorization to Inject (ATI) or Cease Injection (CI) at all times
- If after the effective date of primacy, you have an active CI from the EPA, you will need an ATI from Michigan after a successful MIT
- For a new Class II well, a permit does not equal an ATI





R 324.807 Maximum injection pressure.

Rule 807. During Class II well injection operations, a permittee shall ensure that the surface injection pressure does not exceed a pressure determined by the following equation:

Pm = (fpg - 0.433 sg)d where

Pm = surface injection pressure

fpg = fracture pressure gradient of the injection interval (if unknown, assume 0.800)

sg = specific gravity of the injection liquid (if unknown, assume 1.2)

d = depth of the top of the injection interval in feet (true vertical depth).

The value for fpg may be determined by an instantaneous shut-in pressure or data derived from step rate testing. Other information to derive fpg values may be used with approval of the supervisor or authorized representative of the supervisor.



- R 324.808 Class II well operational testing requirements
 - MIT at least every 5 years for existing Class II wells, including wells with TA status
 - For a Class II well that has not been utilized for its intended purpose for a period of greater than 2 years, the permittee shall, prior to resuming injection, demonstrate mechanical integrity for the well and receive authorization to resume injection from the supervisor or authorized representative of the supervisor.



- R 324.810 Monitoring and filing records and reports
- R 324.811 Loss of Mechanical Integrity



Reporting requirements

Report	Frequency	Timing	Comment
Injection data – well not used for secondary recovery	Weekly recording	Monthly reporting	Due by the end of the following month
Injection data secondary recovery well	Monthly recording	Annual reporting	By March 1 of each year for the previous year
Commercial disposal well list of sources	Quarterly	Due within 45 days after the end of each quarter	
Commercial disposal new source	Any time a new source is added	Supervisor approval prior to injection of fluids from that source	Approval in form of letter

Reporting requirements

Report	Frequency	Timing	Comment
Annual injectate analysis	At least annually	By March 1 of each year for the previous year	More frequently if change in sources or characteristics of injectate (within 30 days)
MIP exceedance	Every occurrence	On the next injection monitoring report	
Observed noteworthy anomalies or problems	Every occurrence	On any submitted report	



Reporting requirements

Report	Frequency	Timing	Comment
Schedule MIT	At least every 5 years	No less than 5 days before the test	Operators encouraged to schedule in advance
Results of MIT	After every MIT	Within 14 days after the test	
Loss of MI	After every loss of MI	Within 24 hours, written within 5 days	Logging related within 5-10 days
QA fill data	Quarterly	Due within 45 days after the end of each quarter	Rule authorized wells exempt



R 324.812 Cessation of injection wells; request for temporary abandonment status.

Rule 812. If an injection well ceases operating for the purpose for which it was intended for 1 year, then a permittee shall plug the well or request temporary abandonment status for the well in writing. The request for temporary abandonment status shall be pursuant to R 324.511. The temporary abandonment status may be granted by the supervisor if, after application and justification by the permittee, the supervisor determines that waste will be prevented. When approving the temporary abandonment status or subsequent extensions, the supervisor may require special actions and monitoring by the permittee to ensure the prevention of waste and endangerment of underground sources of drinking water. If temporary abandonment status is not granted, then the permittee of the injection well shall plug the well. The permittee may petition the supervisor for a hearing to show cause why the well should not be plugged. This rule supersedes R 324.209 for injection wells.

R 324.813 Suspension of Class II well operations due to threat to public health and safety or underground sources of drinking water.

Rule 813. (1) The supervisor or authorized representative of the supervisor may immediately require corrective action at a Class II well, including suspending any or all components of the injection or disposal operations, if the supervisor determines either of the following:

(a) The injection operations are in violation of the provisions of the act, these rules, permit conditions, instructions, or orders of the supervisor.

(b) The injection operations threaten the public health and safety or underground sources of drinking water.



(2) A suspension of injection or disposal 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 and underground sources of drinking water is ensured.

(3) Unless the permittee brings the operations into compliance as required pursuant to subrule (1), the supervisor may issue an emergency order to continue the suspension of injection or disposal operations beyond 5 days, and may schedule a hearing under part 12 of these rules. The total duration of the suspension of injection or disposal operations under this provision shall not be more than 21 days, as provided in section 61516 of Part 615, MCL 324.61516.

