

STATE OF MICHIGAN
DEPARTMENT OF ATTORNEY GENERAL



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March 4, 2022

VIA EMAIL ONLY

Mr. Steve Willis
Program Manager
BRAC Program Management Division
AFCEC/CIBE
BRAC Program Management Division
Bldg. 1, 3515 Southern General McMullin Ave.
San Antonio, TX 78266

Re: *Applicable or Relevant and Appropriate Requirements (ARARs) for Former Wurtsmith Air Force Base, Oscoda, Michigan; Interim Remedial Action for Van Etten Lake at Ken Ratliff Memorial Park, Oscoda, Michigan*

Dear Mr. Willis:

The State of Michigan has identified state applicable or relevant and appropriate requirements (ARARs) for the interim remedial action proposed for Van Etten Lake at Ken Ratliff Memorial Park adjacent to the former Wurtsmith Air Force Base in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300).

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) and the Michigan Department of Attorney General have worked with the Air Force to focus the ARARs to fit the location and type of action that are part of the interim remedial action (IRA) aimed at reducing contaminants entering Van Etten Lake. This IRA involves installation of a hydraulic control system and expansion of groundwater treatment capacity inside the existing Central Treatment System to reduce migration perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) into Van Etten Lake. Additional treatment capacity and treatment components will be added to the existing pump and treat systems in the Central Treatment System.

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The ARARs identify the limits on PFAS and other contaminants that must be met in the post-treatment water before discharge to the designated surface waters. This interim remedial action is focused specifically on treating groundwater before it reaches Van Etten Lake, and is not the remedy for the site as a whole. The site as a whole will instead be addressed by a final remedy after completion of remedial investigation of the entire site. As such, the identified ARARs for the VEL interim remedial action are tailored to the specific actions that the Air Force will be undertaking here.

The standards that are relevant to the extraction and treatment of groundwater are found in the 2016 Substantive Requirements Document dated October 7, 2016, #MIU990027 (SRD), which implements the substantive requirements of the National Pollutant Discharge Elimination System (NPDES) program and Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act (NREPA), MCL 324.3101 *et seq.* Specifically, the SRD provides discharge limits for the treatment system and assures that the discharged water meets state standards under Part 31 and its implementing rules.

Due to the limited nature of the proposed actions for this interim remedial action, the State of Michigan is not identifying the requirements of Part 201, Environmental Remediation, of the NREPA, MCL 324.20101 *et seq.* for this interim remedial action. The interim remedial action continues and expands existing pump and treat systems, which are regulated under Part 31, as discussed above, and not under Part 201 cleanup criteria. However, while the Part 201 standards are not the controlling authority for this stage of the cleanup and for the actions required under the interim remedial action, the State of Michigan will identify Part 201 standards as ARARs for the long-term remedy for this area and the entire WAFB Facility.

Additionally, the State of Michigan has reviewed and analyzed information provided by the Air Force and has determined that the interim remedial action will not result in the “take” of any state-listed threatened and endangered species under Part 365, Endangered Species Protection, of the NREPA, MCL 324.36501 *et seq.*, and has therefore not identified Part 365 as an ARAR. (1/25/2022 DNR Letter to Aerostar; 12/20/2021 Aerostar Letter to DNR.) The State of Michigan also has not identified Part 301, Inland Lakes and Streams, of the NREPA, MCL 324.30101 *et seq.* as an ARAR based on assurances from Air Force that it will not be making any changes to Van Etten Lake’s bottomland, which includes any land area of Van Etten Lake that lies below the ordinary high-water mark.

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Finally, although not identified for this interim remedial action, the State of Michigan has made the Air Force aware of existing foam advisories, which urge residents to avoid foam impacted by per- and polyfluoroalkyl substances (PFAS), including PFOA and PFOS. The State of Michigan acknowledges that the VEL interim remedial action will not result in the immediate removal of the advisory, but believes it is important that Air Force keep these advisories in mind for the final remedy, where they may be a useful metric in determining success of a final remedy.

The State of Michigan is confident that the ARARs that are being provided today to the Air Force ensure that all appropriate state laws relevant to the VEL interim remedial action are applied to this action. The State of Michigan thanks the Air Force for ensuring that state law requirements are met for this interim remedial action as required under CERCLA and looks forward to working with Air Force to identify ARARs for future interim actions as well as the final remedy.

