GUIDANCE MANUAL

for the Private and Type III Groundwater Supplies Drinking Water Supply Program

EGLE

Michigan Department of Environment, Great Lakes, and Energy
Drinking Water and Environmental Health Division
Environmental Health Section
Source Water Unit
Well Construction Program

(Rev. 08/2023)

TABLE OF CONTENTS

Drinking Water Supply Program

State funds are provided through the Departments of Environment, Great Lakes, and Energy (EGLE) and Community Health to operate local drinking water supply regulatory programs in 44 Michigan local health departments (LHD). Annual LHD Operation Contracts are offered by EGLE's Drinking Water and Environmental Health Division (DWEHD).

Under the contracts, the LHDs are expected to adhere to minimum program requirements (MPR) and applicable provisions of Part 127, Water Supply and Sewer Systems, of Act 368 of 1978, as amended, and rules (State Well Code). The MPRs establish consistent statewide program activities and goals and were developed in consensus with the Michigan Association of Local Environmental Health Administrators (MALEHA) in the mid-1990s for eight core public health programs. Included are three environmental health programs: Drinking Water Supplies, Food Service Sanitation, and Onsite Sewage Disposal Management. DWEHD oversees the Drinking Water Supply Program.

The Drinking Water Supply Program incorporates a preventive public health strategy to ensure that newly installed onsite water well systems are safe and reliable sources of drinking water.

The purpose of this Guidance Manual is to assist the LHDs in meeting the Drinking Water Supply Program's MPRs Number 5 through Number 7, which address Private and Type III Groundwater Supplies. The manual also assists EGLE staff in evaluating LHD performance. The performance evaluations accomplish the following goals:

1. Assessing LHD compliance with the MPRs and Indicators, and LHD Operations Contracts.

2. Ensuring appropriate use of state funds allocated for local drinking water supply protection programs.

3. Identifying unique local program components or activities that could enhance programs within other LHDs.

4. Determining levels of compliance with the State Well Code.

For further information, contact EGLE-DWEHD, Environmental Health Section, Source Water Unit, P.O. Box 30817, Lansing, Michigan 48909-8311 or by e-mail: EGLE-EH@Michigan.gov.

Minimum Program Requirements 5 through 7
Program Evaluation Criteria
Private and Type III Public Drinking Water Supply Program

Purpose
To establish uniform criteria for evaluating LHD compliance with the Private and Type III Groundwater Supplies portion of the Drinking Water Supply Program, and components of EGLE's, Minimum Program Requirements for Cost Shared Services, Drinking Water Supply, October 1, 2015. Compliance with MPRs determines the eligibility of LHDs to participate in "Essential Local Public Health Services – Mandated Cost Shared Services," administered by EGLE, to receive state funding. Throughout this section, "shall" means a required or mandated activity, and "should" refers to a recommended activity.

Adoption
MPRs, Indicators, and Program Evaluation Criteria were developed by EGLE and MALEHA. This group agreed to meet as needed to review the MPR materials.

Definitions
Alternate Institutional Control – a tool that provides information regarding the risks associated with contamination and the activities that are to be restricted or prohibited. They are used when environmental contamination is proposed to be left in-place at a property.

Approval – written communication (letter, inspection form, finalized permit, or other document) to the water well owner from the LHD that the newly-completed water system is suitable for its intended use and meets the State Well Code. This includes, at a minimum, having a safe coliform (non-detect) water sample and an accurate well record. A final inspection requirement is based on LHD policy.

Contractor – general term that includes water well drilling contractors, pump installation contractors, and licensed master plumbers.

Deviation – an exception issued by the LHD Health Officer to a department rule establishing minimum standards or requirements.

Evaluator – EGLE or LHD employee conducting the evaluation.

Final Inspection – an onsite inspection including all components of a newly-completed water well system.

Indicator – an activity and/or documentation prescribed as demonstrating compliance with the MPRs.

Minimum Program Requirement (MPR) – objective criteria for meeting requirements of laws, rules, or professionally accepted methods or practices and are used to ensure the quality, availability, and effectiveness of services and activities.

Non-Approval – written communication (letter, inspection form, or other document) to the water well owner from the LHD that the water system is not approved.

Onsite Evaluation – refers to a field Pre-Drilling Site Evaluation, Random Construction Inspection, or Final Inspection.

Pre-Drilling Site Evaluation (PDSE) – office review (with optional field component) of the proposed water well site prior to drilling.

Quarterly Reporting Database – EGLE database used to track all quarterly reports submitted by the LHDs.

Random Construction Inspection (RCI) – an inspection of the well construction process. This does not count as a final inspection or a PDSE.

State Well Code – general term that refers to water well provisions of Part 127, Water Supply and Sewer Systems, of the Public Health Code, 1978 PA 368, as amended, and rules.

Technical Staff – LHD employees who conduct well permitting and/or inspection activities.

Water Well Record – general term that includes both Water Well and Pump Records and Abandoned Well Plugging Records.

Wellogic – online well record database program used by contractors to submit their water well records (drilling and plugging) electronically and used by others to retrieve water well information.

Written Enforcement Notice – also called a “Correction Order” or “Notice of Violation” is a written communication that is sent to the responsible party stating that a well code violation has occurred.

Evaluation Formats:

Self-Assessment (SA) Evaluation
For those LHDs who request and are subsequently approved by EGLE to complete SAs, the LHD will assume the role of Evaluator. The SA is to be evaluated throughout the fiscal year, and the SA report is due from the LHD to EGLE by November 1 of each year on an evaluation report form(s) approved by EGLE. The following documents shall be submitted:

1. The evaluation report form.
2. Worksheets showing the office review of permits for each staff member assigned responsibility for the program (see table below to determine number of permits per staff), and worksheets showing the field verification by the Evaluator of one permit per staff member.

PERMIT SAMPLE SIZE TABLE		
Number of staff in P3 Program	Number of permits reviewed per staff member	Total number of permits reviewed
1	5	5
2	5	10
3	5	15
4	5	20
5	4	20
6	3	18
7	3	21
8	3	24
9	3	27
10	3	30

3. One finalized and approved permit along with associated paperwork (permit, well record, water samples, letters, site sketches, etc.) per staff member.

The **permits reviewed in the office** shall be permits where a final inspection was previously conducted, and the permit was finalized as approved or not approved. If the LHD is unable to review the minimum number of permits, the Evaluator shall provide an explanation on the report.

Field verifications conducted by the LHD Evaluator are completed to determine the accuracy and proper documentation of the final inspection that was previously conducted. All aspects of the water supply system must be observed by the LHD Evaluator during the field verification.

The comment sections of the evaluation report and the worksheets shall be used. This is for LHDs to document both MPR compliance and noncompliance, clarify any unusual issues (e.g., deviations, special construction requirements, groundwater concerns, etc.), and document follow-up taken by the Supervisor.

Within 30 days, EGLE will review the LHDs completed SA and determine compliance. EGLE will contact the LHD to discuss the findings and may request additional information from the LHD to better explain and evaluate MPR compliance. EGLE will complete the process with a letter to the LHD with their MPR evaluation results.

Every third year, following review of the SA, EGLE will make an onsite visit to the LHD for reviewing the SA process and to discuss any program items. EGLE may choose to request additional information from the LHD to better explain and evaluate their water supply program. This is an opportunity for the LHDs to provide feedback to EGLE.

See “Private and Type III Water Supply Program – Self-Assessment Evaluation Option” for additional details on the SA process.

Standard [Non-Self-Assessment] Evaluation
EGLE will conduct the P3 evaluation each year. Both an office component and field component will be conducted.

The Standard evaluation process is as follows:

1. EGLE will contact the Environmental Health Director or Environmental Health Supervisor to schedule the evaluation.
2. EGLE or the LHD will randomly select the permits for office review. Permit review sample size is determined by the table above.
3. On the day of the evaluation, EGLE will have an opening interview with the Environmental Health Director, Environmental Health Supervisor, and/or staff.
4. EGLE will review the LHD files (**Office Component**). Files reviewed are from the previous fiscal year. The files reviewed during the office component are:
    a. Permits and associated paperwork for wells that have received approval
    b. Policy and procedure for issuing permits near known or suspected contamination areas (to evaluate compliance with MPR 7, Indicator C)
    c. Well contractor files
    d. Contamination site files
    e. Complaint files
5. EGLE and the LHD will jointly conduct the **Field Component**. The field visits shall be real-time joint final inspections at locations not previously inspected by the LHD. The files are chosen by the LHD and may or may not be the same files reviewed for the Office Component. The number of field inspections will be one per technical staff, or a maximum of six. The LHD must make appointments with well owners to ensure all well components are accessible for inspection. Appointments also eliminate well owner confusion from unannounced visits. Where deficiencies are identified, the Evaluator may elect to perform additional field visits up to a maximum of four.
6. EGLE will conduct an **Exit Interview** with the Environmental Health Director, Environmental Health Supervisor, and/or staff.
7. Within 30 days following the evaluation, EGLE will complete the process with a letter to the LHD with their evaluation findings.

MPR Format:
Following each MPR (or subpart of an MPR) within this document, the following components are listed:

Indicator – Activity or documentation prescribed as demonstrating conformity with the MPRs.
LHD Activities – Furnishes guidance to the LHD and the Evaluator about the types of activities expected to be performed by the LHD to satisfy the MPRs.
Evaluation Factors – Furnishes guidance to the Evaluator and the LHD on how to assess compliance with the MPRs and Indicators.

MPR Evaluation Results:
Each LHD will be evaluated and receive one of the following designations for each MPR:

Met – Meets all the necessary requirements as described in the Program Evaluation Criteria. Met equals 80 percent (80%) or higher in compliance with all indicator requirements.

Met with Conditions – Serves as an alternative to giving a "Not Met" result when a deficiency is discovered in a review that does not warrant the Not Met rating. The appropriateness and basis for granting of "Met with Conditions" will be communicated for each Indicator in the guidance document. Where a "Met with Conditions" rating is awarded, the specific conditions required to be met at the next scheduled evaluation will be clearly communicated in the evaluation report. Where specific conditions have not been satisfied at the time of the next review, a "Not Met" rating will result. Met with Conditions equals 70-79 percent (70-79%) in compliance with the Indicator requirements.

Not Met – Does not fully meet all the requirements as described in the guidance document. LHDs that do not fully meet all requirements for a specific Indicator must develop and submit a formal corrective action plan (CAP) specifying actions to be developed and implemented in order to achieve the requirements for this Indicator. Not Met equals 69 percent (69%) or less in compliance with the indicator requirements.

Once the CAP is reviewed, the LHD will be notified if the action plan is:

1. Not accepted and will need to be resubmitted
2. Accepted
3. Accepted with further action required. The type of action required will be communicated to that LHD (a follow-up review by EGLE may be conducted to verify implementation of the plan).

Guidance Documents
There are several example documents in the guidance manual, including:

- Pre-Drilling Site Evaluation (PDSE) Checklists
- LHD Policy and Procedure for MPR 7
- State of Michigan Resources for Water Wells and Contamination Information
- Random Construction Inspection (RCI) Checklist
- Final Inspection Checklist
- Correction Order
- Complaint Form

The purpose of these documents is to provide guidance to LHDs, and their use is not mandatory. If LHDs create their own forms, they are encouraged to have EGLE review them prior to implementation.

Minimum Program Requirement No. 5

The LHD shall maintain and review for timeliness, completeness, and accuracy, all water well records submitted by contractors and property owners who install or plug their own well. Inaccurate or incomplete records shall be corrected. Appropriate enforcement action shall be taken to obtain well records from contractors and property owners who fail to comply with the State Well Code.

Indicator A
Evidence of a water well record processing system.

LHD Activities
Access to the computerized water well record database (Wellogic or equivalent) and paper water well record files (if applicable) shall be maintained to allow for easy retrieval.

Evaluation Factors
The Evaluator assesses MPR compliance by reviewing the water well record tracking system. The LHD should demonstrate to the Evaluator how the number of water wells drilled and reported quarterly are obtained.

The LHD shall be considered in compliance if:
1. Water well records are easily retrievable.
2. The number of wells drilled and plugged are tracked.

