

From: [Paulson.Robert](#)
To: "[Gielniewski, Margaret](#)"; [Dombrowski.Frank](#)
Cc: [Prasad.Narendra M](#); [Bartoszek.Brian F](#); [Marcus D. Byker \(mbyker@naturalrt.com\)](#); [Jennifer Knoepfle](#); [Terri Gerrish](#); [DuFresne, Kristin I - DNR](#); [Victor, Elizabeth A - DNR](#)
Subject: RE: WPSC ARARs Table Formatting Comment (Marinette and Manitowoc)
Date: Wednesday, March 15, 2017 10:49:37 AM
Attachments: [image003.gif](#)
[image004.png](#)
[Manitowoc_ARAR_Table.pdf](#)

Hello Margaret,

Regarding the ARAR table for Manitowoc in the FS revision submitted in December 2016, it appears to me that the table already discusses how the ARAR applies to an alternative or a component of an alternative. Is what you are looking for simply listing in another column which of the 5 alternatives applies to? As an easy example take the ARAR for NR149 Laboratory Certification in the Manitowoc table, you would like the ARAR table to include a column that states this ARAR applies to Alternatives 2, 3, 4, 5 since they all include a component of Monitored Natural Recovery (which assumes some sample analysis), correct? As an alternative, in the table column that discusses the relationship to the Alternative, could we simply add another bullet to that box stating the Alternative(s) it applies to?

Bob

From: Gielniewski, Margaret [mailto:gielniewski.margaret@epa.gov]
Sent: Wednesday, March 15, 2017 10:17 AM
To: Paulson.Robert; Dombrowski.Frank
Cc: Prasad.Narendra M; Bartoszek.Brian F; Marcus D. Byker (mbyker@naturalrt.com); Jennifer Knoepfle; Terri Gerrish; DuFresne, Kristin I - DNR; elizabeth.victor@wisconsin.gov
Subject: WPSC ARARs Table Formatting Comment (Marinette and Manitowoc)

Hello Bob and Frank,

In March? (or earlier) in 2016, EPA met with WPSC and NRT folks on the EPA's 12th floor to discuss the Marinette FS deliverable and all FS comments, including comments on ARARs (and the ARAR tables). I believe there was an ARARs call with DNR as well.

Based on the FS submittals for Marinette and Manitowoc, it appears that the ARAR tables do not include the additional column that EPA would like to see incorporated. That column would be to discuss to which Remediation Alternative presented does the ARAR listed apply and how it applies.

This is something EPA needs to see for all the FSs; therefore, I am letting you know now so you have an opportunity to work on both Marinette and Manitowoc ARAR tables while EPA and DNR can continue FS response to comments review. I defer to Jennifer/Terri from CH2M to provide an example row from how we want the ARARs tables formatted (inclusive of an additional column). Please submit revised ARAR tables ASAP following Jennifer's/Terri's submittal.

Thank you for your cooperation.

Best regards,
Margaret

Margaret Gielniewski
Remedial Project Manager
U.S. EPA Region 5, Chicago
ph. 312-886-6244



WARNING: This email was sent from an external address. Exercise caution when opening links or attachments.

**Table 1 - Preliminary List of Applicable or Relevant and Appropriate Requirements (ARARs), and To Be Considered (TBC) Guidance/Criteria Wisconsin Public Service Corporation - Former Manitowoc Manufactured Gas Plant Site
402 North Tenth Street, Manitowoc, Wisconsin
USEPA ID WIN000509949 / BBRTS # 02-36-000219**

