

# Permitting Aggregate Mines in Minnesota

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# Legal Notice

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# Speaker



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# Overview

- **Operating Permit**
- **Water Permits**
  - **Wetlands**
  - **Discharge**
  - **Water Appropriation**
- **Air Permit**
- **Hazardous Waste**
- **Environmental Review**
  - **Environmental Assessment Worksheet**
  - **Environmental Impact Statement**
- **MERA**

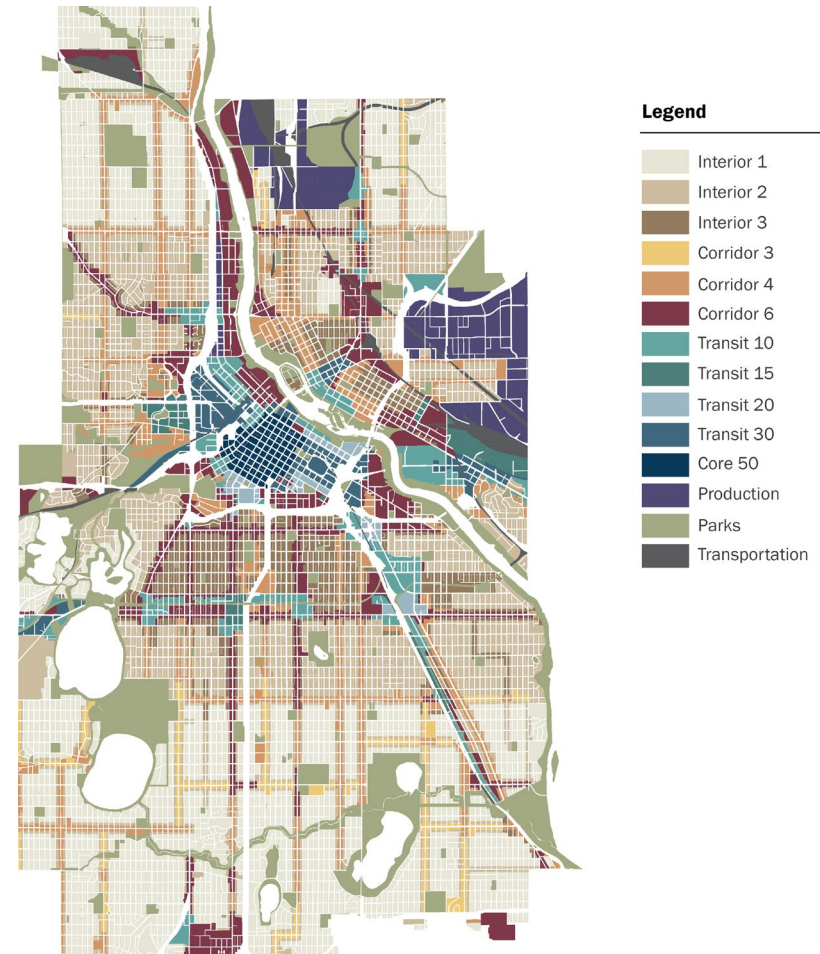
# Operating Permit

Local land use permits



# Comprehensive Plans

- A comprehensive plan is considered the “blueprint” for a city and how development should occur over a given time frame.
- Zoning codes must adhere to the comprehensive plan and give a municipality the tools to implement its comprehensive plan.
- Municipalities in the Twin Cities must adopt a plan AND to update their comprehensive plans every ten years.
- Municipalities in Greater Minnesota may elect to adopt a plan, but not required to do so.



# Conditional Use Permit

- A conditional use permit is a use within a zoning district that is only authorized if certain criteria are met.
- The decision-maker may impose conditions on granting a conditional use permit, such as requiring reclamation.
- It runs with the land – meaning it will remain in effect indefinitely so long as the standards are met.
  - Minn. Stat. § 462.3595

# Interim Use Permit

- “A temporary use of property until a particular date, until the occurrence of a particular event, or until zoning regulations no longer permit it.”
  - Minn. Stat. § 462.3597
- Some political subdivisions regulate all mining as interim use permit.

## Permits address:

- Noise
- Traffic
- Dust
- Reclamation
- Road Use Agreements

Local authorities are also requiring a mining and reclamation plan along with the permit.

# Variance

- **Variance typically granted for dimensional requirements (e.g., height and setback)**
- **Requires showing of practical difficulties**
  - **Proposed use must be reasonable,**
  - **Circumstances unique to the property not created by the landowner, and**
  - **Will not alter the essential character of the locality.**
  - **Note: Economic considerations alone insufficient**
- **Often board of adjustments or zoning board of appeals is decisionmaker**



# Zoning Amendments

- **Map Amendment**
- **Text Amendment**
- **Planned Use Development**



# Map Amendment

- A map amendment changes what a parcel of land may be used for.
- Rezones the property.

# Text Amendment

- A text amendment changes the text of the zoning code or zoning regulations to make it more or less permissive.
- Applies to all properties covered by the amended zoning district.

