



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Remediation and Redevelopment Division

Request For Mixing Zone-Based GSI Criteria

This form should be completed with appropriate information, documentation, or narrative to provide the necessary information for EGLE to process the request. Original sources of information, if not supplied, should be appended or clearly referenced.

Facility Characteristics:

1. The name of the receiving surface water body and the location of the venting groundwater contaminant plume:

This is a: ☐ New ☐ Increased ☐ Existing Loading

Recreational Use: ☐ Yes ☐ No

If no, provide an explanation of conditions that make recreational use not applicable to site conditions:

Attach Map.

2. The location, nature and chemical characteristics of the source of the groundwater contamination plume:

3. The name, Chemical Abstract Service (CAS) Number, and worst-case maximum concentration of contaminants predicted to reach groundwater/surface water interface (GSI). Generally, the highest concentration of the contaminant found in the groundwater would be appropriate to represent the worst-case maximum. If source contaminants have not yet reached the groundwater but are expected to do so, source concentrations should be identified and noted as such. Mixing zone based GSI criteria will not be developed for contaminants that are not identified as having a reasonable potential to exceed water quality criteria.

Table 1. Contaminates Predicted to Reach Groundwater/Surface Water Interface (GSI)

Chemical or General Chemistry Parameter	CAS Number	Predicted Worst Case Maximum GSI Discharge Concentration	Average Surface Water Concentration Upstream, if available

4. The discharge rate of the venting groundwater contaminant plume in cubic feet per second (cfs):
5. The location of other contaminant plumes entering the receiving surface water body, their constituents and concentrations, if available:

6. If available:

The lowest monthly 95 percent exceedance low flow
at the discharge location:

_____ cfs

The harmonic mean flow at the discharge location:

_____ cfs

The 90dQ10 flow at the discharge location:

_____ cfs

Source: ☐ EGLE Low Flow Database

☐ Determined by EGLE Hydraulic Studies Unit (memo attached)

☐ Other (Describe):

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this request and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Authorized Signature

Date

Name: _____ Title: _____

Authorized signatures:

- For a corporation, a principal executive officer of at least the level of vice president or his designated representative. If the designated representative is responsible for the overall operation of the facility from which the groundwater is venting, the designation of the representative must be in writing from a principal executive officer and provided to EGLE.
- For a partnership, a general partner.
- For a sole proprietorship, the proprietor.
- For a state, municipal, or other public facility, either a principal executive officer, the mayor, village president, city or village manager, or other authorized employee designated in writing from a principal executive officer and provided to EGLE.

If this is a new loading, or increased loading above previously authorized levels, an antidegradation demonstration, which includes the information in numbers 8 and 9 below, or a demonstration of qualification for an exemption under Rule 323.1098(7) or (8), is required.

7. Please check whether there is:

- ☐ an antidegradation demonstration (information for 8 and 9) is included or
- ☐ a demonstration of qualification for an exemption (Refer to 323.1098(7) or (8) for elements needed for this demonstration).

Please identify who prepared the antidegradation or exemption demonstration:

8. This is a new or increased loading from venting groundwater. The social or economic development and the benefits to the area in which the waters are located that would be foregone if the new or increased discharge is not allowed include:

Employment increases:

Production level increases:

Employment reduction avoidance:

Efficiency increases:

Industrial, commercial, or residential growth:

Economic or social benefits to the community:

Other relevant factors:

If the new or increased loading includes the following bioaccumulative chemicals of concern (BCCs), Chlordane, 4,4'-Dichlorodiphenyldichloroethane, 4,4'-Dichlorodiphenyldichloroethylene, 4,4'-Dichlorodiphenyltrichloroethane, Dieldrin, Hexachlorbenzene, Hexachlorobutadiene, Hexachlorocyclohexanes, alpha Hexachlorocyclohexane, beta-Hexachlorocyclohexane, delta-Hexachlorocyclohexane, Lindane, Mercury, Mirex, Octachlorostyrene, Polychlorinated biphenyls, Pentachlorobenzene, Photomirex, 2,3,7,8-Tetrachlorodibenzodioxin, 1,2,3,4-Tetrachlorobenzene, 1,2,4,5-Tetrachlorobenzene, Toxaphene, complete the following:

9. Please check whether:

- ☐ There is no BCC in the discharge.
- ☐ BCCs are included in the discharge (information for 10 and 11 is included).

10. The alternatives evaluated and the alternatives to be implemented that will comply with minimizing the discharge of the BCC by implementation of any cost-effective pollution prevention alternatives (such as source control) and techniques reasonably available that would eliminate or significantly reduce the discharge of the BCC are:

11. If pollution prevention alternatives would not eliminate the increased discharge of the BCC, the person making the demonstration must evaluate alternative or enhanced groundwater treatment techniques that would eliminate the discharge of the BCC. The techniques that have a cost that are reasonable relative to the cost of treatment necessary to achieve generic GSI criteria must be implemented. The alternatives evaluated and the alternatives to be implemented that will comply with this requirement are:

Submission Information:

This form and the Response Activity Plan should be submitted to the EGLE Remediation and Redevelopment Division (RRD), unless regulated by another division in which case contact should be made with that division for information on where to provide the form and report. Submittals to RRD can be provided electronically using the Remediation Information Data Exchange (RIDE). For more information on submitting forms electronically using RIDE, please visit [EGLE's RIDE Webpage](#). Hardcopy submittals should not be provided if RIDE is used to upload the submittal. If the submittal is being provided as a hardcopy only, it can be sent to RRD using the following address:

Michigan Department of Environment, Great Lakes, and Energy
Remediation & Redevelopment Division
PO Box 30426
Lansing, MI 48909-7926

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

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