Minimum Program Requirement No. 5

Indicator B
Technical staff reviews all well records for timeliness, completeness, and accuracy. Inaccurate and incomplete records (electronic and non-electronic) are corrected. Non-electronic well records are date-stamped before they are sent to EGLE.

LHD Activities
The LHD technical staff shall review all water well records (i.e., drilled, pump records, plugging records) submitted on paper or electronically before final filing or entry into database, or prior to submittal to EGLE. Review of the water well records shall include determination that:

1. The water well record was received within 60 days of well completion.
2. The water well record is complete and accurate.
3. The water well construction details meet the State Well Code and permit conditions.

The LHD shall date-stamp non-electronic well records prior to sending them to EGLE.

The LHD shall ensure that corrections are made to the well record prior to sending them to EGLE.

Note: Sec. 12707 of the Statute requires LHDs to submit well records to EGLE within 30 days of receipt.

Evaluation Factors
Complete and accurate well records are sent to EGLE from the LHD. The EGLE Evaluator shall review the spreadsheet of water well records returned by EGLE to the LHD prior to the evaluation.

The LHD shall be considered in compliance if:

1. Clerical (or technical) staff is able to retrieve contractor-submitted well records from Wellogic (or equivalent).
2. Technical staff is able to review the well records for completeness and accuracy.
3. Well records are date stamped.
4. Both electronic and non-electronic well records are corrected.
5. Water well records are complete and accurate prior to sending them to EGLE.

Minimum Program Requirement No. 5

Indicator C
Documentation of enforcement action to contractors regarding the submission of timely, complete, and accurate water well records. Written enforcement notices shall be copied to EGLE.

LHD Activities
The LHD shall maintain a record when incomplete or inaccurate water well records are returned to a contractor (or well owner) for completion. The LHD shall have a mechanism for tracking water well records that are returned to contractors to assure that records are completed and resubmitted. A procedure shall exist to assure that resubmitted water well records are not counted twice for number of wells drilled. The record shall note the nature of the deficiency. The LHD may correct deficient water well records with the contractor's verification without returning them to the contractors.

Not every late or incomplete well record needs a written enforcement notice; however, if a contractor continues to show a pattern of noncompliance, it is expected that the LHD will send a written enforcement notice.

Evaluation Factors
The Evaluator shall observe evidence of follow-up when deficient water well records are being returned to the contractors. Copies of written enforcement notices sent to the contractors should be available for review.

The LHD shall be considered in compliance if:

1. Deficient water well records are corrected and/or returned to the contractors for correction.
2. Written enforcement notices are available for inspection.
3. Follow-up is conducted with the well contractor for completed wells that do not have a well record submitted within 60 days of completion.

Minimum Program Requirement No. 6

The LHD shall have a Private and Type III Drinking Water Supply Program, which includes a permit and inspection program established by a locally adopted ordinance that requires contractors or property owners to obtain a permit to construct a water well.

Conduct activities to evaluate well/pump installations and water samples required under code for compliance with applicable state and local regulations.

Conduct activities to evaluate well abandonment status to determine compliance with state or local regulations.

Indicator A
Local ordinance requiring a permit before the installation of a water well.

LHD Activities
The implementation of a local regulatory program to oversee construction of water wells is required. The program shall include a permit application process. This allows the LHD to, among other things, evaluate the drilling site before drilling begins; thereby reducing the public health risks associated with improper placement of water wells.

The LHD shall require a detailed site plan. This should include the location of the proposed water well, existing water well(s), distances from the water well to contamination sources (e.g., septic systems, sewer lines, fuel or chemical storage tanks, animal feedlots, etc.), buildings, roadways, and property lines. Sources of contamination on adjacent parcels, if known, shall be included.

Evaluation Factors
The LHD shall be considered in compliance if:

1. They have a locally adopted ordinance that contains:
    a. Evidence of legal adoption.
    b. Effective date of ordinance.
    c. A requirement for issuance of a permit by the LHD prior to water well construction.
2. A detailed site plan was submitted by the permit applicant or developed and approved as part of the permit process.

Minimum Program Requirement No. 6

Indicator B
Completion of predrilling site evaluation (office or field evaluation) of all proposed well drilling sites.

Documentation that staff has access to and utilizes groundwater contamination internet sites, maps, or resources to assess contamination potential (both man-made and naturally occurring) at sites of proposed wells.

If applicable, the permit shall include a notice on the well permit where areas of groundwater concern are identified, such as known natural or man-made contaminants, low production areas, or flowing wells.

LHD Activities
A PDSE shall be performed for each water well permit prior to issuance. A PDSE consists of an office component, field component, or a combination thereof (at the discretion of the LHD). Sites where replacement wells are proposed should receive a Field PDSE.

An Office PDSE consists of, but is not limited to, a review of the following:

1. Site plan and LHD file for that property (and neighboring property, if applicable).
2. Water well records.
3. Deed restrictions or restrictive covenants, if available.
4. Land use limitations, such as institutional controls.
5. Contaminant source inventories.
6. Hydrogeological studies (if submitted by the permit applicant).

A Field PDSE consists of the same components as an Office PDSE, but also includes an Onsite evaluation of the proposed drilling site.

State resources and local information shall be reviewed by the LHD before issuance of water well permits to determine if sites where water wells are proposed to be drilled are within or near a known groundwater contamination site, as described in local policy.

These state resources include:

- Part 201 Sites of Environmental Contamination, Part 213 Leaking Underground Storage Tanks, and Part 211 Underground Storage Tanks available at Remediation Information Data Exchange (EGLE.State.MI.US/RIDE/).
- Part 115 Landfills and Part 111 Hazardous Waste Sites available at EGLE Waste Data System (EGLE.State.MI.US/wdspi/Home.aspx).
- Part 615 Oil and Gas Well Sites available at GeoWebFace (DEQ.State.MI.US/GeoWebFace/).
- Septage Land Applications Sites available at Septage Hauler Directory (Michigan.gov/EGLE/About/Organization/Drinking-Water-and-Environmental-Health/Septage).
- PFAS Contamination Sites available at PFAS Response (Michigan.gov/PFASResponse).

All items listed above are under the regulatory review of the state and information can be found in the guidance documents. Specifically, Parts 201, 213, and 211 sites can be viewed at Environmental Mapper (MCGI.State.MI.US/EnvironmentalMapper).

EGLE recommends that the LHDs also maintain records and locations of agricultural facilities and non-EGLE regulated sites, such as old unlicensed dumps.

The LHDs shall communicate as needed with EGLE District Staff and other appropriate sources for additional information regarding contamination sites.

The permit shall contain the following, as appropriate:

1. Known/potential sources of contamination.
2. Known water quality or quantity problems in the vicinity of the proposed water well drilling site.
3. Minimum isolation distance requirements.
4. Water sampling requirements and recommendations.
5. Special well construction practices, if needed, to ensure a safe drinking water supply.
6. Requirement to plug the abandoned well(s).

Evaluation Factors

The Evaluator shall review the LHD's PDSE procedures and permits to help ensure that appropriate factors are considered before water wells are drilled, and to ensure State Well Code compliance with public health protection.

The EGLE Evaluator shall review the EGLE Quarterly Reports to determine if the LHD is performing PDSEs at the required level.

The LHD shall be considered in compliance if:

1. PDSEs are being performed on all water well permits.
2. Locations of known contamination sites are located prior to issuing water well construction permits.
3. The issued permits contain the minimally required information, as identified above.

Minimum Program Requirement No. 6

Indicator C
All newly completed wells shall have at least one onsite evaluation prior to, during, or after construction.

LHD Activities
The LHD technical staff shall perform **at least one of the following** onsite evaluations on every newly-completed well:

- Before construction (Field PDSE)
- During construction (RCI)
- After construction (Final Inspection)

RCIs should be conducted while the well contractor is onsite.

The LHD's well permitting, and inspection program shall have a method to ensure that an onsite evaluation takes place for every well completed. For a LHD that does not perform 100 percent (100%) field PDSE, this may result in additional communication with the contractor prior to installation (drilling notification) and/or with the well owner after hook-up (final inspection). The LHD will need documentation showing due diligence in attempting to contact owners for final inspections.

Evaluation Factors
The Evaluator shall review EGLE Quarterly Reports to determine if the LHD is performing onsite evaluations at the required level of 100 percent (100%). Additional documentation above the quarterly report may be necessary if discrepancies are found.

The LHD shall be considered in compliance with this indicator if 80 percent (80%) of all newly- completed wells have at least one onsite visit prior to, during, or after construction. This will be evaluated by reviewing the quarterly reports and annual evaluation.

Minimum Program Requirement No. 6

Indicator D
A minimum of ten percent (10%) of all newly-completed wells will have a final inspection to ensure compliance with the State Well Code.

LHD Activities
The LHD shall perform final inspections on a minimum of ten percent (10%) of the newly-completed wells annually, not the number of permits issued annually.

The LHD should have a checklist or a policy that outlines the final inspection process. The minimum elements checked, and activities performed during a final inspection are:

1. Water well location to ensure adequate separation from contamination sources.
2. Casing termination method (pitless adapter, well house, or basement offset) and well cap.
3. Visual check of sealing of annular space surrounding the water well casing.
4. Water system component materials (water well casing, water service line, etc.).
5. Pump installation (pump, pressure tank, piping, sample tap, valves, and controls). For most situations, this will require obtaining access to the house or Type III facility.
6. Visual confirmation of plugging of abandoned water well location at replacement water well sites and/or well record review.

Final inspections should be distributed so that both new water wells and replacement water wells are evaluated. It is preferable to complete final inspections before the water supplies are placed into service. To minimize exposure to potential health risks, all final inspections should be completed in a timely manner.

Evaluation Factors
The Evaluator shall review the LHD's final inspection practices to ensure that appropriate components are inspected.

The Evaluator shall review water well records and final inspection forms to ensure adherence with minimum final inspection criteria.

The EGLE Evaluator shall review the EGLE Quarterly Reporting Database to determine if the LHD is reporting final inspections at the required minimum level of ten percent (10%).

The LHD shall be considered in compliance if:

1. The LHD is reporting final inspections at or above the minimum required level.
2. All appropriate components are being inspected during a final inspection.

Minimum Program Requirement No. 6

Indicator E
Documentation that all newly-completed wells are approved only after meeting the minimum criteria, such as a safe coliform sample, permit requirements, complete and accurate well record, and final inspection (if applicable).

LHD Activities
All permits shall be closed either by issuance of a written approval or non-approval to the permit applicant or well owner by the LHD.

If the minimum criteria for issuance of an approval cannot be attained, a non-approval shall be issued to the water system owner. A non-approval shall cite the reason(s) for not approving the water supply system.

Bacteriological sampling requirements apply to all newly installed potable water supply systems. All water samples accepted by the LHD must be validated from a certified laboratory for the parameter sampled. The LHD shall document follow-up on positive coliform bacteria results, including *E. coli*.

Note: R 325.10831 of the Michigan Safe Drinking Water Act, 1976 PA 399, as amended (Act 399), and the administrative rules requires Type III water supplies to obtain two safe bacteriological samples at least 24 hours apart prior to placing system into service.

Evaluation Factors
The LHD shall be considered in compliance if:

1. Written approvals and non-approvals are issued to the permit applicant or well owner.
2. Non-approvals are issued to water well owners after it is determined that the criteria for water supply system approval have not been met.
3. Well owners are notified in writing of the need to obtain satisfactory bacteriological sample(s) before placing the water system into service.
4. Notification is made to the responsible party when positive coliform bacteria test results for new water supply systems are received.

Minimum Program Requirement No. 6

Indicator F
Documentation of deviations being issued pursuant to provisions of the State Well Code.

LHD Activities
All deviations and rationale shall be documented on the well construction permit. It is recommended that all deviation requests be made in writing to the LHD and that they include the reason for the deviation.

Evaluation Factors
The LHD shall be considered in compliance if:

1. Deviations are documented in writing.
2. The spirit and intent of the rules is observed, and the public health, safety, and welfare are assured, as required in the State Well Code.

Minimum Program Requirement No. 6

Indicator G
Documentation of the review of plugging of abandoned wells and dry holes. Provide documentation of status of wells that remain in service.