**A person may appeal to the Minnesota district court and there is a six-year statute of limitations. Minn. Stat. § 541.05.**

# Planned Unit Developments

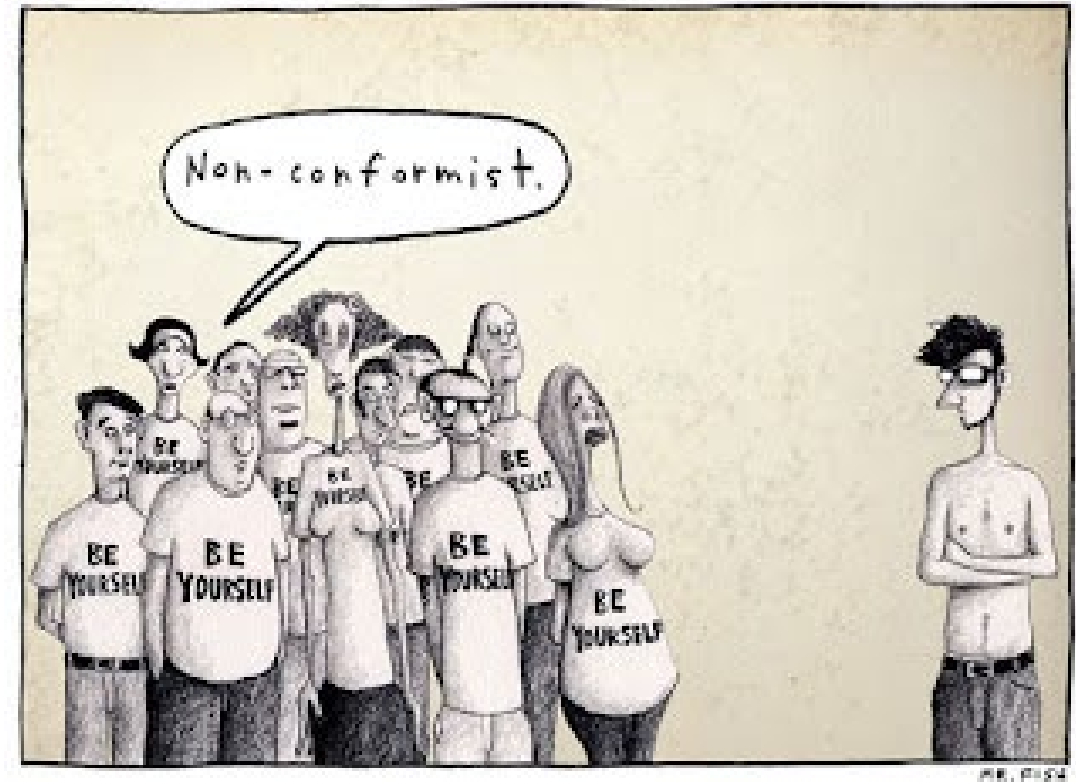
- **A land area that contains developed clusters that also has commercial development.**
- **It is a change to the zoning code that is typically limited to a property or clusters of property that gives a governing board the flexibility in the allowed uses and conditions.**
- **Out of favor because a PUD is very flexible.**

# Interim Ordinance (Moratorium)

- **One-year moratorium on a use or development**
- **May be extended an additional 18-months**
- **Inapplicable to applications submitted before effective date of interim ordinance**
- **Must complete a study of the proposed use or development**