(4) Unless the permittee brings the operations into compliance as required pursuant to subrule (1) or (2) of this rule, the supervisor shall issue a new order following a minimum of 10 day notice and public hearing as provided in section 61516 of Part 615, MCL 324.61516(1) and R 324.1211, enter into an administrative consent agreement, or enter other binding instrument to extend the suspension of injection or disposal operations under this provision beyond 21 days. The order, administrative consent agreement, or other binding instrument shall require corrective actions within specific time limits to achieve compliance and protection of the public health and safety and underground sources of drinking water, and shall remain in force until the operation is brought into compliance.

(5) Authorization to resume injection shall not be given by the supervisor or authorized representative of the supervisor until compliance and protection of the public health and safety and underground sources of drinking water is achieved. The authorization to inject will only be given when mechanical integrity is also demonstrated, if applicable.

(6) This rule supersedes R 324.1014 for Class II wells.

MiSTAR

- Michigan's State Tracking and Reporting
- Joint effort among GWPC, DTMB, EGLE-OGMD



What is MiSTAR for?

- MiSTAR allows operators to electronically submit data to fulfill all regulatory reporting requirements of Class II injection well reporting required per Part 615 of the NREPA consistent with the EGLE/OGMD assumption of Class II Primacy from the USEPA
- Phase I Injection reporting
- Phase II Production reporting



What is required to use MiSTAR?

- Signed and Submitted Letter of Assurance
- Updated EQP 7200-13 Well Permittee Organizational report – (Rev 05/2022)
- Computer with internet access and modern browser
- Ability to create CSV or XLSX files



STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

OIL, GAS, AND MINERALS DIVISION

MiSTAR Letter of Assurance

MiSTAR is a web application that allows operators to electronically submit data to fulfill the regulatory requirements of filing and reporting pursuant to the Administrative Rules of Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act (NREPA).

The first phase of MiSTAR implementation will include comprehensive Class II injection well data reporting. The second phase will include oil and gas production data reporting replacing the Oil and Gas Production E-file reporting system utilized by both the Michigan Public Service Commission and EGLE/OGMD.

To participate in the MiSTAR application, each operator must fill out and sign the <u>Certification</u> of <u>MiSTAR Usage</u> below and submit a revised Well Permittee Organizational Report (EQP 7200-13). Both the signed Certification and the revised Well Permittee Organizational Report must be returned via email at <u>EGLE-OGMDpermitapplications@Michigan.gov</u>.

This information will be used to create usernames and passwords which will be provided via email to the designated individuals indicated on the Well Permittee Organizational Report. If designated individuals are to be added or removed from reporting responsibilities, a revised Well Permittee Organizational Report must be submitted to reflect the changes. Should the individual signing the Certification below no longer have authority over the submission of reports, a new signed Certification is required to be submitted. It is the responsibility of the operator to assure that the MiSTAR login credentials are held confidential and only used by those individuals authorized to submit the electronic filings on behalf of the organization they represent.

Each Class II injection well operator will go through a test period (generally 90 days) wherein the operator shall submit both paper and electronic records for Class II injection data. Upon EGLE/OGMD approval of test period results, the paper submission requirement will be eliminated for injection data. For operators who are currently approved for E-Filing production data, the test period for submitting production data will be waived.

The operator will need a computer with any of the following internet browsers: Google Chrome, Mozilla Firefox, or Microsoft Edge. Use of other browsers may result in the application not working or working with reduced functionality. The ability to create CSV (Comma Separated Values format) or .xlsx files is necessary. Assistance can be provided by EGLE/OGMD in submitting the electronic files to MiSTAR.