LHD Activities
To ensure that abandoned wells are properly plugged, the LHD staff shall perform the following program activities:

1. Replacement Well Sites:
    a. Include an abandoned well plugging requirement on replacement water well permits.
    b. Verify and document that the existing water well was either properly plugged or will remain in service when final inspections are conducted.
2. Dry Hole Sites:
    a. Verify that, for known dry holes, the drilling contractor is submitting both Water Well Drilling Records and Abandoned Well Plugging Records.
    b. When conducting final inspections or other site inspection activities, verify (to the extent possible) that dry holes have been properly plugged.

Evaluation Factors
The LHD shall be considered in compliance if:

1. Abandoned Well Plugging Records are evaluated for conformity with the State Well Code.
2. Field inspections and enforcement activities associated with abandoned well management, where performed, are documented, and show compliance with the State Well Code.

Minimum Program Requirement No. 6

Indicator H
Documentation of enforcement actions when State Well Code violations are identified, and follow-up inspections are performed.

Copies of written enforcement notices shall be copied to EGLE.

LHD Activities
The LHD technical staff shall conduct enforcement actions (including follow-up) where well code violations are encountered. EGLE recommends enforcement be in writing.

Written enforcement notices shall contain the following key elements:

- Addressed to the registered contractor, including registration number
- Violation observed
- Statute/rule violated
- Method of correction
- Deadline for correction
- Penalty for noncompliance
- Copy to EGLE

Evaluation Factors
Not every State Well Code violation may need a written enforcement notice; however, if a contractor continues to show a pattern of noncompliance, it is expected that the LHD will send a written enforcement notice.

The LHD shall be considered in compliance if:

1. The LHD conducts enforcement actions when needed and documents those actions.
2. The LHD follows up to ensure the violation has been corrected.
3. Written enforcement notices contain the seven elements listed above.
4. Written enforcement notices are copied to EGLE.

Minimum Program Requirement No. 6

Indicator I
Documentation of investigation of written contractor/customer complaints and/or water well quality complaints related to well construction, with technical assistance from EGLE, where appropriate.

LHD Activities
The LHD shall have a mechanism for tracking complaints.

Complaint investigations involving water well issues should be initiated within 30 days of receipt. Investigation findings, corrections, recommendations, and methods of resolution shall be documented.

Complaints against contractors shall be filed in the registered contractor file, in a separate water well complaint file, or database. The LHD shall send copies of correspondence to EGLE relating to contractor complaint investigations where a State Well Code violation has been identified.

Evaluation Factors
The LHD shall be considered to be in compliance if:

1. They have a procedure to investigate and document complaints.
2. Complaints are handled promptly and completely, and enforcement notices are sent, if applicable.
3. Findings are documented.

Minimum Program Requirement No. 7

The LHD shall assist EGLE in the investigation of all known or suspected cases of drinking water contamination for sites under the regulatory review of EGLE.

The LHD shall investigate all known or suspected cases of groundwater contamination for sites of naturally-occurring or non-point source contaminants.

The LHD shall maintain documentation of sites of known or suspected groundwater contamination and use this information when processing well permit applications.

Indicator A

Conduct and document investigations to assist EGLE in assessing water supply sources in areas of potential and existing groundwater contamination.

LHD Activities

The LHD shall initiate an investigation or consultation when water quality concerns or problems are received from the general public. Water quality concerns and problems include, but are not limited to microbiological organisms, manmade chemicals, heavy metals, nitrates and nitrites, turbidity, taste, and odor. The LHD may contact EGLE for assistance and guidance with the investigation.

The LHD shall maintain received documentation for sites of known and suspected groundwater contamination. This should contain all relevant correspondence (including advisory letters and analytical results sent to drinking water well users) along with land use limitations (i.e., institutional controls, restrictive covenants, deed restrictions, notices of migration, and other land use controls).

Evaluation Factors

The LHD shall be considered to be in compliance if the LHD:

1. Educates the public on water quality concerns.
2. Conducts groundwater contamination investigations when needed.
3. Documents investigations in a paper or electronic file.

Minimum Program Requirement No. 7

Indicator B
Provide information and education on general water quality concerns to the general public. Send health advisory letters to all residents involved in drinking water quality investigations or with a Maximum Contaminant Level (MCL) exceedance.

LHD Activities
Coliform Positive on Newly-Constructed Wells:
Document follow-up on positive coliform bacteria results.

Note: Coliform positives not related to newly-constructed wells are not reviewed as part of this MPR.

Chemical MCLs:
A written health advisory shall be sent to the well owner when other chemical contaminants (e.g., nitrates, arsenic, barium, etc.) exceed the MCL established by the United States Environmental Protection Agency (U.S. EPA).

Note: The Drinking Water Monitoring Program requirements with the LHDs are covered under a separate contract, “Drinking Water Long-Term Monitoring Program, Program B.”

Evaluation Factors
The LHD shall be considered to be in compliance if the LHD:
1. Documented follow-up on coliform positives for newly-constructed wells.
2. Sent the appropriate health advisories when chemical contaminants met or exceeded the MCL established by the U.S. EPA, or state criteria, if applicable.

Minimum Program Requirement No. 7

Indicator C
Documentation of a policy/procedure to address proposed well sites near known or suspected groundwater contamination, to protect public health and the groundwater resource.

LHD Activities
The LHD shall have a procedure to evaluate the vulnerability of a proposed water supply well that is near a site of known or suspected groundwater contamination (see MPR 6B and the example Policy and Procedure for specific resources).

Policy/procedure shall include the following:

1. A process to evaluate a proposed well site in certain contaminated areas and to require special water well construction features.
2. Provide health advisory or other information to the water well owner/contractor.
3. Special water sampling.

Evaluation Factors
The LHD shall be considered to be in compliance if:

1. They have a groundwater contamination policy/procedure in place.
2. The policy/procedure is being used.

Type III Public Water Supplies

A Type III public water supply is a waterworks system that provides water for drinking or household purposes to persons other than the supplier of water and is not a community water supply (Type I), noncommunity water supply (Type II), or a waterworks system that supplies water to only one living unit. Therefore, if the water supply does not serve a typical private single-family dwelling but serves water to fewer than 15 living units and less than 25 people on an average daily basis less than 60 days per year, it is classified as a "Type III" public water supply. Examples include small apartment complexes, duplexes, small retail stores, or small offices.

Type III public water supply construction is regulated by the Safe Drinking Water Act, 1976 PA 399, as amended, and the administrative rules (SDWA). Through adoption by reference in R 325.10804 (Rule 804) of the SDWA, most provisions of the State Well Code apply to Type III public water supplies.

Except for isolation distances from a contamination source and initial sampling requirements, the minimum construction standards for Type III public water supplies are the same as those for private single-family dwellings.

Please refer to EGLE's Policy and Procedure ODWMA-399-013, Classification of Public Water Supplies, for additional clarification.

Isolation Areas
Rule 808 of the SDWA establishes the standard isolation area from any existing or potential sources of contamination (including but not limited to storm and sanitary sewers, pipelines, septic tanks, drainfields, dry wells, cesspools, seepage pits, leaching beds, barnyards, surface water, or an area or facility from which contamination of the groundwater may occur) as a 75-foot radius in all directions from a Type III well.

Rule 812 of the SDWA requires a Type III well to be a minimum of 800 feet from known major sources of contamination, including large-scale waste disposal sites, land application of sanitary wastewater or sludges, sanitary landfills, and chemical or waste chemical storage or disposal facilities. Based on hydrogeological studies, the LHD may require an increase or approve a decrease in the 800-foot distance.

The EGLE Well Construction Program in partnership with EGLE Source Water Protection Program is a resource for hydrogeological information when reviewing suitability of isolation deviations.

Water Sampling
Rule 831(2) of the SDWA requires that before placing a new or reconditioned Type III well or well facility which is opened for maintenance or inspection into service, not less than two consecutive water samples for bacteriological analyses shall be collected from the installation, 24 hours apart, and each analysis shall not indicate the presence of coliform.

Rules 710(2), 716(2), 717d(2) and 831(2) of the SDWA authorize the LHDs to require sampling for contaminants other than coliform bacteria. A nitrate sample is recommended for all Type III water supplies. EGLE recommends that a partial chemical analysis be performed also. More extensive contaminant sampling should be performed for new water wells installed near groundwater contamination sites or areas specific to those known contaminants, or in areas of naturally-occurring contaminants (e.g., arsenic, chloride, etc.).

Applicable Statutes and Rules

The following statutory and regulatory provisions from the SDWA specifically apply to Type III public water supplies:

Part 5. Types of Public Water Supplies

R 325.10502 Classification of public water supplies
R 325.10506 Type III public water supplies generally

Part 7. Surveillance, Inspection, and Monitoring

R 325.10704 Collection and analysis of samples for coliform bacteria generally
R 325.10710 Collection and analysis of samples for inorganic chemicals
R 325.10716 Collection and analysis of samples for Volatile Organic Compounds

Part 8. Groundwater Sources

R 325.10801 Purpose
R 325.10802 Applicability; approval of deviation from minimum standards and requirements
R 325.10804 Type III public water supplies; applicability of other rules
R 325.10805 Retroactivity of rules; significant changes or major repairs made to existing well; utilization of well not in compliance with this part
R 325.10806 Change in classification of public water supply
R 325.10807 Location of well
R 325.10808 Standard isolation area generally
R 325.10809 Standard isolation area; modification; approval
R 325.10810 Standard isolation area for Type I public water supplies; ownership or control
R 325.10811 Sewers within approved isolation area
R 325.10812 Location of wells; major sources of contamination
R 325.10813 Study of hydrogeological conditions by Type I and Type IIa public water supplies
R 325.10814 Studies of Type IIb and Type III public water supplies
R 325.10815 Conversion of a test well to a production well serving Type I and Type II public water supplies; procedures for department approval
R 325.10816 Location of well in area subject to flooding
R 325.10817 Top of well casing; elevation
R 325.10818 Minimum well casing depth
R 325.10819 Well casing in rock formation
R 325.10820 Water suction lines
R 325.10821 Casing materials
R 325.10822 Grouting

R 325.10823 Flowing artesian wells; well construction
R 325.10824 Flowing artesian wells; flow control
R 325.10825 Elevation of discharge from well casing; location of connection to well casing
R 325.10826 Construction and location of room housing pumping equipment or room housing top of well casing
R 325.10827 Tail pipe or pump suction pipe; termination
R 325.10828 Casing vents; sampling tap; relief valves
R 325.10829 Well appurtenances; Type I public water supplies
R 325.10830 Aquifer or performance testing requirements
R 325.10831 New or reconditioned well; disinfection; water samples

Water Treatment
Rule 506 of the SDWA requires Type III supplies to either:

1. Provide a groundwater source in compliance with Part 8 (Groundwater Sources), or
2. Provide an alternate source of water in accordance with Parts 24, 25, and 26 (Hauled Water and Bottled Water).

Therefore, treatment for the protection of public health is not intended for Type III supplies. Type III supplies can be required to monitor for contaminants. However, MCLs and other drinking water standards are not enforceable on Type III supplies, unless there is a local program addressing those contaminants.

Waterworks Systems Under the Same Ownership
Rule 503 of the SDWA addresses two or more waterworks systems owned or operated by the same person at the same general location, not individually meeting the definition of a community supply or a noncommunity supply, but collectively meeting the definition of a community supply or a noncommunity supply, shall be considered by the department to be a single public water supply.

Multiple Type III wells owned or operated by the same person in the same general location, where necessary would be deemed a community or noncommunity supply under this rule.

The LHD staff should be familiar with these regulations, in addition to the applicable provisions of this manual, to ensure that Type III public water supplies are appropriately handled in the permitting/inspection process.

Water Supplies for Subdivision/Condominium Developments/Land Divisions

EGLE's Administrative Rules for Onsite Water Supply and Sewage Disposal for Land Divisions and Subdivisions (EGLE Administrative Rules) require LHD approval for parcels less than one acre in size. This provision became effective July 28, 1997, and specifically applies to new parcels not served by public sewer and/or public water. The following information is intended to assist with the correlation between the EGLE Administrative Rules, Onsite Water Supply and Sewage Disposal for Land Divisions and Subdivisions, PA 368 (R560.401 to R560.428); Michigan Safe Drinking Water Act, 1976 PA 399, as amended and Administrative Rules R325.10101 to R 325.12830 (SDWA); and the State Well Code. Questions regarding water supplies in subdivisions, condominiums, and land divisions should be directed to EGLE's DWEHD Onsite Wastewater staff.