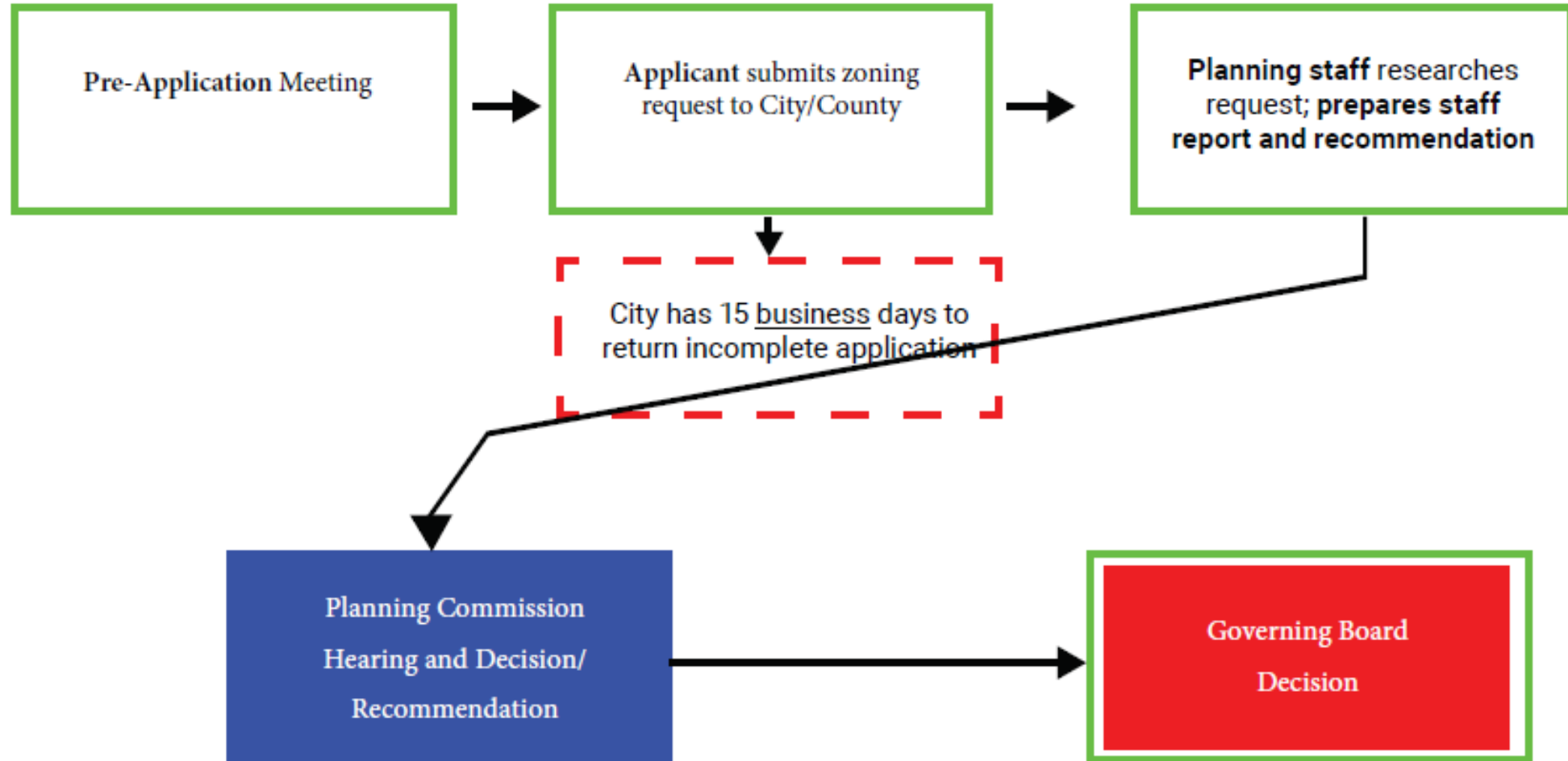
# Nonconforming Use

- **Nonconformity means a lawful use or condition that becomes unlawful due to an ordinance change**
- **Allows repair, replacement, maintenance—but not expansion**
- **Nonconformity cannot be discontinued for > 1 year**





# What Does the Process Look Like?





# Shoreline Management

- **There are certain setback requirements for shoreland and implemented through shoreland ordinances, which establish overlay districts.**
- **An overlay district is an additional zoning requirement that is placed on a geographic area.**
- **In the event of conflicts between the primary and overlay districts, the overlay district governs.**

# Environmental Review

# Types of Environmental Review

- **Environmental Assessment Worksheet**
- **Environmental Impact Statement**



# Environmental Assessment Worksheet (EAW)

- **An EAW sets out facts necessary to determine if a project creates the potential for significant environmental effects. Minn. Stat. § 116D.04, subd. 1a(c).**
- **The responsible government unit (RGU) must complete an EAW for an aggregate mining project before granting zoning approval. Minn. R. 4410.4300, subp. 12(B), 12(C), and 12(D).**

## Environmental Assessment Worksheet

This most recent Environmental Assessment Worksheet (EAW) form and guidance documents are available at the Environmental Quality Board's website at: <https://www.eqb.state.mn.us/> The EAW form provides information about a project that may have the potential for significant environmental effects. Guidance documents provide additional detail and links to resources for completing the EAW form.

**Cumulative potential effects** can either be addressed under each applicable EAW Item or can be addressed collectively under EAW Item 21.

**Note to reviewers:** Comments must be submitted to the [RGU](#) during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

### 1. Project title:

### 2. Proposer:

Contact person:  
Title:  
Address:  
City, State, ZIP:  
Phone:  
Fax:  
Email:

### 3. [RGU](#):

Contact person:  
Title:  
Address:  
City, State, ZIP:  
Phone:  
Fax:  
Email:

### 4. Reason for EAW Preparation: (check one)

Required:

- EIS Scoping
- Mandatory EAW

Discretionary:

- Citizen petition
- [RGU](#) discretion
- Proposer initiated

If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):

### 5. Project Location:

- County:
- City/Township:
- [PLS](#) Location (¼, ¼, Section, Township, Range):
- Watershed (81 major watershed scale):
- GPS Coordinates:

