

**Instructions for Use of this Due Care Matrix**

The Due Care Matrix (matrix) is a tool to help evaluate an owner or operator's due care obligations. The matrix is designed to help the user determine what due care obligations apply and to ask pertinent questions that can help evaluate those obligations. Information gained through an appropriate due care assessment, defined as the inquiry necessary to determine what response activity is needed to comply with the due care requirements, is used to determine if actions, if any, are needed to comply with due care. The pathway and exposure analysis questions guide the user through a process to determine what exposures may occur, if an exposure may cause unacceptable risks, and if a response action or presumptive remedy is needed to prevent or mitigate the exposure. A series of questions also prompt a person to consider whether their actions might cause exacerbation of the contamination, if there are any required notices that must be made, if there are deed restrictions that might apply, etc.

To effectively use the matrix, it is important for the user to have knowledge of the property use and condition. Information that is important includes:

- the property use (residential, school, day care, nursing home or hospital, commercial, industrial, etc.);
- the presence and construction of buildings and underground structures;
- whether the grounds are paved, landscaped, or exposed dirt;
- the source of the drinking water;
- past property uses and potential hazardous substance uses;
- environmental conditions, Phase I Environmental Assessment, Phase II Environmental Assessment data if needed; etc.

Section 1, Obligation Evaluation is designed to help determine what due care obligations the owner/operator has based on whether they are a private or public entity, whether the contamination is migrating onto the property or originates on the property, and if there is an exemption that applies.

- Step 1 asks whether the person is a local unit of government (LUG) which is defined as a municipality or county, or the state of Michigan.
- Step 2 asks if the contamination has migrated onto the property or if there are other exemptions that apply.
- Step 3 indicates which due care obligations apply based on the answers in Steps 1 and 2.
- Step 4 then indicates which sections of the matrix should be used to evaluate those obligations. Not all of the sections apply to every person, because not all of the obligations apply to every person. Sections 2-6 of the matrix provide instructions for each obligation and the Due Care Rules. After a person determines which obligations apply (from Section 1), they need only refer to those sections of the matrix that apply.

Section 2, Pathway and Exposure Analysis, asks the user to answer a series of questions that relate to each possible exposure pathway. This helps determine which exposure pathways are relevant based on the current and intended use by this owner/operator and the characteristics of the property. Only those exposure pathways that will actually occur need to be evaluated further using information gained through the appropriate due care assessment. An appropriate due care assessment is different than the investigation needed for contaminant remediation. Typically, a Phase I Environmental Assessment, conducted by a trained environmental professional, reviews the historical site uses, interviews with neighbors and, if possible, site owners, and includes a visual site inspection, to determine the potential for and type of contamination at a site. A Phase II Environmental Assessment collects samples to analyze for contaminants and to locate impacted areas. The type of soil and/or groundwater analytical data needed in a Phase II assessment for due care will be completely dependent upon the applicable exposure pathways. Defining the full extent of contamination may not be necessary. For example, if there are no buildings on the property and none are proposed or, based on historical information there is no reason to believe volatile contaminants are on the property, then the vapor intrusion indoor air pathway would not be relevant and an investigation for this pathway it would not necessary. Groundwater water investigation may not be necessary if municipal water is provided, volatile contaminants are not expected, and contact with the groundwater is not expected to occur. However, if groundwater supplies the drinking water for the facility a more thorough groundwater investigation may be needed. Each property and property use will be different, resulting in a different type of investigation and evaluation for each property. Changes in property use may necessitate additional assessment needs. In some circumstances, presumptive actions can be taken instead of collecting samples. For example, physical barriers such as pavement and floors can be used to prevent potential exposure to contaminated soil. This type of barrier may be presumptively installed rather than collecting soil samples in those areas. Based on the appropriate due care assessment and/or implementation of presumptive actions, the matrix asks questions about the type of response activities that will be taken, the date those activities are implemented, and what maintenance, inspection, or monitoring is needed to ensure the activity continues to prevent or mitigate the exposure. Documentation of the assessment and response activities is discussed in Section 6 of the matrix.

Section 3, Exacerbation and Reasonable Precautions asks the user questions about activities that may exacerbate the existing contamination; and about reasonable precautions that may be needed for people using, working, or living on the property.