Onsite Water Supply
Specific well construction criteria for the construction of water supplies in subdivision/ condominium developments and land divisions are found in the Administrative Rules R560.401 to R 560.428. These rules will be reflected in the recorded deed restrictions and advisories for applicable projects. Each individual well construction permit issued will reflect these rules even where they supersede the rules of the SDWA and the State Well Code.

Onsite Water Supply and Sewage Disposal Land Divisions and Subdivisions, Part 4, PA 368, 1978

Rules 404 – 415 Specifically address water supply criteria.

R 560.404 Approval for suitability of onsite water supply
Rule 404. Before issuing an approval for the suitability of an onsite water supply for a development site that is less than 1 acre in size or a subdivision, the department shall have evidence that a potable, adequate, reliable, and protected onsite water supply has been or can be developed on the parcel as prescribed in these rules.

R 560.405 Water well or test well on parcel
Rule 405. The completion of a sufficient number of water wells or test wells on the parcel and submittal of water well records for the water wells or test wells under section 12707 of Act No. 368 of the Public Acts of 1978, as amended, being §333.12707 of the Michigan Compiled Laws, and submittal of water sample results or the submittal of other hydrogeological information to the department constitutes evidence for determining the suitability of an onsite water supply.

R 560.406 Water well records and water sample results for well not on parcel
Rule 406. If a water well or test well has not been completed on the parcel, then water sample results or other hydrogeological information pertaining to existing wells in the vicinity of the parcel which demonstrates that the proposed onsite water supply will likely result in compliance with these rules constitutes evidence of suitability. If well record data, water sample results, and hydrogeological information are not available, or

if the data indicate that unsuitable groundwater quantity or quality may exist, then the department shall either reject the development site of less than 1 acre in size or proposed subdivision under R 560.428 or issue a conditional approval with a recorded deed restriction under R 560.426.

Rule 407 references the rules from Part 127 (State Well Code). EGLE's Administrative Rules apply in all areas where more stringent than Part 127.

R 560.407 Onsite water supply construction criteria
Rule 407. An onsite water supply shall meet the location and construction standards in R 325.1601 to R 325.1676.

R 560.408 Well protection
Rule 408. The owner shall be responsible for the construction of an onsite water supply that is free from sources of contamination. The following methods shall be given consideration:

(a) Penetration of an impervious layer which is of sufficient areal extent, but which is not less than 10 feet thick.
(b) Maintaining a minimum of 50 feet from the static water level to the bottom of the casing or top of the screen in an unconfined aquifer.
(c) An increase in the minimum horizontal isolation distance between the well and a source from which groundwater contamination may occur.
(d) A combination of the methods in subdivisions (a), (b), and (c) of this sub rule or another method that the department determines will provide adequate protection for the Onsite water supply.

R 560.409 Prohibited water sources for new dwellings
Rule 409. The owner or designated representative shall not obtain water for drinking or household purposes that is intended to furnish new dwellings located on a development site that is less than one acre in size or a subdivision from any of the following:

(a) A dug well
(b) A crock well
(c) A hauled water system
(d) A cistern
(e) A surface body of water
(f) A spring
(g) Any other similar device

R 560.410 Deviations to decrease minimum casing depth or isolation distances prohibited
Rule 410. The department shall not grant deviations to decrease minimum casing depth or to decrease minimum isolation distances under R 325.1613 for development sites less than one acre in size or subdivisions.

R 560.411 Yield or performance testing
Rule 411. A registered water well drilling contractor under the supervision of the owner or the owner's designated representative shall perform a yield or performance test to demonstrate that water can be withdrawn from an onsite water supply well for drinking

and household purposes at a sustained pumping rate which is not less than ten gallons per minute (gpm) and which meets or exceeds peak water demand for not less than a 4-hour period of time. If onsite water well cannot sustain a capacity that meets the peak water demand, then the department shall require demonstration of a combination of the known well yield and storage facilities that can furnish water at a delivery rate sufficient to meet the peak water demand.

R 560.412 Collection and analysis of water samples

Rule 412. (1) The department or a property owner's designated representative shall collect water samples for chemical and bacteriological analyses from each test well or onsite water supply well intended for household purposes.

(2) A state-certified laboratory shall perform all water sample analyses.

(3) The state-certified laboratory shall perform analyses for all of the following parameters:

- (a) Chloride
- (b) Fluoride
- (c) Hardness
- (d) Iron
- (e) Nitrate
- (f) Nitrite
- (g) Sodium
- (h) Sulfate
- (i) Coliform bacteria

(4) The department may require additional sampling or allow a reduction in sampling for specific contaminants based on local site conditions or other pertinent factors.

Rule 413 establishes the adoption by reference the 1996 publication "Drinking Water Regulations and Health Advisories." The standard under this rule for arsenic is 50 ppb.

R 560.413 Adoption of standards by reference

Rule 413. The department adopts by reference in these rules the publication entitled "Drinking Water Regulations and Health Advisories," EPA-822-B-96-002, October 1996. The publication may be obtained free of charge from the Office of Ground Water and Drinking Water, United States Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460-0003. The toll-free telephone number is 800-426-4791. A copy of this publication is available on the internet at EPA.gov\OST\Tools\DWSTDS.html. Copies of the adopted matter are available for inspection at the offices of the Drinking Water and Radiological Protection Division, Department of Environment, Great Lakes, and Energy, 3423 N. Martin L. King Jr. Blvd., Lansing, Michigan 48906.

See attached April 15, 2002, memo for clarification regarding arsenic guidance for subdivisions, site condominiums, and land divisions.

Rule 414 water samples must meet the MCL naturally (without treatment). Arsenic samples are required on all development sites < 1 acre in size. Arsenic levels must be < 50 percent (50%) of the MCL, therefore, < 25 parts per billion (ppb).

R 560.414 Primary maximum contaminant levels

Rule 414. (1) The department shall reject proposed development sites that are less than one acre in size and subdivisions if the water sample analysis detects contaminants in concentrations that exceed the primary maximum contaminant levels as defined in R 560.401(t).

(2) The department shall reject proposed development sites that are less than one acre in size and subdivisions if the water sample analysis detects a contaminant in a concentration that is more than 50 percent (50%) of the maximum contaminant level and the department has determined that the contaminant is likely to exceed the primary maximum contaminant level in the future after considering the following:
   (a) Contaminant transport and modeling
   (b) Land use
   (c) Geology
   (d) Other factors that influence groundwater movement

(3) If the department requires additional analysis under R 560.412(4), then the department shall use the drinking water regulations and health advisories adopted in R 560.413 to determine primary maximum contaminant levels.

Rule 415 addresses secondary MCLs. Sites cannot be denied under Rule 415. Recorded deed advisories shall be issued when/if water sample analysis exceeds secondary MCLs.

R 560.415 Secondary maximum contaminant levels

Rule 415. If water sample analyses from a test well or onsite water supply well for a development site less than one (1) acre in size or a subdivision detects a contaminant in a concentration that exceeds the secondary maximum contaminant level in Table 1, then the department shall disclose by means of recorded advisories according to R 560.426, the nature of the impact on drinking water quality.

Table 1
Secondary Maximum Contaminant Levels (SMCL)

Contaminant	Secondary Maximum Contaminant Level in Milligrams Per Liter (mg/l)
Chloride	250
Hardness (as Calcium Carbonate)	250
Iron	0.3
Sodium*	250
Sulfate	250
Corrosivity	Noncorrosive

* U.S. EPA withdrew Sodium from the SMCL listing.

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JOHN ENGLER
GOVERNOR

RUSSELL J. HARDING
DIRECTOR

April 15, 2002

TO: Local Health Departments and Branch Offices
ATTN: Director of Environmental Health

FROM: Richard A. Falardeau, P.E., Chief
Land Division and Local Health Department
Support Program Environmental Health Section
Drinking Water and Radiological Protection Division

SUBJECT: Arsenic Guidance for Subdivisions, Site Condominiums, and Land Divisions

On February 22, 2002, the amended Environmental Protection Agency (EPA) standard for arsenic in drinking water became effective. Although the EPA standard is specifically applicable to certain public water supplies, questions continue to be received as to how private wells in proposed subdivisions, site condominiums, and land divisions less than one acre should be addressed. This memo will respond to this concern and recommend a course of action for local health departments.

The new EPA drinking water standard lowers the concentration of arsenic from 0.05 mg/l to 0.01 mg/l for certain public water supplies. Our current Administrative Rule (Rule) 560.414, Onsite Water Supply and Sewage Disposal for Land Divisions and Subdivisions, which applies to private wells located in proposed subdivisions, site condominiums, and land divisions under one acre in size, establishes a maximum contaminant level for arsenic of 0.05 mg/l through reference to EPA's October 1996 publication entitled "Drinking Water Regulations and Health Advisories." Whether the administrative rules for land divisions and subdivisions will be amended to reflect the new EPA arsenic standard of 0.01 mg/l has yet to be determined.

Our current Rule 560.412 (4), states: "The department may require additional sampling or allow a reduction in sampling for specific contaminants based on local site conditions or other pertinent factors." In order to provide site specific information, we are requiring that arsenic monitoring of existing wells or test wells be included with the other parameters which are described in Rule 560.412 (3) for subdivisions, site condominiums, and land divisions less than one acre. Depending on results obtained, we are recommending the following interim actions in order to react to proposals under review.

- Where representative water quality data available from existing wells or test well data confirms that arsenic concentrations will consistently remain below 0.01 mg/l, approval can be considered without condition.

- Where representative water quality data from existing wells or test well data confirm arsenic concentrations that exceed or may exceed 0.01 mg/l but are not likely to exceed 0.05 mg/l, it is requested that your staff contact area staff of this program to discuss the specific proposal. It is intended that a meeting be arranged with the design consultant and developer to advise of concerns related to arsenic, discuss available alternatives, and strongly recommend language which should be included in recorded advisories, including health effects and the possible need for appropriate water treatment.

- Where representative water quality samples from test wells or existing wells confirm arsenic concentrations that exceed 0.05 mg/l, it is requested that your staff contact area staff of this program to discuss the specific proposal. It is intended that a meeting be arranged with the design consultant and developer to advise of concerns related to arsenic and to discuss available alternatives. Point of use treatment will not be an acceptable alternative where arsenic concentration exceeds 0.05 mg/l. Where other alternatives are not available, these projects shall be rejected in accordance with Rule 560.414.

Experience available thus far suggests that one should not expect any uniformity of results when it comes to arsenic. This comment is not only applicable on a statewide basis, but it is also important to note that results from an individual well may vary based on sampling technique and pattern of usage. It is important that sample results used as the basis of approval or rejection be consistent with the typical usage pattern for the home. We are suggesting two separate samples be collected for arsenic. In addition to a sample collected at the end of an extended pump period, it is suggested that a "first draw" sample should also be taken after a period of resting where test wells are utilized. Sampling of existing wells that have been in use would also be expected to yield more representative results assuming that they are completed in the same aquifer. It is our hope to work closely with local health departments, consultants, and developers to assure that representative samples are gathered.

In addition to this guidance, the Department of Environmental Quality (DEQ) will also be providing to local health departments an educational pamphlet available for distribution to explain the significance of arsenic. It is expected that this pamphlet will be available in the near future and will provide further information generally applicable to private groundwater supplies.

While it is recognized that the above guidance is somewhat general in nature, it provides a framework for your consideration of pending and future proposals. Please contact this office at 517-241-1345, or area staff of the Environmental Health Section with whom you routinely communicate, regarding the Land Division program should you have specific questions.

RAF:rs
cc: Mr. Flint C. Watt, DEQ
Mr. Richard S. Sacks, DEQ
Mr. Mark Weber, DEQ
Mr. Joe Lovato, DEQ

Private and Type III Water Supply Program
Self-Assessment Evaluation Option

Michigan's LHDs, in partnership with EGLE, are committed to the protection of public health and the environment through effective Private and Type III Drinking Water Supply Programs. Structured evaluations of LHDs by EGLE staff on a three-year basis have been utilized to measure the success of programs in meeting MPRs. Historical reviews clearly confirm that a commitment to ongoing quality assurance at LHDs have consistently resulted in program audits where there were few, if any, major deficiencies noted. It is the purpose of this guidance to establish the alternative option for review, based upon annual LHD self-assessment (SA) and reporting that effectively communicates ongoing compliance status.