Certification of MiSTAR Usage:

"I state that I have read and understand the MiSTAR Letter of Assurance requirements above and I am authorizing individuals to submit electronic reports to EGLE/OGMD as required by Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994, PA 451, as amended (NREPA). I acknowledge that data exclusively posted by EGLE/OGMD within the MiSTAR system is for the purpose of compliance assistance only and I further acknowledge that data may not be current, accurate or reliable and therefore I will not rely upon the data posted by EGLE/OGMD for the purpose of submitting any of my reports required by rule or law. The reports that will be submitted will be prepared under my supervision and direction. The facts as contained in the reports and documents to be submitted using the assigned username and password are true, accurate and complete to the best of my knowledge. I further understand that the assigned usernames and passwords to be assigned by EGLE/OGMD will serve as my signature and that I am required to assure that they are used exclusively for the purpose of the submission of this data, which I hereby certify by my signature below. If the individuals reporting data change, I will submit a revised Well Permittee Organization Report. If I no longer have authority over the submission of reports, the company is required to submit a new signed Certification. I understand that this Certification is subject to renewal as may be required by EGLE/OGMD."

Signature

Date

The following information is required to set up your company's MiSTAR login credentials:

Full Name (Please Print)

Title

Organization Name

Mailing Address

Your E-mail Address

Your Phone No.

Both the signed Certification and revised Well Permittee Organization Report must be returned to EGLE/OGMD via email at <u>EGLE-OGMDpermitapplications@Michigan.gov</u>

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MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY OIL, GAS AND MINERALS DIVISION WELL PERMITTEE ORGANIZATIONAL REPORT

Required by authority of Part 615 SUPERVISOR OF WELLS and Part 625 MINERAL WELLS, Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. This form is used for the purpose of defining those responsible for making operational decisions and serves to register individuals authorized to prepare and/or submit information on behalf of the well permittee to the Department of Environment, Great Lakes, and Energy - Oil, Gas, and Minerals Division (EGLE-OGMD). Non-submission and/or falsification of this information may result in fines and/or imprisonment.

PURPOSE FOR FILING: New Principal/Employee/Agent/Address Change Name Change Electronic Submittal Permission Change

1. ORGANIZATION Con Company Name (as sho			Federal ID	Number (Do not include SS #):	
Mailing Address:			Phone Number:		
			assumed r	anization is a subsidiary or an name (dba), give name and address	
Street Address (if different	ent)		of associa	ted/parent company or person:	
Current Organization PI	an (check one) Joint Venture		Partnership	Limited Liability Company	
	Trust			Other	
If Reorganization or Nar					
-					
	nsibility for mal	king operatior	nal decisions i	, partners, or shareholders who have ncluding siting, drilling, operating, needed).	
Name (Last, First, MI)	Phone Number	Email A	ddress	Address, City, State, Zip	

3. EMPLOYEES List the names of employees of the organization, who are authorized to submit applications, workplans, or records pursuant to the above cited Act(s). (Attach extra sheet if needed). NOTE: In Checking the EFORMS and MISTAR boxes under Electronic Submittal below, it is acknowledged that these individuals are authorized for submittals on behalf of the company. OGMD will assign password/log-in information to these individuals, thereby allowing them to submit data and/or documentation within the EFORMS and MISTAR systems as indicated.

debuillentation within the Er of the and michart systems as indicated.					
Name (Last, First, MI)	Phone Number	Email Address	Electronic Submittal		
			□EFORMS □MISTAR		
			EFORMS MISTAR		
			□EFORMS □MISTAR		
			EFORMS MISTAR		
			□EFORMS □MISTAR		

4. AGENTS List the names of persons, other than employees of the organization, who are authorized to submit applications, workplans, or records pursuant to the above cited Act(s). (Attach extra sheet if needed). NOTE: In Checking the EFORMS and MISTAR boxes under Electronic Submittal below, it is acknowledged that these individuals are authorized for submittals on behalf of the company. OGMD will assign password/log-in information to these individuals, thereby allowing them to submit data and/or documentation within the EFORMS and MISTAR systems as indicated.

Name (Last, First, MI)	Phone Number	Email Address	Electronic Submittal
			EFORMS MISTAR
			□ EFORMS □ MISTAR
			□ EFORMS □ MISTAR
			□ EFORMS □ MISTAR
			□EFORMS □MISTAR

5. CERTIFICATION "I certify that I am authorized to sign 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: EGLE-OGMD, Permits and Bonding Unit, P.O. Box 30256, Lansing, MI 48909-7756; or EGLE-OGMDpermitapplications@Michigan.gov.