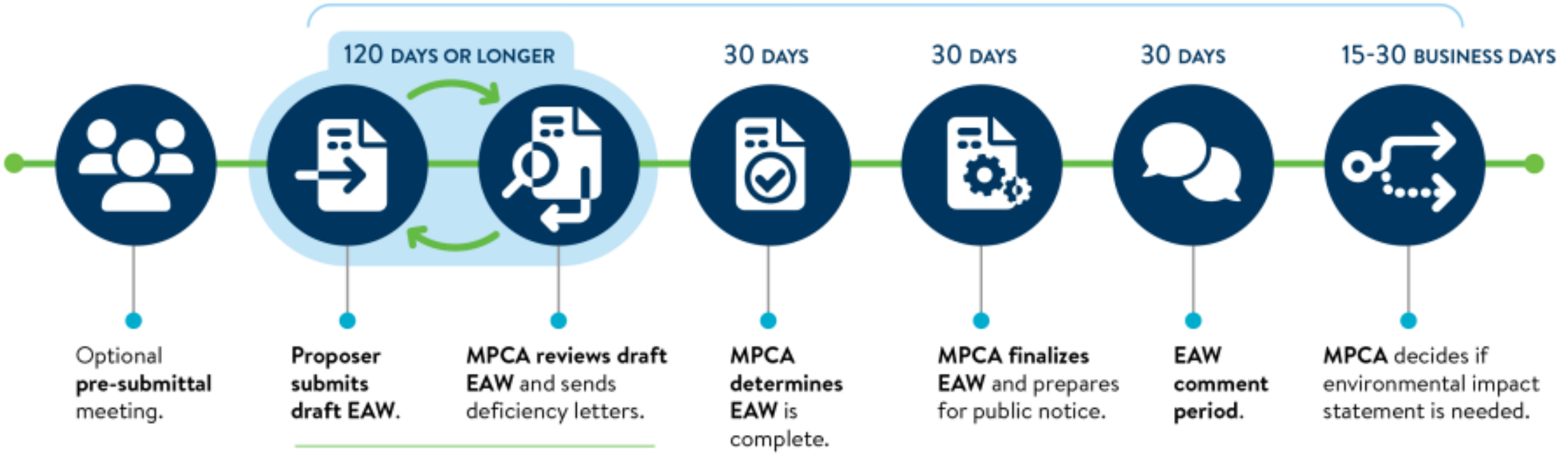


# An EAW is Required When:

- For development of a facility for the extraction of nonmetallic minerals, which will excavate 40 or more acres of land to a mean depth of ten feet or more during its existence.
- For development of a facility for the extraction the extraction of nonmetallic minerals, which will excavate 20 or more acres of forested or other naturally vegetated land in a sensitive shoreland area or 40 acres of forested or other naturally vegetated land in a nonsensitive shoreland area.
- For development of a silica sand project that excavates 20 or more acres of land to a mean depth of ten feet or more during the project's existence.

# EAW Timeline

AVERAGE 8-14 MONTHS



This process often includes multiple rounds of review by the MPCA (30 days each) and multiple draft EAW submissions by the proposer.

# Citizen Petition for EAW

- Any person may request an EAW be prepared on a project by collecting 100 signatures of people who live in Minnesota.
- The citizen petition must include “material evidence” that physically accompanies the document.
- The RGU has fifteen (15) days to decide if an EAW is necessary.
- The RGU shall notify the relevant parties in writing of decision within five (5) days.
- Minn. R. 4410.1100

## Petition for an Environmental Assessment Worksheet for the [Project Title] Project

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for [Project Title], located in [City/County]. By signing below, I support the material evidence submitted in the attached petition and believe that, because of the nature or location of the proposed project there may be potential for significant environmental effects including, but not limited to:

- [List concerns for environmental effects]
- [List concerns for environmental effects]
- [List concerns for environmental effects]

Minnesota’s Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

# Environmental Impact Statement

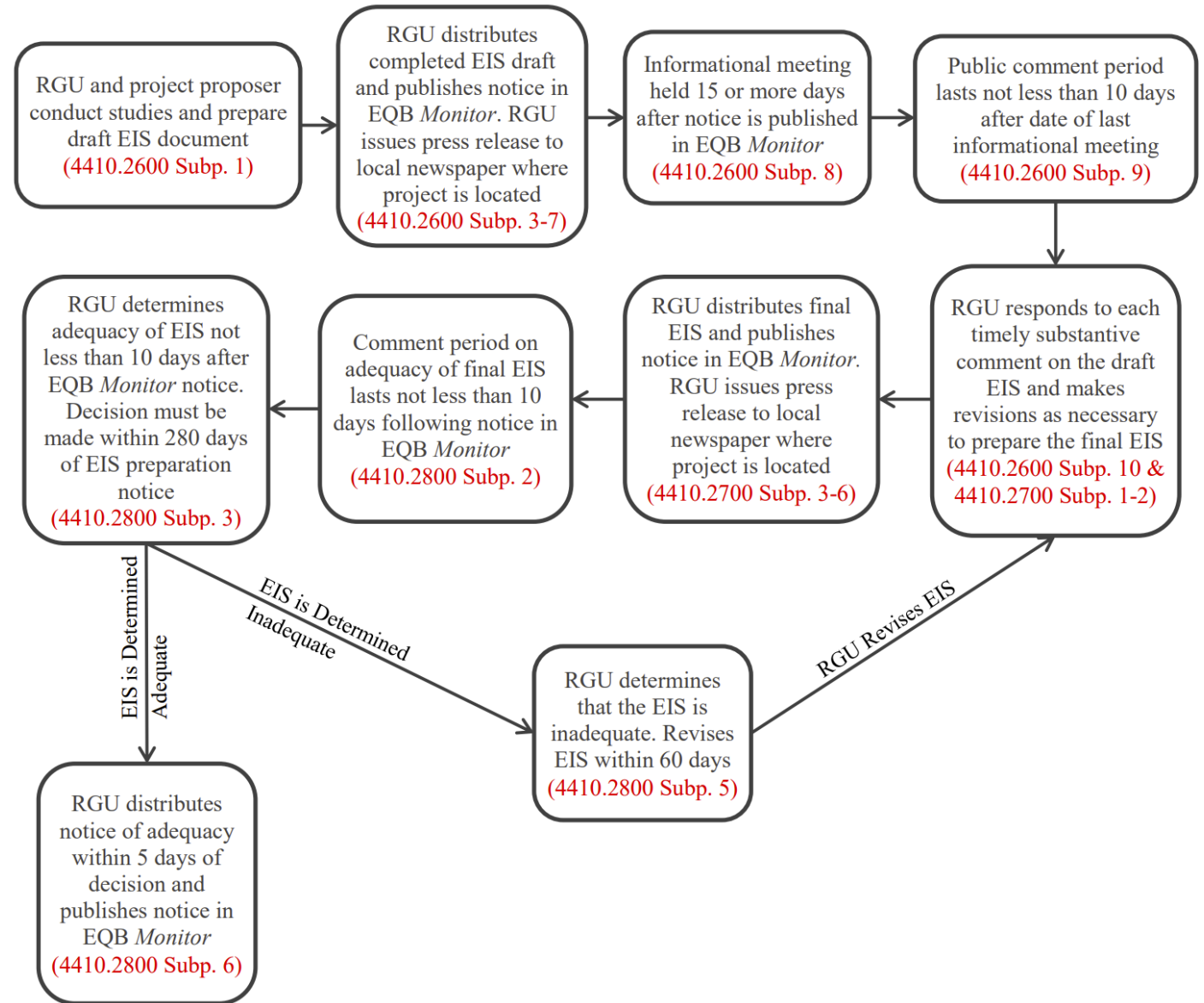
- **An EIS is required if an EAW determines that there is potential for significant environmental effects resulting from zoning approval or the approval falls into a mandatory EIS category. Minn. R. 4410.4400**
- **An aggregate mining project is statutorily required to complete an EIS if the project:**
  - **will excavate 160 acres of land or more to a mean depth of ten feet or more during its existence**
  - **will excavate 40 or more acres of forested or other naturally vegetated land in a sensitive shoreland area or 80 or more acres of forested or other naturally vegetated land in a nonsensitive shoreland area**
  - **Minn. R. 4410.4400, subp. 9(B) and 9(C)**