A significant component to the success of a SA approach is the designation at the LHD of a key staff person responsible for program training, oversight, and monitoring. They would be relied upon as the in-house expert related to program implementation consistent with the MPRs and ongoing quality assurance monitoring. Designated staff would also be expected to serve as the primary point of communication and reporting to EGLE in all matters related to the Private and Type III Water Supply Program. This would include submission of annual SA reports and quarterly Private and Type III Program activity reports.

All LHDs are encouraged to utilize the SA approach. However, a LHD best prepared to use this option is one that conducts thorough routine and ongoing quality assurance program reviews. For LHDs wishing to be authorized to utilize this approach, a written request must be submitted to EGLE for review. The quality assurance process, designed to meet LHD needs, is expected to be outlined by the LHD in their written request to EGLE. The LHD may use the worksheet that accompanies the SA report for recording specific reviews, or a LHD may develop their own review form for EGLE approval.

LHDs who desire to utilize the SA option are encouraged to submit their request as soon as possible, and at least six months prior to the end of the fiscal year.

Under this option, the overall review shall consist of the following elements:

A. Annually, the LHD is required to submit the documents previously listed in the Evaluation Criteria. The SA evaluation report form will follow a standardized format that is available from EGLE. The LHD shall include detailed reporting of the review process of the permits (both office and field review), which can be detailed on the worksheet example provided. Annual reports shall be transmitted each year to EGLE by no later than November 1 for the previous fiscal year. The SA will include both office review and field review.
B. EGLE will review the SA report (within 30 days) and provide a formal response to the LHD for each SA report submitted.
C. As part of the ongoing SA process, during the time period leading to the scheduled review by EGLE, a LHD may determine that one or more Indicators are "Not Met" or "Met with Conditions."
    1. The LHD has full discretion to put a corrective action plan (CAP) in place; the details of which shall be communicated with EGLE. The LHD will then be removed from the SA evaluation for one year if one or more of the

following occurs:

- A “Not Met” with one of the Indicators
- Two consecutive “Met with Conditions” on the same Indicator

2. After showing 90 days of compliance with the plan, at the time of the scheduled review the LHD shall receive a “Met” or “Met with Conditions” on that MPR where EGLE verifies corrective actions have resulted in compliance.

D. At the time of the scheduled three-year review following submittal of the SA to EGLE, the LHD will arrange to meet with EGLE. It is anticipated that the meeting would be arranged at a time, date, and location selected by the LHD and attended by the Evaluator, designated LHD quality assurance staff, and others chosen by the LHD. Discussions at that time would focus on:

- Quality assurance activities
- SA report review
- SA compliance rating against established program MPRs and Indicators

MPR Rating

The LHD will receive the rating it gave itself on any MPRs, provided EGLE verifies the rating as correct.

Should a LHD assess any Indicators as “Not Met,” which are verified at the time of review, they will be subject to the established CAP process.

Should the SA show an incorrect rating or a program element that was not properly or completely reviewed, that element shall be jointly reviewed with EGLE and LHD staff to determine the correct rating.

EGLE may review a number of the original documents assessed to determine if the SA is correct and accurate.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
DRINKING WATER AND ENVIRONMENTAL HEALTH DIVISION
ENVIRONMENTAL HEALTH SECTION

GUIDE FOR COMPLETION OF LOCAL HEALTH DEPARTMENT QUARTERLY REPORTS FOR PRIVATE AND TYPE III PUBLIC WATER SUPPLY PROGRAM

Data requested on Form EQP2057(08/2022) is to be submitted to the Department of Environment, Great Lakes, and Energy (EGLE), Drinking Water and Environmental Health Division, Environmental Health Section, on a quarterly basis, within 15 days of the end of each fiscal year quarter. Reporting is a prerequisite for receiving payment under the provisions of the annual Local Health Department Operations Contracts.

Reporting Period	Filing Deadline
1st Quarter – October/November/December	January 15
2nd Quarter – January/February/March	April 15
3rd Quarter – April/May/June	July 15
4th Quarter – July/August/September	October 15

Reporting Parameter Instructions

To count an activity as having been completed within a reporting category, the following criteria shall be observed:

1. **Number of Well Permits Issued** – report the number of well permits that were issued.

2. **Number of Wells Drilled** – report the number of water well and pump records that were received (regardless of the date completed). This includes those well records submitted on paper and electronically. DO NOT include abandoned well plugging records or pump installation-only records.

3. **Number of Abandoned Wells Plugged** – report the total number of abandoned well plugging records that were received. This includes those records submitted on paper (abandoned well plugging records and replacement drilling records) and electronically.

4. **Number of Field Predrilling Site Evaluations –** report the number of on-site evaluations of the well drilling site prior to drilling.

5. **Number of Random Construction Inspections –** report the number of inspections during the well construction process.

6. **Number of Final Inspections of Newly Completed Water Well Systems** – report the number of final inspections of newly completed water wells.
    - The water well location and all visible components of the well and water supply system (including pressure tank, sample tap, etc.) must be observed and comply with the State Well Code and local water well permit conditions.
    - Field Predrilling Site Evaluations and Random Construction Inspections are **not** Final Inspections because they occur *before* the water system is completed.

7. **Number of Final Inspections with Well Construction Violations** – report the number of final inspections conducted where *well construction-related violations* of the well construction code were identified in the field. DO NOT include water well record violations or coliform positive samples in this category. Include violations for those items listed in MPR 6, Indicator D.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
DRINKING WATER AND ENVIRONMENTAL HEALTH DIVISION
ENVIRONMENTAL HEALTH SECTION

LOCAL HEALTH DEPARTMENT QUARTERLY REPORT
PRIVATE AND TYPE III PUBLIC GROUND WATER SUPPLY PROGRAM

Issued under authority of the Public Health Code, 1978 PA 368, as amended and the Safe Drinking Water Act, 1976 PA 399, as amended.

The following data shall be reported to the Michigan Department of Environment, Great Lakes, and Energy by local health departments on a quarterly basis, within 15 days of the end of each quarter within the fiscal year. In order to receive payment, this data must be reported.

Local Health Department _____

Reporting Period _____

Person Submitting Report _____

Well Information	1st	2nd	3rd	4th
1. Number of Well Permits Issued				
2. Number of Wells Drilled				
3. Number of Abandoned Wells Plugged				
4. Number of Field Predrilling Site Evaluations				
5. Number of Random Construction Inspections				
6. Number of Final Inspections				
7. Number of Final Inspections with Well Construction Code Violations				

1st Quarter = October/November/December
2nd Quarter = January/February/March
3rd Quarter = April/May/June
4th Quarter = July/August/September

Completed forms may be submitted by FAX to 517-241-1328 or by E-MAIL to EGLE-EH@Michigan.gov.

If you need this information in an alternate format, contact EGLE-Accessibility@Michigan.gov 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 DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
DRINKING WATER AND ENVIRONMENTAL HEALTH DIVISION
ENVIRONMENTAL HEALTH SECTION
WELL CONSTRUCTION PROGRAM

LOCAL HEALTH DEPARTMENT EVALUATION
PRIVATE AND TYPE III WATER SUPPLY PROGRAM – FISCAL YEAR 2022
(OCTOBER 1, 2021, THROUGH SEPTEMBER 30, 2022)

Authorized by the Public Health Code, 1978 PA 368, as amended.

TYPE NAME OF DEPARTMENT HERE (INITIALS)

Type of Evaluation:	
Date(s) of Standard Evaluation:	
Final Exit Interview Date:	

Explanation of Performance Status

The Private and Type III Water Supply Program has been evaluated for compliance with the Minimum Program Requirements (MPR) and Indicators using the format provided herein. Program status is summarized in this report.

MET = 80% or higher in compliance with all indicator requirements
MET WITH CONDITIONS = 70%-79% in compliance with the indicator requirements
NOT MET = 69% or less in compliance with the indicator requirements

Performance Status for the Private and Type III Water Supply Program

MPR 5	☐ Met	☐ Met with Conditions	☐ Not Met
MPR 6	☐ Met	☐ Met with Conditions	☐ Not Met
MPR 7	☐ Met	☐ Met with Conditions	☐ Not Met

Number of Technical Staff in the Private and Type III Water Supply Program _____

_____ _____
Evaluator(s) Name Here Date
Title Here

TYPE NAME OF DEPARTMENT HERE
Private and Type III Program Evaluation
Fiscal Year (FY) 2022

MPR 5
The local health department (LHD) shall maintain and review for timeliness, completeness, and accuracy, all water well records submitted by contractors and property owners who install or plug their own well. Inaccurate or incomplete records shall be corrected. Appropriate enforcement action shall be taken to obtain well records from contractors and property owners who fail to comply with the State Well Code.

Indicator A: Evidence of a water well record processing system.
- Well records are easily retrievable ..... ☐ Yes ☐ No
- The number of wells drilled and plugged is tracked ..... ☐ Yes ☐ No

Indicator B: Technical staff reviews all well records for timeliness, completeness, and accuracy. Inaccurate and incomplete records (electronic and non-electronic) are corrected. Non-electronic well records are date-stamped before they are sent to EGLE.
- LHD adequately reviews and corrects well records before they are sent to EGLE ..... ☐ Yes ☐ No
- LHD forwards well records to EGLE within 30 days ..... ☐ Yes ☐ No
- LHD date stamps non-electronic well records ..... ☐ Yes ☐ No

Indicator C: Documentation of enforcement action to contractors regarding the submission of timely, complete, and accurate water well records. Written enforcement notices shall be copied to EGLE.
- LHD returns well records to contractor and/or corrects items after verification ..... ☐ Yes ☐ No
- Written enforcement notices are in contractor files ..... ☐ Yes ☐ No
- LHD follows-up on non-submittal and/or late well records ..... ☐ Yes ☐ No
- Is there a pattern of noncompliance by a contractor ..... ☐ Yes ☐ No ☐ NA

MPR 5 Comments:

MPR 6
The LHD shall have a Private and Type III Public Water Supply Program, which includes a permit and inspection program established by a locally adopted ordinance that requires contractors or property owners to obtain a permit to construct a water well.
Conduct activities to evaluate well/pump installations and water samples required under code for compliance with applicable state and local regulations.
Conduct activities to evaluate well abandonment status to determine compliance with state or local regulations.

Indicator A: Local ordinance requiring a permit before the installation of a water well.
- LHD has a permit program ..... ☐ Yes ☐ No
- Detailed site plan available with application from applicant or LHD at time of PDSE ... ☐ Yes ☐ No

Indicator B: Completion of predrilling site evaluation (office evaluation or field evaluation) of all proposed well drilling sites.

Documentation that staff has access to and utilizes groundwater contamination internet sites, maps, or resources to assess contamination potential (both manmade and naturally occurring) at sites of proposed wells.
If applicable, the permit shall include a notice on the well permit where areas of groundwater concern are identified, such as known natural or manmade contaminants, low production areas, or flowing wells.

LHD completes 100% predrilling site evaluations ☐ Yes ☐ No
Known contamination sites are identified prior to issuing water well permits ☐ Yes ☐ No
Permits contain sources of contamination, water quantity or quality problems in the area, isolation distances, water sampling requirements and recommendations, special construction requirements and requirement to plug abandoned well(s) ☐ Yes ☐ No

Indicator C: All newly-completed wells shall have at least one on-site evaluation prior to, during, or after construction.

An onsite evaluation (before, during, or after construction) is performed on at least 80% of all wells installed ☐ Yes ☐ No

Indicator D: A minimum of 10% of all newly-completed wells will have a final inspection to ensure compliance with well construction code.

LHD conducts final inspections on a minimum of 10% of all newly completed wells ☐ Yes ☐ No
Percent final inspections completed ____ %
LHD inspects minimum components during final inspection ☐ Yes ☐ No

Indicator E: Documentation that all newly-completed wells are approved only after meeting the minimum criteria such as a safe coliform sample, permit requirements, complete and accurate well record, and final inspection (if applicable).