Section 4, Deed Restrictions, Reasonable Cooperation and Access asks the user whether land or resource use restrictions apply to this property; whether a responsible party has requested access to the property; and if cooperation and assistance is being provided to the responsible party.

Section 5, Notifications discusses whether notifications or disclosures should be made to various parties.

Section 6, Documentation discusses an owner/operator's documentation of compliance with their due care obligations. This documentation does not need to be submitted to the Department of Environmental Quality (DEQ) but does need to be provided if the DEQ makes a specific request to the owner or operator. DEQ approval of the due care plans or documentation is not required, but can be requested. The documentation should contain information such as:

- the evaluations and assessment that were completed for each section that is applicable to the owner/operator,
- information on the current and intended use, relevant exposure pathways and the rationale used to determine the pathways,
- descriptions of any response activities taken to prevent unacceptable exposures or comply with other due care obligations,
- records showing the implementation of any response activities,
- copies of notices and/or disclosure statements,
- information on land or resource use restrictions,
- information on requests for access, cooperation, or assistance, etc.

Due care is an on-going obligation. Response activities taken may require periodic inspection and/or maintenance to remain effective. As property conditions or use changes, the new situation may require re-evaluation of the due care needs. Examples of changes that would necessitate a re-evaluation may include: change from non-residential to residential use; construction of buildings; new knowledge is obtained regarding contaminant conditions or resource/use restrictions; etc.

To use the matrix, the user should start on Section 1 to determine which obligations apply. To use Sections 2-6 of the matrix, the user answers the question in the first column, and then follows the directions in the following columns. The matrix is a tool that is designed to be used by an owner/operator or an environmental professional. Parties are encouraged to keep their completed matrix with their due care documentation for future reference.

Section 1: Which Due Care Obligations Apply?									
Step 1 Select the appropriate section below for either a private owner or operator, a local unit of government, or the state.	Step 2 Consider the Conditions and Exceptions		Step 3 Determine the applicable obligations and rules.		Step 4 Determine the applicable Matrix Sections				
			7a Sections	Part 10 Rules	Matrix Sections				
Owner/Operator that is not a Local Unit of Government or the State of Michigan	Did the contamination migration onto the property?	Do any of the exemptions in 7a(5) or (6) apply to you? See ** below							
	Yes	(skip)	(1)(d-f)	1001, 1003, 1015	4, 5, and 6				
	No	No	(1)(a-f)	All	2, 3, 4, 5, and 6				
Local Unit of Government of Michigan State	Did the contamination migrate onto the property?	Do any of the exemptions in 7a(5) apply to you? See * below	Are you inviting the public onto the property for an express public purpose, such as parks, municipal buildings, schools, etc.?						
				Yes	(skip)	(skip)	(1)(d-f)	1001, 1003, 1015	4, 5, and 6
				No	Yes	Yes	(1)(a-f)	All	2, 3, 4, 5, and 6
					No	No	(1)(d-f)	1001, 1003, 1015	4, 5, and 6
	No	(skip)	(1)(a-f)	All	2, 3, 4, 5, and 6				
* Exemptions: Subsection (1)(a) to (c) does not apply to the state or to a local unit of government that is not liable under:									
Section 20126(1)(c)	Conducted and submitted a BEA when acquired								
Section 20126(3)(a)	The state or a local unit of government that acquired ownership or control of a facility involuntarily through bankruptcy, tax delinquency, abandonment, a transfer from a lender pursuant to subsection (7), or other circumstances in which the government involuntarily acquires title or control by virtue of its governmental function or as provided in this part, a local unit of government to which ownership or control of a facility is transferred by the state or by another local unit of government that is not liable under subsection (1), or the state or a local unit of government that acquired ownership or control of a facility by seizure, receivership, or forfeiture pursuant to the operation of law or by court order.								
Section 20126(3)(b)	A state or local unit of government that holds or acquires an easement interest in a facility, holds or acquires an interest in a facility by dedication in a plat, or by dedication pursuant to 1909 PA 283, MCL 220.1 to 239.6, or otherwise holds or acquires an interest in a facility for a transportation or utility corridor, including sewers, pipes, and pipelines, or public right of way.								
Section 20126(3)(c)	A person who holds an easement interest in a facility or holds a utility franchise to provide service, for the purpose of conveying or providing goods or services, including, but not limited to, utilities, sewers, roads, railways, and pipelines; or a person that acquires access through an easement.								
Section 20126(3)(e)	The state or a local unit of government that leases property to a person if the state or the local unit of government is not liable under this part for environmental contamination at the property.								
Section 20107a(5)	Or, to the state or a local unit of government that acquired property by purchase, gift, transfer, or condemnation prior to June 5, 1995								
** Exemptions: Subsection (1)(a) to (c) does not apply to the person that is not liable under:									
Section 20126(3)(c)	(3)(c): A person who holds an easement interest in a facility or holds a utility franchise to provide service, for the purpose of conveying or providing goods or services, including, but not limited to, utilities, sewers, roads, railways, and pipelines; or a person that acquires access through an easement.								
Section 20126(3)(d)	A person who owns severed subsurface mineral rights or severed subsurface formations or who leases subsurface mineral rights or formations								