# Content of EIS

- **Project description**
- **Governmental approvals**
- **Alternatives**
- **Environmental, economic, employment, and sociological impacts**
- **Mitigation measures**



# EIS Draft Process



# Judicial Review

- **An EAW and EIS may be subject to judicial review.**
- **“A petition for a writ of certiorari by an aggrieved person for judicial review under sections 14.63 to 14.68 must be filed with the court of appeals and served on the responsible governmental unit not more than 30 days after the responsible governmental unit provides notice of the final decision in the EQB Monitor.”**
  - **Minn. Stat. § 116D.04, subd. 10.**



# Minnesota Environmental Rights Act ("MERA")

*The Wild Card*

# MERA is a Citizen Suit Statute

- **Allows any person to file a lawsuit**
- **Against an operator**
  - **Alleging that an operator is in violation of state environmental statute, rule, order, or permit**
  - **Alleging that the person is engaged in “conduct” that is impairing the natural resources of the State**
- **Against the State**
  - **Alleging that a permit or rule is insufficiently protective of the natural resources of the State**
- **“Natural Resources” is very broadly defined**
- **Used by environmental groups when other tools are not available.**

# Water Permitting

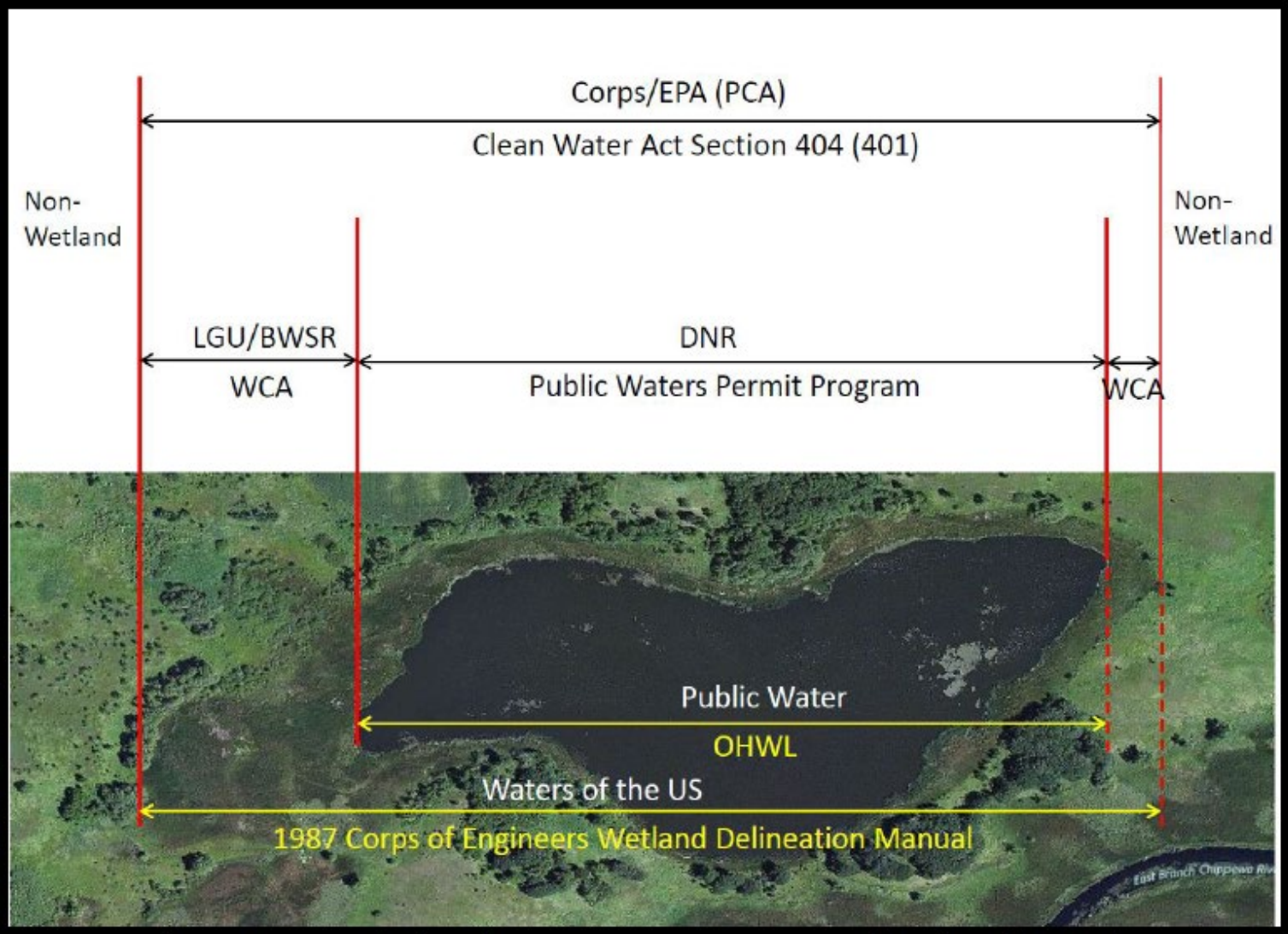
***Wetlands* – Stay out if possible**

# Wetlands Permitting Overview

- **Wetlands Conservation Act (local)**
- **Public Waters Work Permit Program (state)**
- **Section 404 of Clean Water Act (federal)**
- **Often overlapping state and federal jurisdiction**



# Scope of Wetlands Permitting Jurisdiction



# Wetlands Conservation Act (WCA)

- **Minnesota Board of Water and Soil Resources (BWSR) has overall authority, but WCA is implemented by Local Government Units.**
- **WCA is meant to minimize direct and indirect impacts to wetlands.**
- **Landowner applies for a “determination.” It is not a permit.**
  - **Replacement Plan Determination**
  - **Exemption Determination**
  - **No-Loss Determination**
  - **Wetland Boundary or Type Determination**
  - **Wetland Bank Plan Determination**
- **LGU decisions may be appealed to BWSR.**