LHD issues written approvals and non-approvals ☐ Yes ☐ No
LHD notifies well owners in writing of the need to obtain bacteriological sample prior to placing water system into service ☐ Yes ☐ No
LHD responds to positive bacteriological test results on new wells with responsible party ☐ Yes ☐ No

Indicator F: Documentation of deviations being issued pursuant to provisions of the State Well Code.

LHD documents deviations in writing ☐ Yes ☐ No ☐ NA
LHD issues deviations in concurrence with well code and public health protection ☐ Yes ☐ No ☐ NA

Indicator G: Documentation of the review of plugging of abandoned wells and dry holes. Provide documentation of status of wells that remain in service.

LHD notifies of well plugging requirement on replacement well permits ☐ Yes ☐ No ☐ NA
Plugging records comply with the code ☐ Yes ☐ No ☐ NA
LHD provides proper documentation for abandoned wells left in service ☐ Yes ☐ No ☐ NA
LHD requires known dry holes to have drilling and plugging record ☐ Yes ☐ No ☐ NA

Indicator H: Documentation of enforcement actions when State Well Code violations are identified, and follow-up inspections are performed.

Enforcement documented ☐ Yes ☐ No ☐ NA
Enforcement follow-up documented ☐ Yes ☐ No ☐ NA
Enforcement notices contain all key elements ☐ Yes ☐ No ☐ NA
Enforcement notices copied to EGLE ☐ Yes ☐ No ☐ NA

Indicator I: Documentation of investigation of written contractor/customer complaints and/or water well quality complaints related to well construction with technical assistance from EGLE, where appropriate.

LHD has mechanism for tracking complaints..... ☐ Yes ☐ No
LHD handles complaints promptly and completely..... ☐ Yes ☐ No
LHD documents complaint findings correctly..... ☐ Yes ☐ No

MPR 6 Comments:

MPR 7

The LHD shall assist EGLE in the investigation of all known or suspected cases of drinking water contamination for sites under the regulatory review of EGLE.
The LHD shall investigate all known or suspected cases of groundwater contamination, for sites of naturally-occurring or nonpoint source contaminants.
The LHD shall maintain documentation of sites of known or suspected groundwater contamination and use this information when processing well permit applications.

Indicator A: Conduct and document investigations to assist EGLE in assessing water supply sources in areas of potential and existing groundwater contamination.

Public is educated on water quality concerns..... ☐ Yes ☐ No
Groundwater contamination investigations documented..... ☐ Yes ☐ No
Documents related to sites of known or suspected groundwater contamination maintained..... ☐ Yes ☐ No

Indicator B: Provide information and education on general water quality concerns to the general public. Send health advisory letters to all residents involved in drinking water quality investigations or a Maximum Contaminant Level (MCL) exceedance.

LHD follows-up on positive coliform samples (newly-constructed wells only)..... ☐ Yes ☐ No
LHD sends written health advisories to well owner when a chemical MCL is exceeded ☐ Yes ☐ No

Indicator C: Documentation of a policy/procedure to address proposed well sites near known or suspected groundwater contamination, to protect public health and the groundwater resource.

LHD has policy / procedure to evaluate proposed well sites near known or suspected groundwater contamination..... ☐ Yes ☐ No
LHD policy / procedure contains required information..... ☐ Yes ☐ No
LHD policy / procedure used consistently by all staff..... ☐ Yes ☐ No

MPR 7 Comments:

P3 Permit Review Worksheet (for MPR 5 & MPR 6)

Permit	Sanitarian Name					
	Permit Identifier					
	Well Address					
	New or Replacement					
	Minimum Isolation Requirements (Y/N)					
	Water Sample Requirements (Y/N)					
	Site Plan (Y/N)					
	Deviation Issued (Y/N)					
	Water Quality/Quantity Concerns (Y/N)					
	Contamination Areas (Y/N)					
	Special Construction Requirements (Y/N)					
	Well Plugging Required (Y/N/NA)					
Well Record	Received within 60 Days (Y/N)					
	Complete, Accurate, Complies with Permit (Y/N)					
	Date Stamped (Y/N)					
	Abandoned Well Plugged (Y/N/NA)					
	Plugged Well in Compliance (Y/N/NA)					
	Unplugged Well Documented (Y/N/NA)					
Inspection	Pump / Pressure Tank Approved (Y/N)					
	Sample Tap Approved (Y/N)					
	Pressure Relief Valve Installed (Y/N)					
	Well Cap / Conduit Approved (Y/N)					
	Casing 12” Above Grade (Y/N)					
	Seal Around Annular Space / Grouting (Y/N)					
	Isolation Distances Approved (Y/N)					
Approval	Water Samples Received (Y/N)					
	Bacteria Results (ND/POS/NA)					
	Additional Sampling Required (Y/N)					
	Follow Up on Unsafe Samples (Y/N/NA)					
	Non-Approval Letter Sent (Y/N/NA)					
	Approval Letter Sent (Y/N/NA)					
	Enforcement (Y/N/NA)					

Comments/Notes:

Permit Identifier Field Verified ☐ Yes ☐ No

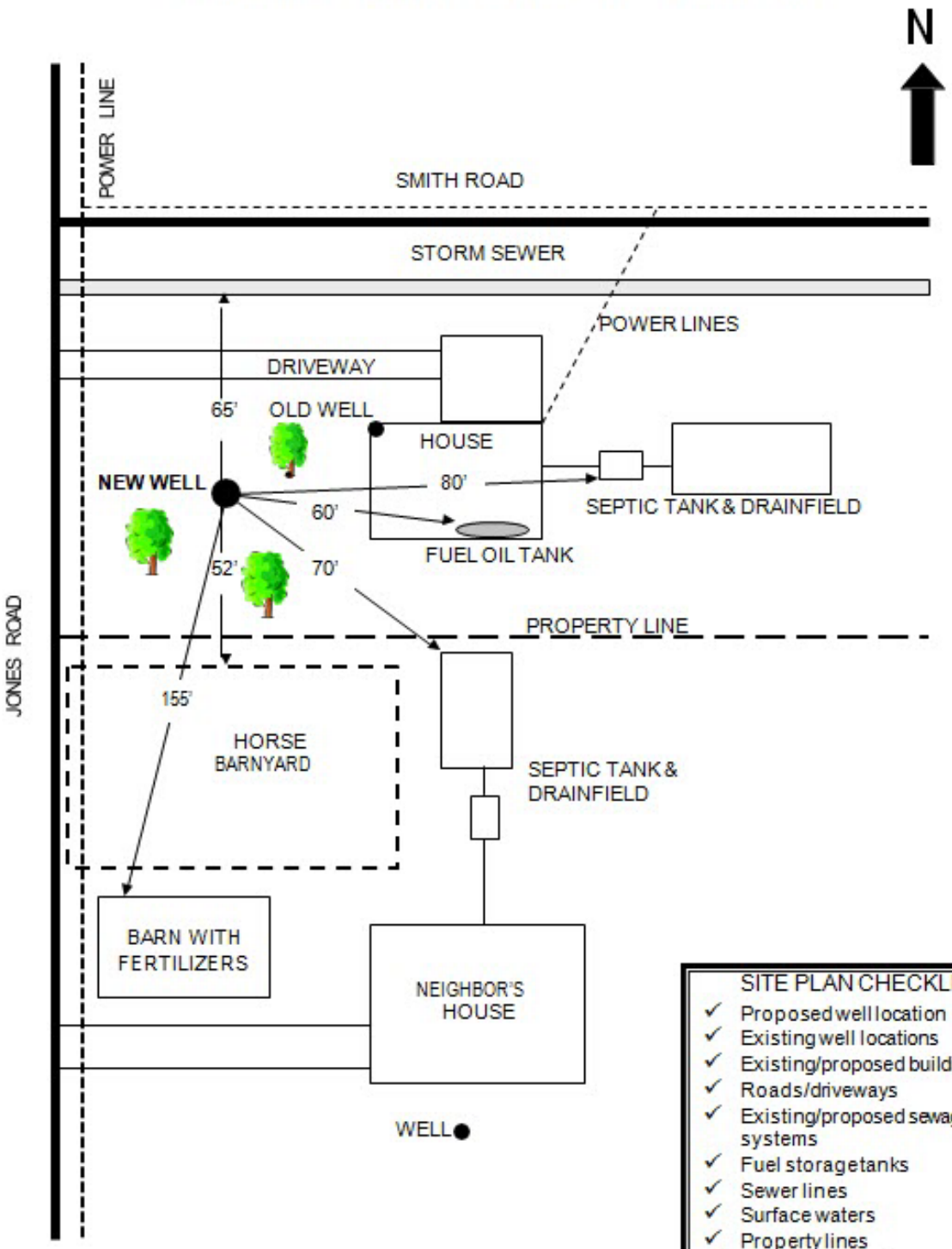
Permit Identifier Field Verified ☐ Yes ☐ No

Permit Identifier Field Verified ☐ Yes ☐ No

Permit Identifier Field Verified ☐ Yes ☐ No

Permit Identifier Field Verified ☐ Yes ☐ No

EXAMPLE OF DETAILED PROPOSED SITE PLAN



SITE PLAN CHECKLIST:

- ✓ Proposed well location
- ✓ Existing well locations
- ✓ Existing/proposed buildings
- ✓ Roads/driveways
- ✓ Existing/proposed sewage systems
- ✓ Fuel storage tanks
- ✓ Sewer lines
- ✓ Surface waters
- ✓ Property lines
- ✓ Animal barnyards
- ✓ All items on adjacent properties

OFFICE PREDRILLING SITE REVIEW CHECKLIST

Owner Name	Well Address	
Permit/Application Number	Date	
Detailed site sketch provided? ☐ Yes ☐ No		
Proposed well location ☐	Existing wells ☐	Existing/proposed building ☐
Existing/proposed sewage systems ☐	Sewage ejector in basement ☐	Sewer lines ☐
Fuel storage tanks ☐	Sewage systems and fuel tanks on adjacent property ☐	Surface water (lakes/ditches) ☐
Property lines ☐	Accurate distances ☐	Roads and driveways ☐
Proposed water well location acceptable? ☐ Yes ☐ No		
Deviations requested? ☐ Yes ☐ No	**Existing wells on site?** ☐ Yes ☐ No	
Proposed well in a subdivision/site condo development? ☐ Yes ☐ No		
Environmental Mapper and other resources for contamination sources reviewed? ☐ Yes ☐ No		
Contamination or aquifer concerns exist? ☐ Yes ☐ No		
Nitrates, arsenic, chlorides, etc. ☐	Known groundwater contamination ☐	
Suspected groundwater contamination ☐	Fractured (Karst) limestone ☐	
Flowing well area ☐	Low production/dry hole ☐	
Other groundwater concern ☐		
Special well construction requirements necessary? ☐ Yes ☐ No		
Special sampling necessary? ☐ Yes ☐ No		
Comments		

EH Staff Name Date

FIELD PREDRILLING SITE EVALUATION CHECKLIST

Owner Name	Well Address	
Permit/Application Number	Date	
Detailed site sketch provided?		
Proposed well location ☐	Existing wells ☐	Existing/proposed building ☐
Existing/proposed sewage systems ☐	Sewage ejector in basement ☐	Sewer lines ☐
Fuel storage tanks ☐	Sewage systems and fuel tanks on adjacent property ☐	Surface water (lakes/ditches) ☐
Property lines ☐	Accurate distances ☐	Roads and driveways ☐
Utility lines (overhead and buried) near proposed water well? ☐ Yes ☐ No		
Trees or other obstructions interfere with rig setup? ☐ Yes ☐ No		
Site topography allow access for rig? ☐ Yes ☐ No		
Water well accessible for maintenance after site development is completed? ☐ Yes ☐ No		
Proposed water well location approved? ☐ Yes ☐ No		
Comments		

EH Staff Name Date

(LOCAL HEALTH DEPARTMENT NAME)

EXAMPLE Policy and Procedure for Private and Type III Water Supplies

Topic: Groundwater Contamination **Effective Date:**

Reviewed By: (*Supervisor or Lead Sanitarian Name*)

Approved By: (*Environmental Health Director Name*)

Distributed To: Sanitarians and Secretaries

POLICY

(*LHD Name*) will *issue written health advisories* to water well owners when chemical maximum contaminant level (MCL) is exceeded or when water quality or potential contamination threatens public health.