Section 2: Pathway and Exposure Analysis								
A	B	C	D	E		F	G	H
Pathway Questions	Relevant Pathway?	Presumptive Remedy?	Data Sufficient?	Criterion for Pathway Exceeded?		Response Activity Proposed	Response Activity Implemented	On-going Operation, Maintenance, and Monitoring
	Answer to question in Column A: YES or NO. If YES, proceed to Column C. If NO, document the evaluation and conclusion in Section 6.	Are you taking a presumptive remedy rather than comparing site data to criterion? If YES proceed to Column F. If NO proceed to Column D.	Do you have sufficient data to adequately evaluate this pathway? If YES proceed to Column E. If NO, an Appropriate Due Care Assessment with additional site data is needed.	Does the data exceed the appropriate criteria or screening levels? If YES, response activities to prevent the exposure are needed, proceed to Column F, G, and H. If NO, document the evaluation and conclusion. If the site conditions do not meet the criteria assumptions, a site-specific evaluation may be needed.		Describe and document in Section 6 the response activity needed and how it will prevent or mitigate the exposure. Go to Column G	Document in Section 6 what action was actually taken (as-built) and the date implemented. Go to Column H	Describe and document in Section 6 the operation, maintenance, and monitoring needed, the frequency, and how it will be documented.
1. Are you using the groundwater from an on-site well for your drinking water, cooking, bathing, or other household use?	Yes or No	Yes or No	Yes or No	Drinking Water (DW)				
				Soil Protective of DW				
2. Will anyone come in contact with the surface water on your property, where groundwater is venting to that surface water?	Yes or No	Yes or No	Yes or No	Water Quality Standards				
				Water Quality Standards				
3. Will anyone come in contact with the groundwater on your property?	Yes or No	Yes or No	Yes or No	Groundwater Contact Criteria (GCC)				
				Soil Protective of GCC				
4. Are there or will there be buildings or other confined spaces such as manholes on the property?	Yes or No	Yes or No	Yes or No	Groundwater Volatilization to Indoor Inhalation, or Soil Gas Screening Levels				
				Flammability and Explosivity				
				Soil Volatilization to Indoor Inhalation or Soil Gas Screening Levels				
5. Is there groundwater entering confined spaces such as basements, sumps, or manholes?	Yes or No	Yes or No	Yes or No	Acute Inhalation				
6. Are volatile hazardous substances present in soil?	Yes or No	Yes or No	Yes or No	Soil Volatilization to Ambient Inhalation				
7. Are there areas of exposed soil on your property, such as driveways or non-vegetated areas, that could result in concerns such as	Yes or No	Yes or No	Yes or No	Soil Particulate Inhalation Direct Contact				
8. Will people come in contact with the soil on the property (walking, playing, or working on surficial soils with or without vegetation; below surface construction or utility activities)?	Yes or No	Yes or No	Yes or No	Direct Contact				