  - **Any appeal is based on the record.**
  - **BWSR will affirm LGU decision if the fact finding was not “clearly erroneous.”**
  - **BWSR decision may be appealed to the Minnesota Court of Appeals.**
    - **Minn. R. 8420.0905**





# Work in Public Waters Permit Program

- **A proposed project that impacts the course, current, or cross-section of water bodies that are identified on the DNR Public Water Inventory Map may need to obtain a Public Waters Work Permit. Minn. R. 6115.0280 addresses mining specifically and outlines the requirements for approval.**
- **A permittee should consult with an environmental consult to determine if the project requires this permit.**
- **A person may request an expedited hearing within 30 days after receiving an order.**
- **An ALJ must issue a report within 30 days of closing the record.**
- **Minn. Stat. §103G.299.**



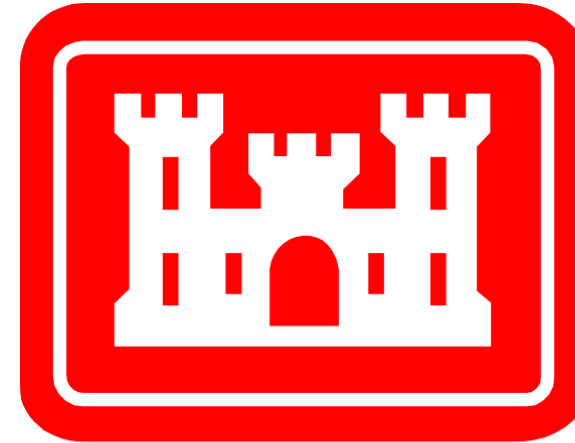


# Considerations for the Public Waters Permit

- **No other feasible and practical location and it must represent a minimal impact solution.**
- **No other feasible or economical method except by draining, diverting or controlling public waters.**
- **The proposed alteration is necessary.**
- **Will be in the public interest and does not substantially impair the interests of the public.**
- **Diverted flows must maintain adequate flow and prevent erosion to protect water quality.**
- **Drainage must be immediately replaced with waters of equal or greater value OR submit a plan for the eventual replacement of waters of equal or greater value.**
- **Impoundment of waters must meet relevant standards and provide plans to mitigate the impacts.**

# CWA Section 404: Wetlands and WOTUS

- Section 404 requires a permit before dredged or fill material may be discharged into “waters of the United States” (WOTUS).
- *Sackett v. EPA* changed the standard for what is a WOTUS.
  - The wetland must be “relatively permanent body of water connected to traditional interstate navigable waters and . . . the wetland has a continuous surface connection with the water.”  
*Sackett v. EPA*, 598 U.S. 651, 654 (2023).
- Each county has a project manager that facilitates projects.