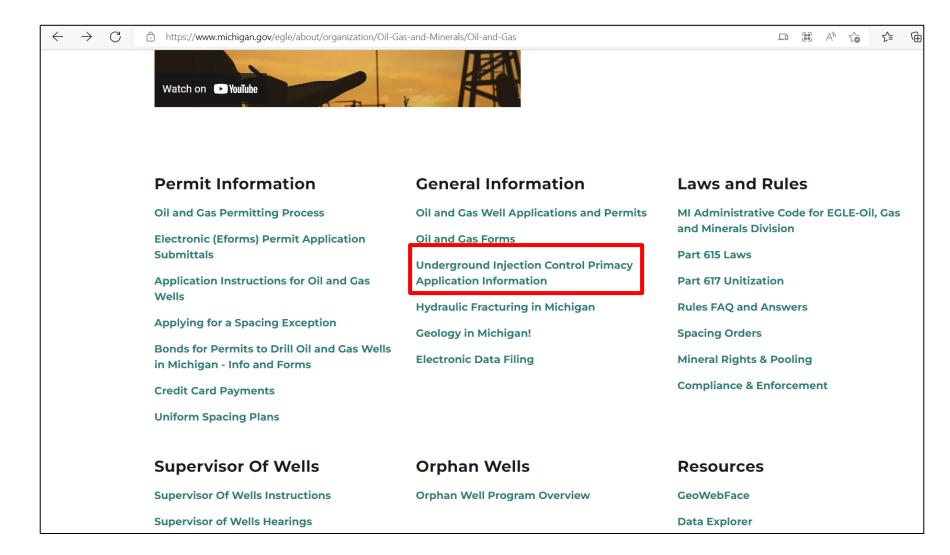
If you need this information in an alternate format, contact <u>EGLE-Accessibility@Michigan.gov</u> or call 800-662-9278.

EGLE does not discriminate on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height, weight, genetic information, or sexual orientation in the administration of any of its programs or activities, and prohibits intimidation and retaliation, as required by applicable laws and regulations. Questions or concerns should be directed to the Nondiscrimination Compliance Coordinator at EGLE-NondiscriminationCC@Michigan.gov or 517-249-0906.

This form and its contents are subject to the Freedom of Information Act and may be released to the public.

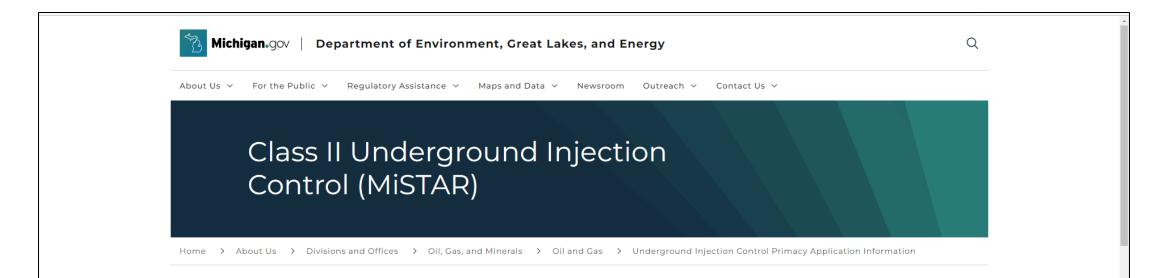
Michigan.gov/EGLE

EQP7200-13 (Rev. 05/2022)



https://www.michigan.gov/egle/about/organization/oil-gas-and-minerals/oil-and-gas/

UIC Website



Electronic filing of Class II well injection data and documents is accomplished using the Michigan's State Tracking and Reporting (MISTAR) system. MISTAR replaces paper data submittals by allowing the electronic submittals of all the Class II well injection reporting requirements. All owners and operators of Class II wells are required to use MISTAR to electronically submit data to fulfill the regulatory requirements of Class II injection well reporting per Part 615 of the NREPA.

MISTAR Class II well injection well reporting includes the Monthly/Annual Injection Well Operating Report (formerly form EQP 7609,) Standard Annular Pressure Test (formerly form EQP 7606), Notification of Loss of Mechanical Integrity, Notification of Scheduling MIT, and Quarterly Annulus Fill Reports. Documents such as Chemical Analysis of Injectate, Pressure Gauge Calibration Data, MIT Charts, and other documents can be submitted in a PDF format.