Section 3: Exacerbation and Reasonable Precautions					
	B	C	D	E	F
<b>Exacerbation Section 20107a(1)(a)</b>	<b>If YES proceed to Column C, D, and E.</b>	<b>What actions are needed to prevent this from happening?</b>	<b>Document in Section 6 actions taken and date implemented.</b>	<b>Describe and document in Section 6 any ongoing operation, maintenance, and monitoring, if needed, the frequency, and how it will be documented.</b>	
Will you be doing anything on the property that will cause the contamination to migrate beyond the property boundary or to increase the response cost for the party conducting response activities?	Yes or No				
<b>Reasonable Precautions Section 20107(1)(c)</b>	<b>If YES proceed to Column C, D, E, and F.</b>	<b>What Actions are needed?</b>	<b>Describe and document in Section 6 actions taken</b>	<b>Describe and document in Section 6 any ongoing operation, maintenance, and monitoring, if needed, the frequency, and how it will be documented.</b>	
Are precautions against the reasonably foreseeable acts or omissions of a third party necessary, such as construction or utility activities, trespass issues, etc.	Yes or No				
Do your Reasonable Precautions include notification to tenants, contractors, or other parties?	Yes or No				
Section 4: Compliance with Land Use and Resource Use Restrictions, and Provide Access, Cooperation, and Assistance					
	B	C	D		
<b>Cooperation, Assistance, &amp; Access Section 20107a(1)(d)</b>	<b>If YES Proceed to Column C and D</b>	<b>Document in Section 6 Access Provided, To Whom, and Date Granted</b>	<b>Document in Section 6 Cooperation or Assistance Provided to Whom, and Date</b>		
Have you been asked by persons that are authorized to conduct response activities at the facility for cooperation, access, or assistance?	Yes or No				
<b>Land Use or Resource Use Restrictions Section 20107a(1)(e and f)</b>	<b>If YES Proceed to Column C and D</b>	<b>Document in Section 6 how you are complying with those restrictions?</b>	<b>Document in Section 6 the actions will you take to not impede the effectiveness or integrity of the land use or resource use restrictions?</b>		
Are there any land use or resource use restrictions related to a response activity on this property? Examples: Deed Restrictions, Easements, Local Ordinances, Due Care Plans, etc.	Yes or No				

**Section 5: Notifications Part 10 Due Care Rules**

Notification Questions	If YES Proceed to Column C and D	Notify	Document in Section 6	
	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>For persons subject to 7a(1)(a-f) or 7a(1)(d-f):</b>				
Rule 1015: Are there abandoned containers that will remain on-site that contain hazardous substances? Note: This does not include underground storage tanks regulated under Part 211.	Yes or No	Notify the DEQ using the Abandoned Container Form EQP4476 within 45 days of becoming the owner or operator.	Document actions taken to prevent releases from these containers. Document the notification(s).	
<b>For persons subject to 7a(1)(a-f) only:</b>				
Rule 1017: Is the contamination migrating or likely to be migrating from your property onto adjacent property or surface water bodies?	Yes or No, Or this doesn't apply because the contamination is migrating onto my property	Notify the DEQ and the adjacent impacted property owner using the Notice of Migration Form EQP4482 within 45 days of becoming the owner or operator.	Document the notification(s). **Note: If you are liable for the contamination, you must also notify all impacted property owners, not just the adjacent property owner. (Section 20114a, Section 21309a)	
Rule 1019: Is there a fire and/or explosion hazard?	Yes or No, Or this doesn't apply because the contamination is migrating onto my property	Notify the local fire department, and take action as directed.	Document the notification, actions taken, and concurrence from fire department that actions are adequate.	
Rule 1013: Are there utilities or other right-of-ways through any contaminated area that may cause an unacceptable exposure to the utility worker or person using the easement?	Yes or No	Notify the utility or right of way holder, providing the information required in Rule 1013(6).	Document the notification(s).	

**Section 6: Documentation Part 10 Due Care Rules**

Rule 1003, Documentation	The owner and operator must maintain documentation of their evaluation, conclusions, and any response activities taken regarding their due care obligations. Rule 1003 describes the type of documentation required. This documentation must be provided to the DEQ upon request not later than 8 months after the earliest of becoming the owner or operator. The DEQ recommends you maintain a copy of this matrix with your documentation.	Document the date DEQ Requested Documentation	Document the date documentation provided to DEQ
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