**US Army Corps  
of Engineers®**

# Water Permitting

***Discharge*** – Should be routine but could be tricky





# Overview of Permitting Requirements

- **Mining is both an industrial activity and a construction activity.**
- **There are both industrial permits and construction permits.**

# Industrial Permitting Requirements

## Nonmetallic mining and associated activities water quality permit options

If the primary activity at a site is described by one of the SIC codes below, a Water Quality Permit is required.

**Subsector J1**  
Construction sand and gravel mining (1442)  
Industrial sand mining (1446)

**Subsector J2**  
Dimension stone (1411)  
Crushed and broken limestone mining/quarry area (1422)  
Crushed and broken granite mining/quarry area (1423)  
Crushed and broken stone mining/quarry area (not elsewhere classified) (1429)

**Subsector D1**  
Hot mix asphalt production areas, (also known as asphalt paving mixtures and blocks), including portable HMAs (2951)

**Subsector E2**  
Concrete block and brick (3271)  
Concrete products other than block and brick (3272)  
Ready-mix concrete, including portable concrete plants (3273)

Permit	What does the permit authorize?	Can multiple sites be covered under one permit?	Cost	
			Issuance/Reissuance Permit Application (Every 5 Years) fees	Annual fee
<b>Industrial Stormwater (ISW) General Permit</b>	<ul style="list-style-type: none"> <li>• <b>Stormwater</b> discharges to surface water or the ground.</li> </ul>	No	\$400/ \$400	\$400
<b>Nonmetallic Mining (MNG49) General Permit</b>	<ul style="list-style-type: none"> <li>• <b>Stormwater</b> discharges to surface water or the ground.</li> <li>• <b>Dewatering</b> from subsectors J2/J2 only.</li> <li>• <b>Wastewater</b> discharges to ground (infiltration), such as aggregate wash water, waters used for dust control, and scale deck wash water. See permit for full list of authorized and prohibited discharges.</li> </ul>	Yes	\$1240/ \$1240	\$345
<b>Individual Wastewater/ Stormwater Permit</b>	<ul style="list-style-type: none"> <li>• <b>Stormwater</b> discharges to surface water or the ground.</li> <li>• <b>Dewatering</b> to surface waters for all sectors.</li> <li>• <b>Site-specific wastewater discharges</b>, e.g. wastewater discharges not authorized by a general permit such as aggregate wash water discharges to surface waters.</li> </ul>	No	\$9300/ \$1240	\$1230 (commonly)

# Nonmetallic Mining & Associated Activities (MNG49) General Permit

- **This general permit covers stormwater discharges, dewatering, and wastewater discharges from:**
  - Construction sand and gravel mining.
  - Industrial sand mining.
  - Dimension stone.
  - Crushed and broken limestone, granite, and stone mining.
- **This permit can be applied to multiple sites, meaning that qualifying sites can be under a single application.**
- **A permittee must create a pollution prevention plan (P2 plan) before this permit is granted.**
- **A discharge monitoring report is required for each stormwater discharge at a site.**



## **Industrial Stormwater Permit (General ISW)**

- **This permit applies to facilities that only have stormwater discharges; they cannot also have wastewater discharges.**

## **Individual Industrial Storm/Wastewater Permit**

- **This type of permit applies if the site does not qualify for a MNG49 or a General ISW permit.**

# Construction Stormwater Permit

- **The NPDES program requires a discharger to obtain a permit.**
- **Permits must incorporate relevant effluent limitations.**
- **Minnesota administers the NPDES program (Minn. Stat. § 115.03).**
- **Required for any construction facility that disturbs one or more acre of soil OR less than one acre that is part of a larger “common plan of development or sale.”**
- **If the site has a MNG49 permit, a construction stormwater (CSW) permit is not required.**
- **If the site has an ISW permit, a CSW is not required for Sector J1/J2 facilities EXCEPT if 50 acres or more are disturbed AND discharges within one mile to special waters.**
- **If the site has a specific individual permit, consult the permit to determine if a CSW is required.**





# Stormwater Pollution Prevention Plan (SWPPP)

- **Permittees, both industrial and construction, must create a SWPPP.**
- **The SWPPP must include best management practices (BMPs).**
- **There are three different types of BMPs**
  - **Non-structural BMPs**
  - **“Off-the-shelf” structural BMPs**
  - **Structural BMPs**



# Water Permitting

*Water Appropriation* – likely not a major issue

# Water Appropriation Permit

- This permit is required if withdrawing more than 10,000 gallons of water per day OR 1,000,000 gallons per year from state water.
- This permit includes ground water from pit dewatering.
- A person may request an expedited hearing within 30 days after receiving an order.
- An ALJ must issue a report within 30 days of closing the record.
- Minn. Stat. §103G.299



# Water Appropriation Permit (cont.)

- **Appropriation permits have historically been easy to maintain and low maintenance**
- **But localized drought conditions, over-drawing of aquifers, and litigation in recent years have increased DNR and public scrutiny**
- **Whether water appropriation will be an issue for a site will depend on the status of the underlying aquifer and uses in the vicinity**