Contact

Jason Mailloux <u>MaillouxJ@Michigan.gov</u> 517-245-2195

Division Guide Organization Chart Telephone and E-mail List L.P Area Geologist Map



UIC Website

In addition, operators may interactively receive correspondence from Oil, Gas, and Minerals Division pertaining to their operations on a real time basis.

To receive access to MiSTAR, operators must complete and submit (according to instructions) the following:

- <u>MiSTAR Letter of Assurance</u>
- Well Permittee Organizational Report

After the required documentation is received and processed, a username and password will be created and provided to the appropriate staff indicated by the operator to access the system.

MiSTAR System

To access the MiSTAR system follow this link:

https://www.egle.state.mi.us/MiSTAR/

For more information about the MiSTAR system, please refer to the following:

- MiSTAR User Guide
- MiSTAR Class II Frequently Asked Questions



MiSTAR EDDs

- Electronic Data Deliverable (EDD) templates have been developed for the following Reports:
 - 1. Monthly/Annual Injection Well Operating Report (EQP 7609) (Rule 324.810 (1)(2)(3)(4))
 - 2. Standard Annular Pressure Test (EQP 7606) (Rule 324.806 & 324.808)
 - 3. Quarterly Annulus Fill Report (Rule 324.810(7))
 - 4. Notification of Loss of Mechanical Integrity (Rule 324.811 (1)(2))
 - 5. Scheduling Mechanical Integrity Tests (Rule 324.806 (1)(2)(3) and (Rule 324.808 (1)(2)(3)(4))



1	Annular Pressure Test				
2	Operator Name				
3	Operator Number				
4	14-digit API Number				
5	Well Name & Number				
6	UIC Well Type				
7	Date of Test (MM/DD/YYYY)				
8	Casing Diameter (decimal inches)				
9	Tubing Diameter (decimal inches)				
10	Gauge Serial Number				
11	Type of Pressure Gauge				
12	Pressure Gauge Comment				
13	Gauge Inch Face				
14	Gauge PSI Range]		
15	Gauge PSI Increments				
16	New Gauge				
17	Calibration Date (MM/DD/YYYY)				
18	Is Calibration Certification Submitted?				
19	Packer Type/Model				
20	Packer Depth (MD ft)				
21	Top of Permitted Injection Zone (MD ft)				
	Is Packer set at depth compliant with				
22	R324.804(2)?				
23	Packer Notes- has justification been submitted?				
24	Fluid Return (gallons)				
25	Purpose of Test				
26	Max Allowable Pressure Change				
27	Test Period Pressure Change				
28	Duration of Test (Min)				
29	Test Result				
	Was test witnessed by an EGLE representative?				
31	Name of EGLE Representative				
30	Comments				

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY - OIL, GAS, AND MINERALS DIVISION ،‡ ANNULAR PRESSURE TEST Permit Number By authority of Part 615 of Act 451 PA 1994, as amended. Well name & No. 5 Non-submission and/or falsification of this information may result in fines and/or imprisonment. Surface location 1/4 of 1/4 of 1/4. R Section Name and address of permittee County Township Secondary recovery Brine disposal Other 2 Well type: 6 Date of test Casing size Tubing size 7 8 9 Type of gauge Packer type/model Packer depth (feet) 10,11,12,13,14,15 19 20 psi increments psi range inch face New gauge 🔲 Yes 🔲 No (if no, enter the date of test calibration) Top of Permitted Injection Zone (feet) 21 16,17,18 Calibration Certification Submitted? Is Packer 100 feet or less above the top of the injection zone? 22,23 Yes No (if no, submit a justification) Fluid return (gallons) 24 Purpose of Test and Test Results Test Results Requirements (NOTE: The difference between the testing pressure and the tubing For Class II wells, readings must be taken at least every 10 minutes, pressure shall not be less than 100 psig at the time of the test). for a minimum of 30 minutes. Annulus test pressure shall not be less than 300 psig. If test is unwitnessed - Original chart must be submitted with this form. 28 5-year test? No No Yes 🔲 Yes New permitted well? 25 Yes After rework? Other? PRESSURE READINGS TIME ANNULUS TUBING 26 Max. Allowable Pressure Change (5%): Initial Pressure x 0.05 psi = Test Pressures: psi Test Failed 🔲 29 Test Passed 🔲 27 Test Period Pressure Change psi NOTE: If test fails, the well must be shut-in, no injection can occur, and the EGLE-OGMD shall be notified within 24 hours. Corrective action may be needed and the well re-tested. An Authorization to Inject must be received before injection can commence.