(*LHD Name*) will *respond to water quality problems or concerns* from the general public and any government agencies (state, local, federal).

(*LHD Name*) will *participate in the "Long-Term Monitoring" program*, which is Appendix B of the Contract between the Department of Environment, Great Lakes, and Energy (EGLE), Drinking Water and Environmental Health Division (DWEHD), and the (*LHD Name*), pending availability of state funding.

(*LHD Name*) will *review all known or suspected contamination sites* and local groundwater conditions prior to issuing a water well construction permit.

(*LHD Name*) will *require water well construction permit stipulations*, as needed, in areas of suspected or known groundwater contamination.

(*LHD Name*) will *maintain a record of sites* of known or suspected groundwater contamination and make such information available to the well drilling industry and the public.

PROCEDURE

Health Advisories

When a water sample result is received by the local health department that indicates an MCL chemical exceedance or other public health threat, the Sanitarian will notify the well owner in writing (*Name of letter or notification*) within three (*3*) working days.

The Sanitarian will contact the EGLE, DWEHD, Environmental Health Section, Source Water Unit (SWU) for guidance on health advisories, if needed.

Water Quality Problems or Concerns
The Sanitarian will initiate an investigation or consultation when water quality problems or concerns are received from the general public and any government agencies (state, local, federal).

Water quality concerns and problems include, but are not limited to:

- Microbiological
- Manmade chemicals
- Heavy metals
- Nitrates and nitrites
- Turbidity, taste, and odor

The Sanitarian will contact the SWU for assistance and guidance in the investigation, if needed.

Long-Term Monitoring Program
EGLE sends a list of sampling points and parameters to the (LHD Name) at the beginning of the fiscal year. (*Employee name or position*) is responsible for scheduling the sample collection with the well owners and ensuring that all samples are collected within the fiscal year.

Upon receipt of the water sample results, the Sanitarian is responsible for sending out the sample result letters to the well owners within 30 days. A copy is sent to the EGLE, DWEHD.

The (*LHD Name*) will maintain files for each site sampled. The files will include all relevant correspondence, including letters, analytical results, etc.

The (*LHD Name*) may submit a request for payment to the EGLE, DWEHD on a quarterly, biannual, or annual basis.

Review Sites of Known or Suspected Contamination
Upon receipt of a well permit application, the Sanitarian will check for any known or potential sites of contamination and any other areas of concern within a (*2000 foot*) radius of the proposed well site.

The Sanitarian will use the EGLE Environmental Mapper (or equivalent) (MCGI.State.MI.US/EnvironmentalMapper/) to determine the locations of:

- Part 201 Sites of Environmental Contamination
- Part 213 Leaking Underground Storage Tanks
- Part 211 Underground Storage Tanks

The Sanitarian will also review other state of Michigan websites to determine locations of other potential sources of contamination. These include, but are not limited to:

- Landfills
- Oil and gas wells
- Hazardous waste sites

- Septage land application sites
- Groundwater discharge sites

The Sanitarian will also review other office documentation for those sites *not* found on the state of Michigan websites. These sites include, but are not limited to:

- Township dumps
- Bulk fuel storage facilities
- Military bases
- Dry cleaners
- Industrial facilities
- Road salt storage facilities

The Sanitarian will also review any local groundwater quality issues (e.g., nitrates, arsenic, chlorides, etc.) near the proposed well site.

If the proposed well site is located in an approved subdivision, the Sanitarian will review the corresponding deed restrictions.

Upon discovering a known or suspected site of groundwater contamination or a groundwater quality issue within (*Distance*) feet of the proposed well site, the Sanitarian will do the following:

1. Determine if there are any assessments, notices, or restrictions in the area by reviewing the contamination site and/or permit files.
2. Review the area geology and use the EGLE Remediation and Redevelopment Division to determine site-specific information such as type and concentration of contaminant, groundwater flow direction, gradient, and extent.
3. Determine if there is an available alternate source of water, if needed.

The Sanitarian will use the following criteria to determine permit issuance related to **isolation distances:**

1. If the proposed well is > *(Distance) feet from the contamination*, the permit may be issued using standard construction methods. This would not apply for a plume longer than the isolation distance.
2. If the proposed well is < *(Distance) feet from the contamination*, the permit may be issued, along with a deviation stating the reasons for the deviation. The permit will then be reviewed by the Supervisor prior to issuance.

Both the Water Well Construction Code (Part 127) and Safe Drinking Water Act (Act 399) contain minimum isolation distances to major sources of contamination. The minimum distances can and should be increased depending on the well use and nature of the contamination.

Local Ordinance Restricting Use of Groundwater

1. If the proposed well is in an area where a local ordinance restricts groundwater use, the well *may not be permitted* for standard construction installation.
2. A water well construction permit *may be issued* within a local ordinance area restricting use of groundwater where:
    a. Wells are not explicitly prohibited by the local ordinance, and

b. The water well is to be constructed in accordance with specifications contained within the ordinance, and
c. Each well is permitted in a written deviation issued by the health officer.

3. A water well construction permit *shall not be issued*, regardless of deviation, if construction of any and all water wells is specifically prohibited within a local ordinance restricting use of groundwater.

Special Construction Stipulations

When issuing a permit for a new or replacement well, one or more of the following special requirements will be required depending upon the extent of contamination, the depth of the contamination, and the type of contaminants:

1. Prepayment for a water sample(s) collected after development of the well that is analyzed for the specific compound(s) identified in the known contaminant plume.
2. Use of steel casing and copper service line to avoid permeation by volatile organic compounds. In the case of chloride contamination, PVC well casing will be utilized.
   If the concentration of chlorides in groundwater is known to exceed 1000 mg/L, neat cement grout will be required.
3. Screened to a depth specified in the permit that is determined to be above or below the existing plume of contamination and separated from the contaminants by a confining layer.
4. Located a specific direction or distance from a known site of contamination so as to not be down gradient from the contaminant plume.

The Sanitarian may require a hydrogeological study be performed prior to issuing the permit in cases where there is insufficient evidence to support issuing the well permit or where the permit applicant requests a change in the permit requirements that might subject the well to an increased chance of contamination.

The Sanitarian may contact the EGLE SWU for assistance and guidance in developing the construction stipulations.

Maintain a Record of Sites

All contamination site files will be located in (*location*). These include not only those sites sampled as part of the long-term monitoring program, but any sites where written correspondence has been received.

Any written correspondence received by the Secretary will be forwarded to the Sanitarian for his/her review. Following review by the Sanitarian, the written correspondence will be filed in the individual site file.

Copies of written correspondence should also be kept in the address/permit file. This will provide support for permit issuance decisions.

Well First Areas

The following “Well First Areas” have been determined using the following criteria:

- (*supporting documentation*)

The map/list of “well first areas” is located (*location*). Prior to issuing the sewage system permit in an area of known or potential groundwater quality or quantity concerns, a test well is required to be drilled and an acceptable water supply well obtained.

If the well does not produce favorable results, the Sanitarian will order the well plugged by the registered contractor and the sewage disposal permit will be denied.

The Supervisor will review the well record and sample data on an annual basis and update the map/list as needed.

Well Records

One important factor in the well permit decision-making process is the evaluation of local geologic conditions. There are many sources of geologic information readily available to LHDs. Water Well and Pump Records can be accessed through the statewide groundwater database, Wellogic, (EGLE.State.MI.US/Wellogic/Login.aspx), and the Scanned Water Well Record Retrieval System (EGLE.State.MI.US/Well-Logs/). Various EGLE divisions and the United States Geological Service also have geologic information available in the form of hydrogeological studies and monitoring well logs.

STATE OF MICHIGAN RESOURCES FOR WATER WELLS AND POTENTIAL SOURCES OF CONTAMINATION

Water Well Resources

Wellogic (2000 and newer water well	EGLE.State.MI.US/Wellogic/Login.aspx
Water Well Viewer (View well records on a map)	MCGI.State.MI.US/WaterWellViewer/ Zoom into an area, use the Tools and Identify button
Water Well Record Data (Shapefiles created from Wellogic for mapping purposes)	GIS-Michigan.OpenData.ARCGIS.com/Search?Collection=Dataset&q=Wellogic
Scanned Well Records (1999 and older water well records)	EGLE.State.MI.US/Well-Logs/
Public Water Supply Wellhead Protection Areas (Shapefiles for mapping purposes)	GIS-Michigan.OpenData.ARCGIS.com/Datasets/EGLE::Wellhead-Protection-Areas

Potential Sources of Contamination

Contamination Investigation Program	Michigan.gov/EGLE/About/Organization/Drinking-Water-and-Environmental-Health/Contamination-Investigation
Part 201 Facilities	EGLE.State.MI.US/RIDE/
Part 211 and 213 Storage Tank Information Database	EGLE.State.MI.US/RIDE/
Michigan Environmental Mapper (View Part 201, 211, and 213 sites on a map)	MCGI.State.MI.US/EnvironmentalMapper/
Part 117 Septage Application Sites	Michigan.gov/EGLE/About/Organization/Drinking-Water-and-Environmental-Health/Septage
Onsite Wastewater Systems	Contact your Local Health Department
Part 615 Oil and Gas Wells	EGLE.State.MI.US/GeoWebFace/
National Pipeline Mapping System (NPMS) Public Map Viewer	pvnpms.phmsa.dot.gov/PublicViewer/
Part 111 Hazardous Waste Sites	EGLE.State.MI.US/WDSPI/Home.aspx
Part 115 Landfills	EGLE.State.MI.US/WDSPI/Home.aspx
Part 31 Groundwater Discharge Sites	MiEnviro.Michigan.gov/nSite/Map/Help
PFAS Contamination	Michigan.gov/PFASResponse

(Rev. 08/2023)

RANDOM CONSTRUCTION INSPECTION CHECKLIST

Owner Name	Well Address
Permit/Application Number	Drilling Machine Operator Name

PERMIT	Was the permit issued?	☐ Yes ☐ No
	Special permit conditions?	☐ Yes ☐ No
RIG REGISTRATION	Rig properly identified with EGLE decals and business information?	☐ Yes ☐ No
DRILLING SITE LOCATION	Location complies with the permit conditions?	☐ Yes ☐ No
	Isolation distances maintained?	☐ Yes ☐ No
	Water well accessible for maintenance?	☐ Yes ☐ No
	Water well in a non-flooding location?	☐ Yes ☐ No
DRILLING WATER	Source approved?	☐ Yes ☐ No ☐ N/A
	Chlorinated to at least 10 ppm residual?	☐ Yes ☐ No ☐ N/A
WATER WELL RECORD	Drilling machine operator routinely checking cuttings samples and recording geologic information?	☐ Yes ☐ No
GROUTING	Necessary grouting equipment and materials at the drilling site?	☐ Yes ☐ No
	Grout appears at the wellhead after pumping?	☐ Yes ☐ No ☐ N/A
	Weight of mixed grout and pumped grout the same?	☐ Yes ☐ No ☐ N/A
	For casing being driven, is dry granular bentonite maintained around the casing during driving?	☐ Yes ☐ No ☐ N/A
CASING	Casing material approved?	☐ Yes ☐ No
DISINFECTION	Method approved?	☐ Yes ☐ No ☐ N/A
	Material and disinfection adequate?	☐ Yes ☐ No ☐ N/A
COMMENTS		

EH Staff Name Date

WATER SUPPLY FINAL INSPECTION AND APPROVAL

Owner Name	Well Address
Permit/Application Number	Date of Final Inspection

LOCATION	Properly isolated from all contamination sources?	☐ Yes ☐ No
	Accessible for maintenance/repair?	☐ Yes ☐ No
WELLHEAD	Minimum 12 inches above grade?	☐ Yes ☐ No
	Approved cap/seal and secure?	☐ Yes ☐ No
	Approved conduit and secure?	☐ Yes ☐ No
	No caving of soil or open annulus around casing?	☐ Yes ☐ No
PUMP	Location approved?	☐ Yes ☐ No
SERVICE LINE	Material approved?	☐ Yes ☐ No
	Protected suction line?	☐ Yes ☐ No ☐ N/A
PRESSURE TANK	Location approved?	☐ Yes ☐ No
	Sample tap 8” above floor, downturned, and accessible?	☐ Yes ☐ No
	Pressure relief valve installed?	☐ Yes ☐ No
ABANDONED WELL	Properly plugged?	☐ Yes ☐ No ☐ N/A
COMMENTS		

WELL PERMIT CONDITIONS MET	☐ Yes ☐ No
WELL CONSTRUCTION APPROVED	☐ Yes ☐ No
WATER SAMPLES COLLECTED AND SATISFACTORY RESULTS	☐ Yes ☐ No
WATER WELL AND PUMP RECORD COMPLETE AND ACCURATE	☐ Yes ☐ No
WATER SUPPLY APPROVED	☐ Yes ☐ No

EH Staff Name Date of Approval

Additional Notes
Make As-Built Drawing Here

EXAMPLE CORRECTION ORDER

<DATE>

John Doe, WD#98-6666
XYZ Well Drilling
123 Main Street
Anytown, Michigan 12345

Dear Mr. Smith:

Michigan Local Health Department (MLHD) has reasonable grounds to believe there has been a violation of Part 127, Water Supply and Sewer Systems, of the Public Health Code, 1978 PA 368 (State Well Code), as amended, and rules (or the rules, regulations, or construction code). Pursuant to Section 12714 of the State Well Code, a review of our files and field activities disclosed the following deficiencies:

- On January 7, 2016, you plugged an abandoned well that terminated in bedrock with bentonite chips at 123 Jones Road. This is a violation of Rule 163 of the State Well Code which requires wells terminating in bedrock to be plugged with neat cement or concrete grout.