Chemical-Specific ARARs/TBC

MEDIA	REQUIREMENT, CRITERIA, STANDARD, LIMIT	CITATION	Relationship between requirement, criteria, standard and/or limit and Alternative Component and other Comments
Soil	Soil Cleanup Standards	Wis. Admin. § NR 720: Soil Cleanup Standards	<ul style="list-style-type: none"> • Soil Cleanup Standards are legally applicable to soil, preferred method for determining RCLs outlined based on EPA soil screening values and 10-6 for individual compounds and 10-5 for cumulative risk, alternate RCLs can be developed with input from WDNR.
Groundwater	Groundwater Quality Standards	40 CFR Part 141 – Safe Drinking Water Act of 1974 Wis. Admin. § NR 140: Groundwater Quality Wis. Admin. § NR 726: Case Closure	<ul style="list-style-type: none"> • The National Primary Drinking Water Regulations establish health-based standards for public drinking water systems [maximum contaminant levels (MCLs)]. MCLs are legally enforceable federal drinking water standards and relevant and appropriate to groundwater. • NR 140 Groundwater Quality Standards are legally applicable to all groundwater, regardless of groundwater use • NR 726 Case Closure Cleanup requirements are relevant and appropriate • Generally, NR 140 PALs are the groundwater cleanup goal for all sites, however, flexible closure requirements in NR 726 may be used to set ESs as the primary ROD goal, provided that an adequate source control action is conducted and groundwater monitoring shows a stable or receding plume everywhere groundwater is monitored, including source and NAPL areas.
Soil Gas/Indoor Air – Chemical Specific	Indoor Air Quality and Vapor Migration	Wis. Admin. § NR 720 Soil Cleanup Standards, NR 726 Case Closure	<ul style="list-style-type: none"> • NR 720: Soil Cleanup Standards are legally applicable. • NR 726 Cleanup for Closure is relevant and appropriate • Indoor Air Quality Standards are used to develop Vapor Action Levels for MGP COCs in indoor air and Vapor Risk Screening Levels for MGP COCs in sub slab and soil gas, and in groundwater. • Actions must be taken to ensure soil and groundwater are remediated such that indoor air from vapor intrusion is addressed; the rule also requires vapor mitigation systems for occupied building if needed to address an immediate threat. • Note: Guidance (which would be a TBC) is planned to allow avoiding vapor mitigation systems in vacant buildings with VI issues provided a continuing obligation (CO) is put in place to require the RP to notify WDNR if the building use changes and possibly install a system.

**Table 1 - Preliminary List of Applicable or Relevant and Appropriate Requirements (ARARs), and To Be Considered (TBC) Guidance/Criteria
Wisconsin Public Service Corporation - Former Manitowoc Manufactured Gas Plant Site
402 North Tenth Street, Manitowoc, Wisconsin
USEPA ID WIN000509949 / BBRTS # 02-36-000219**

Soil Action-Specific ARARs

ALTERNATIVE COMPONENT	REQUIREMENT, CRITERIA, STANDARD, LIMIT	CITATION	Relationship between requirement, criteria, standard and/or limit and Alternative Component and other Comments
Wastewater Discharges to Manitowoc River	Surface Water Effluent Standards, Criteria, and Limitations	Wis. Stat. § 283: Pollution Discharge Elimination Wis. Admin. § NR 102: Water Quality Standards for Wisconsin Surface Waters Wis. Admin. § NR 105: Procedures for Calculating Water Quality Based Effluent Limitations for Point Source Discharges to Surface Water Wis. Admin. § NR 106: Procedures for Calculating Water Quality Based Effluent Limitations for Point Source Discharges to Surface Waters Wis. Admin. § NR 200 - Application For Discharge Permits And Water Quality Standards Variances Wis. Admin. § NR 207: Water Quality Antidegradation Wis. Admin. § NR 218: Method and Manner for Sampling Wis. Admin. § NR 219: Analytical Test Methods And Procedures	<ul style="list-style-type: none"> Surface water quality effluent standards, criteria and limitations are Applicable where dewatering during soil remediation may necessitate discharge to the Manitowoc River.
Wastewater Discharges to POTW	Surface Water Effluent Standards, Criteria, and Limitations	Wis. Stat. § 281: Water And Sewage	<ul style="list-style-type: none"> Discharge to POTW is an offsite action, and any pretreatment requirements would need to be met.
Site Disturbance	Storm Water Runoff Requirements	Wis. Stat. § 283: Pollution Discharge Elimination Wis. Admin. § NR 216: Storm water Discharge Permits Wis. Admin. § NR 151: Runoff Management	<ul style="list-style-type: none"> All are Applicable. Storm water runoff requirements apply during excavation activities at sites equal to or greater than one acre that may result in discharge of storm water to the Manitowoc River.
Site Disturbance In-Situ Treatment of Soil that generates vapors	Air Emissions Requirements, Criteria, Limitations	Wis. Admin. § 415 - Control Of Particulate Emissions Wis. Admin. § 419 - Control Of Organic Compound Emissions Wis. Admin. § 429 - Malodorous Emissions And Open Burning Wis. Admin. § 431 - Control Of Visible Emissions Wis. Admin. § 445 - Control Of Hazardous Pollutants	<ul style="list-style-type: none"> Air emission requirements will apply during soil excavation and blending activities that generate fugitive dust and/or vapors Air emission requirements will apply to in-situ treatment alternatives that involve the generation of vapors.