Was test witnessed by a EGLE-OGMD representative?

30,31

		÷		IGAN DEPARTMENT OF EN	VIRONMENT, GREAT I			AND MINERALS DIV	/ISION	
		- T -			ANNULAR FI	Permit Numbe				1
			By authority of Part 615 of							
	Ac Non-submissi			Act 451 PA 1994, as amended. ssion and/or falsification of this information		Well name & No. 5				
		•	may re	esult in fines and/or imprisonr	nent.	Surface location	Surface location			
						1/4 of 1/4 of 1/4, Section T R				
		Name and address of permittee				Township		County		
			2			Well type: Secondary recovery Brine disposal Other				
			Date of test 7			Casing size	8	Tubing size	9	
			Type of gauge 10	,11,12,13,14,1	5 psi increments	Packer type/m	nodel 19	Packer depth (feet	20	
				No (if no, enter the date o						
	psig		16,17	7,18		Top of Permitted Injection Zone (feet) 21 Is Packer 100 feet or less above the top of the injection zone? 22,23				
				libration Certification Submitted? Ves No			No (if no, submit	a justification)	22,23	
	Tubing Pressure		Purpose of Test and Test Results (NOTE: The difference between the testing pressure and the tubing pressure shall not be less than 100 psig at the time of the test). 5-year test? New permitted well? After rework? Other? Yes No No			Test Results Requirements For Class II wells, readings must be taken at least every 10 minutes, for a minimum of 30 minutes. Annulus test pressure shall not be less than 300 psig. If test is unwitnessed - Original chart must be submitted with this form. 28				-
	24.0									
_	24.9 24.8									
	24.1					PR	ESSURE READI	NGS		
	23.6		1	IME	AN	INULUS TUBING		NG		
	2010					-		_		-
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		4								
e a va a decir	lid time format (HH:MM).	-								
decim		-								
		-						_		-
			Test Pressures:		26 ^{Ma}	x. Allowable Pre	ssure Change (5%): Initial Pressure :	x 0.05 psi = psi	
			Test Passed 🔲	Test Failed 🔲 29			27	Test Period Pressu	ure Change psi	
				well must be shut-in, no inj -tested. An Authorization to				ithin 24 hours. Cor	-	
			Was test witnessed by	a EGLE-OGMD representati	ve? 🔲 Yes 🔲 No	If yes, name of	EGLE-OGMD repre	esentative	30,31	

Pressure Readings			
HH:MM	psig	psig	
Time (Military Time)	Annulus Pressure	Tubing Pressure	
09:43	355	24.9	
09:43 09:53	355 355	24.9 24.8	

34			
35	Yes	HH:MM	'Time (Military Time)' is required and must be a valid time format (HH:MM).
36	Yes	psig	'Annulus Pressure' is required and must be a decimal.
37	Yes	psig	'Tubing Pressure' is required and must be a decimal.

MiSTAR Other Documents

- Where electronic templates (EDD) are not feasible for certain reporting requirements under Part 8, MiSTAR also accepts documents that should be submitted in an accepted format (.doc, .docx, xls, xlsx, .pdf, .tiff). Those documents include:
 - 1. Annual Injectate Analysis (Rule 324.810(8))
 - 2. Injectate Analysis Other (324.810(8))
 - 3. MIT Gauge Records (Rule 324.806(3) and 324.808(3))
 - 4. MIT Chart (Rule 324.806(3) and 324.808(3))
 - 5. Commercial Sources Quarterly (Rule 324.810(5))
 - 6. Commercial Sources New (Rule 324.810(6))



Welcome to MiSTAR

By using MiSTAR, you may submit data and documents to the Michigan EGLE Oil, Gas, and Minerals Division. You may also view data and/or records. To get started, click on one of the buttons below or click on Menu above. For questions, contact OGMD.