You were sent a correction order dated February 1, 2016, regarding this violation, and you failed to comply.

Pursuant to Section 12709 of the State Well Code, you are hereby **ordered** to do the following no later than <DATE>:

1. Remove the bentonite grout and replace it with neat cement or concrete grout.

2. Notify the MLHD at 517-555-1234 prior to correction so that our office can observe the correction.

Failure to comply with this order may result in an escalated enforcement action against your Certificate of Registration.

You are further advised that pursuant to Section 12715 of the State Well Code, any person who is convicted of the violation of any provision of the act or any rule, regulation, or construction code adopted under the act, or any order of the director of the health department, is guilty of a misdemeanor.

Sincerely,

Sanitarian
Michigan Local Health Department
Phone
Email

cc: Well Owner
EGLE Source Water Unit

Suggested Well Construction Code Enforcement Procedures

The following procedures are intended to (1) assist LHDs with conducting enforcement actions involving water well construction and pump installation code violations;
(2) provide guidance to achieve statewide standardization of enforcement actions;
(3) help ensure that enforcement actions are reasonable, consistent, and timely; and
(4) assist local agencies with meeting the MPRs under EGLE's LHD Contracts.

These procedures augment enforcement tools authorized in some counties by local ordinances, such as civil fines.

Legal Authority
Part 127, Water Supply and Sewer Systems, of the Public Health Code (PHC), 1978 PA 368, as amended and the administrative rules promulgated thereunder, referred to as the *Groundwater Quality Control Rules* (State Well Code), give the LHDs legal authority to enforce the State Well Code. Although Part 127 of the PHC gives enforcement authority to both the state and local agencies, the MPRs require the LHDs to enforce the State Well Code.

Section 333.12708 of the PHC states that the state or "LHD may enter and inspect, at reasonable hours, an installation on public or private property for the development or abandonment of ground water supplies." A similar provision authorizing the LHDs to inspect and investigate is found in Section 333.2446 of the PHC. Local prosecuting attorneys and the attorney general are given responsibility for prosecution of violators under Sections 333.12715 and 333.1299 of the PHC.

Section 333.12709 of the PHC states that when the state or LHD determines that there are reasonable grounds to believe there has been a violation of Sections 12701 to 12715 or a rule or the construction code promulgated under Section 12714, the state or LHD shall investigate the violation. If it is established that a violation has been committed, the state or LHD shall order the responsible person to make proper corrections.

EGLE has the statutory responsibility for issuing the registration certificates for water well drillers and pump installers (contractor). Administrative actions relating to revocation or suspension of registrations are the responsibility of EGLE.

Primary Enforcement Procedures
When a State Well Code violation is discovered, it is recommended that the person responsible for committing the violation be contacted via telephone. Oftentimes a telephone contact is all that is necessary to get the responsible person to correct the violation. Some individuals respond more favorably to a personal contact, such as a telephone call or face-to-face meeting.

For State Well Code violations involving site specific issues, it can be beneficial to meet the responsible person at the site to discuss the violation. This approach gives the sanitarian an opportunity to explain the violation and discuss correction options while taking site conditions into consideration. If the responsible person is a contractor, the property owner should be included in the discussion, particularly if the corrections will result in extensive excavation, major alteration, or further expense.

When correction is obtained, a brief follow-up letter or file memo should be prepared confirming the correction with copies sent to the well owner, contractor, EGLE, and other involved parties.

Secondary Enforcement Procedures

If the responsible person fails to make the necessary corrections after the initial contact, a correction order should be sent, pursuant to Section 333.12709 of the PHC. While telephone calls to a contractor can help to resolve some violations, most enforcement documentation must be in writing via correction orders.

In order for correction orders to be enforceable, they need to contain the following five items:

1. Violation observed
2. Statute/rule violated
3. Method of correction
4. Deadline for correction (specific date)
5. Penalty for noncompliance

It is very important that correction orders contain detailed information about the specific well code violation(s). A correction order simply stating that “improper grouting” was observed and a repair needs to be made “as soon as possible” is not sufficient and cannot be used in an administrative enforcement action by EGLE.

Correction orders should be mailed certified, return receipt requested, or personally delivered, to help ensure receipt by the contractor. A duplicate order may also be sent by regular mail (unless the certified letter was personally delivered) as some people refuse to accept a certified letter. Correction orders shall be copied to the well owner, EGLE, and the contractor's file.

It is important to give the responsible person a reasonable deadline for correcting the violation. For most State Well Code violations, deadlines of between five and 30 days are appropriate, depending on the severity of the violation. Special circumstances, such as seasonal load limits on roads and access to property, should be taken into consideration. Being consistent is important – do not give a contractor five days to correct a violation if you gave another contractor 30 days to correct the same type of violation.

If the contractor does not respond to the correction order, EGLE should be contacted for advice. The following actions may be taken, depending on the nature of the violation and other circumstances:

1. Meeting with the contractor and the LHD. EGLE may attend upon request of the LHD.

2. Seek prosecution through the local prosecuting attorney or corporate counsel for violation of a correction order issued by EGLE or LHD, as per Sections 333.12715 and 333.2261 of the PHC.
3. EGLE may initiate administrative action to revoke or suspend the registration certificate, pursuant to the provisions of R 325.1707a.

Administrative Procedures

Where a contractor has demonstrated a pattern of noncompliance or if a serious matter that threatens the public health has occurred, further enforcement action, such as suspension, revocation, or denial of registration certificate renewal, may be necessary. After a LHD contacts the SWU regarding a noncompliant contractor, and the SWU decides to pursue an administrative enforcement action, the SWU contacts counties where that contractor works to retrieve any additional violation information for infractions not already on file. The SWU then has two options to notify the contractor of their unacceptable pattern of noncompliance with Part 127, 1978 PA 368, as amended (Act 368), and the rules:

1. A Notice of Intent to Revoke Certificate of Registration (NOI). The NOI contains the complete list of violations. The contractor has the opportunity to show compliance at an informal conference scheduled by the SWU. LHD staff are expected to attend the informal conference or participate through a conference call and be able to provide clear and concise evidence to verify the allegations.
2. A Notice of Violation and Order Letter (NOV) and Administrative Consent Order (ACO). The NOV contains the complete list of violations, the method of correction, compliance date and consequences for noncompliance. If the contractor does not comply with the NOV, an ACO is then sent to the contractor. The ACO contains a reference to violations, a compliance schedule, stipulations, general provisions, and termination notice requirements. Failure to comply with the ACO may result in the immediate revocation of the contractor's certificate of registration.

It is up to EGLE's discretion on which option above they pursue with the contractor. The contractor's compliance history, the types of violations and the quality of the LHD documentation are all taken into consideration when pursuing an administrative enforcement action. Timeliness and consistency must be maintained by the LHD during the enforcement process. It is important that LHDs respond quickly to ongoing noncompliance issues. Allowing a contractor to generate large numbers of violations over a period of months or even years without escalating enforcement should not be standard practice.

Administrative proceedings against the contractor's registration certificate must be conducted in accordance with the Administrative Procedures Act (APA), 1969 PA 306, as amended. The initial step in this process is the preparation of the NOI. EGLE will draft the NOI using the LHD documentation of well code violations.

Issuance of an NOI informs the contractor of EGLE's intent to take administrative action against their certificate of registration. It offers an opportunity to attend an informal conference (also referred to as a "Rogers" conference) to demonstrate compliance with the State Well Code.

The matter may be settled after the informal conference through a Consent Agreement with provisions for correction of violations, suspension of the certificate of registration, monetary penalties, or other options agreeable to both parties.

If the matter is not resolved via a Consent Agreement, EGLE may issue a Notice of Suspension to the contractor. The contractor can then submit a "Petition for Contested Case Hearings" with the Office of Administrative Hearings within 30 days, in accordance with the APA. If the contractor does not request a contested case hearing, a Notice of Revocation may be issued to the contractor.

Questions regarding enforcement of the State Well Code should be directed to the Source Water Unit, Environmental Health Section, Drinking Water and Environmental Health Division, EGLE staff person for that LHD.

WATER WELL CONTRACTOR COMPLAINT FORM
AUTHORITY: ACT 368 PA 1978

Company or Individual Complaining Against				
Address	City	State	Zip	Phone
Name of Complainant				Phone
Complainant Address	City	State	Zip	Email
Well Address	City	County		Township

Have you contacted the contractor about your complaint?	☐ Yes ☐ No
If yes, name of person contacted and date:	
Have you started legal action?	☐ Yes ☐ No
Were you given a written estimate?	☐ Yes ☐ No
Were you given a water well and pump record?	☐ Yes ☐ No
Were you given an itemized invoice?	☐ Yes ☐ No
Do you have a written contract covering the work?	☐ Yes ☐ No

Signature Date

Note: This complaint is NOT confidential and will be sent to the contractor or firm involved. Attach copies of any documentation that will assist in resolving this complaint.

Complaint Details – briefly explain your complaint:

How would you like to see this matter resolved?

Please return this form to the Local Health Department.

DEVIATION FORM

This is to allow for a deviation of the provisions of the Michigan Well Construction and Pump Installation Code (Part 127, 1978 PA 368). This deviation is authorized under R 325.1613.

Well Owner Name	Well Owner Mailing Address
Phone	Email
Well Address	Permit Number

☐ **Isolation Distance Deviation**

Contaminant Source:	Reason for Deviation:
Minimum Isolation Distance Required by Code (feet):	Minimum Isolation Distance Approved per Deviation (feet):
Additional Construction Requirements:	

☐ **Flowing Well Discharge Deviation**

Reason for Deviation: ☐ Control of Flow Not Practical ☐ Flow Control Resulted in Sand/Turbidity ☐ Discharge is for Beneficial Use	Unrestricted Flow Rate (GPM):	Proposed Flow Rate (GPM):
Explain Reason for Deviation:		

Well Owner Signature	Date
Local Health Department Signature	Date

ACRONYMS

AIC	Alternate Institutional Control
CAP	Corrective Action Plan
DWEHD	Drinking Water and Environmental Health Division
EGLE	Michigan Department of Environment, Great Lakes, and Energy
FY	Fiscal Year
LHD	Local Health Department
MALEHA	Michigan Association of Local Environmental Health Administrators
MCL	Maximum Contaminant Level
MPR	Minimum Program Requirement
PDSE	Pre-Drilling Site Evaluation
PHC	Public Health Code (Act 368 of 1978)
PPM	Parts Per Million
PVC	Polyvinyl Chloride
RCI	Random Construction Inspection
SA	Self-Assessment Evaluation
SDWA	Safe Drinking Water Act, 1976 PA 399
State Well Code	Part 127, Water Supply and Sewer Systems, of the Public Health Code, 1978 PA 368, as amended, and rules
SWU	Source Water Unit
U.S. EPA	United States Environmental Protection Agency