**Table 1 - Preliminary List of Applicable or Relevant and Appropriate Requirements (ARARs), and To Be Considered (TBC) Guidance/Criteria
Wisconsin Public Service Corporation - Former Manitowoc Manufactured Gas Plant Site
402 North Tenth Street, Manitowoc, Wisconsin
USEPA ID WIN000509949 / BBRTS # 02-36-000219**

Soil Action-Specific ARARs (Continued)

ALTERNATIVE COMPONENT	REQUIREMENT, CRITERIA, STANDARD, LIMIT	CITATION	Relationship between requirement, criteria, standard and/or limit and Alternative Component and other Comments
In-Situ Treatment - injection of Fluids	Injection Well Requirements	Wis. Stat. § 281: Water and Sewage Wis. Admin. § NR 815: Injection Wells	<ul style="list-style-type: none"> Substantive requirements of the injection well regulation are applicable for in-situ treatment via injection of fluids.
Soil Excavation	Waste Disposal	Wis. Admin. § NR 718 Management of Solid Wastes Excavated During Response Actions	<ul style="list-style-type: none"> Substantive requirements of the disposal of excavated soils deemed waste are applicable.

Groundwater Action-Specific ARARs

ALTERNATIVE COMPONENT	REQUIREMENT, CRITERIA, STANDARD, LIMIT	CITATION	Relationship between requirement, criteria, standard and/or limit and Alternative Component and other Comments
All Groundwater Alternatives	Groundwater Monitor Well Requirements	Wis. Stat. § 281: Water and Sewage Wis. Admin. § NR 141: Groundwater Monitor Well Requirements	<ul style="list-style-type: none"> Groundwater monitoring is required to demonstrate the effectiveness of any groundwater remedy on reducing concentrations of MGP COCs.
In-Situ Chemical or Thermal Treatment	Air Emissions Requirements, Criteria, Limitations	Wis. Stat. § 285: Air Pollution Wis. Admin. § 415- Control Of Particulate Emissions Wis. Admin. § 419 - Control Of Organic Compound Emissions Wis. Admin. § 429.03 - Malodorous Emissions And Open Burning Wis. Admin. § 431 - Control Of Visible Emissions Wis. Admin. § 445 - Control Of Hazardous Pollutants	<ul style="list-style-type: none"> Air Emission requirements, criteria and limitations will apply during remediation activities that generate vapors during injection, vapor recovery, and/or treatment of pumped groundwater.
In-Situ Chemical Treatment In-Situ Enhanced Bioremediation	Injection Well Requirements	Wis. Stat. § 281: Water and Sewage Wis. Admin. § NR 815: Injection Wells Wis. Admin. § NR 140: Groundwater Quality	<ul style="list-style-type: none"> Substantive requirements of the injection well regulation are applicable for in-situ chemical treatment via injection of fluids.

All Media Action-Specific ARARs

**Table 1 - Preliminary List of Applicable or Relevant and Appropriate Requirements (ARARs), and To Be Considered (TBC) Guidance/Criteria
 Wisconsin Public Service Corporation - Former Manitowoc Manufactured Gas Plant Site
 402 North Tenth Street, Manitowoc, Wisconsin
 USEPA ID WIN000509949 / BBRTS # 02-36-000219**

ALTERNATIVE COMPONENT	REQUIREMENT, CRITERIA, STANDARD, LIMIT	CITATION	Relationship between requirement, criteria, standard and/or limit and Alternative Component and other Comments
All Media – Chemical Specific	Laboratory Certification Requirement	Wis. Admin. § NR 149: Laboratory Certification and Registration Wis. Admin. § NR 299.01(4): Water Quality Certification	<ul style="list-style-type: none"> Any sampling during design and implementation must meet these requirements
Remediation Standards, Requirements, and Initiatives	Remedy selection, design, implementation and operation and maintenance requirements	Wis. Admin. § NR 724: Remedial And Interim Action Design, Implementation, Operation, Maintenance And Monitoring Requirements	<ul style="list-style-type: none"> Applicable. The remedial action documents provide standards and requirements for remediation of contamination sites in Wisconsin. NR 722 is very similar to the NCP for remedy evaluation and selection.

Other Non-ARAR Requirements (Full Compliance is Required)

ALTERNATIVE COMPONENT	REQUIREMENT, CRITERIA, STANDARD, LIMIT	CITATION	Relationship between requirement, criteria, standard and/or limit and Alternative Component and other Comments
Institutional Controls – any media	Continuing Obligation (CO) Requirements	Wis. Admin. § NR 725 and 726	<ul style="list-style-type: none"> Should WI CO responsibilities be used as additional ICs, then the rule requirements are applicable. To be enforceable, WDNR must issue an approval of a remedial action type plan with enforceable requirements for the continuing obligations. Enforcing COs at properties not controlled by the RP could be an issue.