# Air Permits

## General or Registration Permits

# Air Permitting Considerations

- **First, calculate air emissions. If a project exceeds the relevant thresholds, a permit is required.**
- **Most aggregate mining operations will have Nonmetallic Mineral Processing General Permit provided they're seeking to cover emissions from standard operations.**
- **If they do not qualify for this permit, they can obtain a Registration D Permit.**
- **If an operator does not qualify for either, they must apply for another permit.**

Nonmetallic Mineral Processing General Permit	Registration D Permit
<ul style="list-style-type: none"> <li>• Complete the Qualifications Review Checklist – Nonmetallic Mineral Processing General Permit</li> <li>• This document determines if a project qualifies for the General Permit.</li> <li>• If a facility qualifies for this permit, they must apply.</li> </ul>	<ul style="list-style-type: none"> <li>• If a project does not qualify for the General Permit, then utilize the Aggregate Air Emissions Calculator to determine if the project qualifies for the Registration D Permit.</li> </ul>

**Aggregate mining has the potential to cause fugitive dust. An operation must take “all reasonable measures” to limit fugitive dust. Minn. R. 7011.0150.**

# Federal Air Rules

Operators should realize that federal air rules *may apply even if a permit is not required.*\*

- **Reciprocating Internal Combustion Engines**
- **Stationary Compression Ignition Internal Combustion Engines**
- **Stationary Spark Ignition Internal Combustion Engines**
- **Calciners and Dryers\***
- **Volatile Organic Liquid (Petroleum Storage)\***
- **Nonmetallic Mineral Processing:\* consider the following questions and if the answers are yes, additional requirements may apply.**
  - **Is there crushing equipment?**
  - **Is the capacity of the crushing plant larger than 25 tons/hour or your portable crushing plant larger than 150 tons/hour?**
  - **Was the plant or equipment constructed, re-constructed, or modified after August 31, 1983?**

\* If this rule applies, then an air permit is required.



# Hazardous Waste Permit

## Hazardous Waste and Storage Requirements

# Generator License

- **A facility that creates hazardous waste is a “generator.”**
  - Regulated under RCRA and Minnesota hazardous waste rules.
  - MPCA regulates Greater Minnesota, whereas the Metro Counties are responsible in the Twin Cities.
- **Facilities must assume that all waste that they generate is hazardous unless it qualifies for an exemption or documented as non-hazardous.**
- **To be non-hazardous, a facility must determine through evaluation that the waste is not Listed and not Characteristic.**
- **The MPCA and the Metro Counties CANNOT evaluate waste for a facility.**
- **Once the waste is evaluated as hazardous, the facility must determine generator size.**
- **Generator size is calculated by volume of hazardous waste each calendar month.**

# Registration Number

- **An aggregate mining operation that produces hazardous wastes needs a hazardous waste identification number (HWID).**
- **Must obtain a HWID for each size where hazardous waste is generated, transported, stored, or treated.**
- **Make annual reports, pay a fee, and obtain the generator license for the following year.**

# Thresholds for Generator Sizes

- **Minimal Quantity Generator (MiniQG)**
  - Less than 100 pounds per year of all counted hazardous waste AND no acute hazardous waste.
- **Very Small Quantity Generator (VSQG)**
  - Less than 220 pounds per month of all counted hazardous waste AND less than 2.2 pounds per month of non-pharmaceutical acute hazardous waste.
- **Small Quantity Generator (SQG)**
  - Between 220 and 2,200 pounds per month of all counted hazardous waste AND less than 2.2 pounds per month of non-pharmaceutical acute hazardous waste.
- **Large Quantity Generator (LQG)**
  - More than 2,200 pounds per month of all counted hazardous waste OR more than 2.2 pounds per month of non-pharmaceutical acute hazardous waste.
- **SQG and VSQG requirements are more lenient than LQG requirements.**
- **Generator size impacts a variety of requirements like:**
  - How long can waste be accumulated.
    - LQG can only accumulate waste for 90 days.
  - Labeling requirements;
  - Storage on and around property;
  - Reporting amount; and
  - Training procedures.



# Spill Reporting Requirements

- **Generators of hazardous substances must have a prevention and response plan (Minn. Stat. § 115E.03; Minn. Stat. § 115E.04).**
- **Commissioner of public safety must be notified when the plan is submitted. A facility shall submit a copy to any commissioners who request it.**
- **A substance that spills or leaks that may pollute waters of the state must report it the Minnesota Duty Officer (Minn. Stat. § 115.061). A generator must also report reportable quantities of hazardous waste to the National Response Center.**
- **Spill Prevention, Control, and Countermeasure (SPCC) Regulation might be applicable.**

# Aboveground Tank

- The tank owner must notify the MPCA if the aboveground storage tank (AST) has a capacity of 500 gallons or more.
- The AST contains liquid substances that may pollute waters of the state.
- The AST might be exempt from notification requirements if it is a certain type.

# Underground Tank

- The tank owner must notify the MPCA if the underground storage tank (UST) has a capacity of 110 gallons or more.
- The UST contains petroleum or hazardous substances used commercially.
- The UST might be exempt from notification requirements if it is a certain type.
- The tank owner must notify the MPCA at least ten days in advance of certain activities.

**AST or UST owners must notify the MPCA of any product change or status change within thirty (30) days**

# Questions



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