**Table 1 - Preliminary List of Applicable or Relevant and Appropriate Requirements (ARARs), and To Be Considered (TBC) Guidance/Criteria
Wisconsin Public Service Corporation - Former Manitowoc Manufactured Gas Plant Site
402 North Tenth Street, Manitowoc, Wisconsin
USEPA ID WIN000509949 / BBRTS # 02-36-000219**

To Be Considered Standards, Guidance, and Initiatives

STANDARD, GUIDELINE, INITIATIVE	CITATION	Relationship between TBC and Alternative Component
Soil Cleanup Standards	<p>WDNR Guidance Document: “Soil Residual Contaminant Level Determinations Using the U.S. EPA Regional Screening Level Web Calculator” (WDNR PUBL-WR-890, January 23, 2014)</p> <p>WDNR Guidance Document: “RR Program’s RCL Spreadsheet Update” (WDNR-RR-052c, December 2015)</p>	<ul style="list-style-type: none"> • These documents provide guidance on applying the U.S. EPA Screening Level Web Calculator to Wisconsin soils to calculate soil cleanup standards.
Air Management Guidelines Community Involvement	<p>Wisconsin Bureau of Environmental and Occupational Health, Department of Health and Family Services: “Health-based Guidelines for Air Management And Community Involvement During Former Manufactured Gas Plant Clean-ups” (March 23, 2014)</p>	<ul style="list-style-type: none"> • This document provides guidance on developing Air Management Plans to protect human health during remedial activities at MGP sites in Wisconsin.
Soil Cover Guidance	<p>WDNR Guidance Document: “Guidance for Cover Systems as Soil Performance Standard Remedies” (WDNR PUBL-RR-709, October 2013)</p>	<ul style="list-style-type: none"> • This document provides guidance on cover systems and soil performance standard remedies.
Remediation Standards, Requirements, and Initiatives	<p>Wisconsin’s Initiative for Sustainable Remediation and Redevelopment in the State of Wisconsin, A Practical Guide to Green and Sustainable Remediation in the State of Wisconsin. (WDNR Pub-RR-911, January 2012)</p>	<ul style="list-style-type: none"> • The Guide to Green and Sustainable Remediation provides guidance on implementing the US. EPA’s Superfund Green Remediation Strategy (September 2010) at cleanup sites in Wisconsin.
Vapor Intrusion Guidance	<p>WDNR Guidance Document: “Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin” (WDNR PUBL-RR-800, December 2010).</p> <p>WDNR Guidance Document: “Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin” (WDNR PUBL-RR-800) Update (July 2012)</p> <p>WDNR Guidance Document: “Sub-slab Vapor Sampling Procedures” (WDNR PUBL-RR-986, July 2014).</p> <p>WDNR Guidance Document: "DNR Case Closure Continuing Obligations: Vapor Intrusion" (WDNR PUBL-RR-042, August 2015)</p>	<ul style="list-style-type: none"> • These documents provide guidance on the investigation and remediation of the vapor intrusion pathway at contamination sites in Wisconsin and the basis for calculating Indoor Air Vapor Action Levels and Vapor Risk Screening Levels. • Also provided is guidance on how vapor intrusion is addressed through continuing obligations applied at case closure at contaminated sites in Wisconsin.
Institutional Controls (Continuing Obligations) Requirements	<p>WDNR Guidance Document: “Guidance on Case Closure and the Requirements for Managing Continuing Obligations” (WDNR PUBL-RR- 606, April 2014):</p> <p>WDNR Guidance Document: “DNR Case Closure Continuing Obligations: Vapor Intrusion” (WDNR PUBL-RR-042, Aug 2015)</p>	<ul style="list-style-type: none"> • These documents provide guidance on which vapor intrusion continuing obligations should be selected when preparing for case closure.

**Table 1 - Preliminary List of Applicable or Relevant and Appropriate Requirements (ARARs), and To Be Considered (TBC) Guidance/Criteria
Wisconsin Public Service Corporation - Former Manitowoc Manufactured Gas Plant Site
402 North Tenth Street, Manitowoc, Wisconsin
USEPA ID WIN000509949 / BBRTS # 02-36-000219**

Acronyms

ARARs: Applicable or Relevant and Appropriate Requirements

CO: Continuing Obligation

WDNR: Wisconsin Department of Natural Resources

MGP COCs: Manufactured Gas Plant Compounds of Concern

Wis. Stat.: Wisconsin Statute

Wis. Admin: Wisconsin Administrative Code

WPDES: Wisconsin Pollution Discharge Elimination System