Sincerely,

/s/ Polly A. Synk

Polly A. Synk

Assistant Attorney General

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PAS:jg

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Van Etten Lake (VEL) Interim Remedial Action State ARARs – March 3, 2022

Regulation ¹	ARAR Status	Requirement	Analysis
<p style="text-align: center;">Part 31 - Water Resources Protection</p> <p>Mich. Comp. Laws 324.3104(4), (6), (9)-(10); 3106, 3107-3109a; 3109e-3110; 3112(1), (3); and</p> <p>Mich. Admin. Code R. 323.1050, 1051, 1053, 1098, 1100, 1105, and 1117 (portions of Part 4 Rules)</p> <p>Part 21 Rules, Wastewater discharge permits (as the source of authority and procedure for SRD terms and effluent limits)– R. 323.2103, 2137, 2139, 2140, 2142, 2149, 2154, 2159, 2189</p>	<p style="text-align: center;">Chemical Specific Applicable <input checked="" type="checkbox"/></p> <p style="text-align: center;">Action Specific Applicable <input checked="" type="checkbox"/></p> <p style="text-align: center;">Location Specific <input type="checkbox"/></p>	<p>Prohibits direct or indirect discharge to ground or surface waters of the state that are or may become injurious to the environment or public health. Defines effluent guidelines based on actual water quality, receiving stream properties, and other appropriate water quality criteria. Provides criteria and standards for the National Pollutant Discharge Elimination System (NPDES) and effluent standards for toxic pollutants. This is the implementing statute for the federally delegated NPDES program.</p> <p>Rules identified in the 323.1050-1117 range specify water quality standards, which prescribe water quality standards for pollutants such as VOCs and pH (R. 1053), which are applicable to this IRA through the identified standards in the Substantive Requirements Document (SRD) for the discharges associated with the two pump and treat systems that make up the Central Treatment System (known as Benzene Plant and Arrow Street). The SRD for the Central Treatment System places effluent limits on VOCs and pH which are developed in accordance with the Part 4 Rules. The effluent limitations identified in the SRD are the limits applicable to this IRA.</p> <p>The limitations for PFOS and PFOA in the SRD are based on treatment technology. They were derived by EGLE under the authority of the Part 21 rules, using best professional judgement in the absence of federal effluent limit guidelines, as allowed by law. Treatment technology limitations are applied if they are more restrictive than water quality based effluent limitations. To the extent that any of the Part 21 rules sections cited include administrative or fee requirements, those are not ARARs.</p> <p>Rule 1098 (antidegradation): compliance with the discharge limits in the SRD will ensure that the requirements of Rule 1098 are met.</p>	<p>Substantive requirements of a permit to discharge are applicable to any discharge to waters of the state as defined in Part 31, including the expected discharge from the pump and treat system anticipated to be implemented as part of this interim remedy. (Action-specific)</p> <p>Discharges from the pump and treat systems must comply with Part 31 substantive requirements for the relevant contaminants, which for the Van Etten Lake IRA are the limits for pH, VOCs, PFOA and PFOS as set forth in the Substantive Requirements Document (SRD) that applies to discharges from the CTS to surface waters. (Chemical-specific)</p> <p>Substantive requirements of state discharge permits (including storm water permits) must be attained for remedial actions taking place on site</p> <p>If the VEL IRA project scope changes or if unexpected site conditions arise, other sections of Part 31 or Part 4 Rules may apply</p>

¹ Based on assurances from the USAF, EGLE has largely removed the definitional and legislative purpose provisions from its list of identified ARARs. This is based on the understanding that if a provision that has been identified as an ARAR requires interpretation or reference to definitions or purpose language, the USAF and the State of Michigan will apply the relevant definitions from the relevant statutes and regulations, and will refer to the purpose statements, as needed.

Van Etten Lake (VEL) Interim Remedial Action State ARARs – March 3, 2022

Regulation	ARAR Status	Requirement	Analysis
<p>NREPA, Part 55 - Air Pollution Control</p> <p>Mich. Admin. Code, R. 336.1372(8)(b)</p>	<p>Chemical Specific <input type="checkbox"/></p> <p>Action Specific <input checked="" type="checkbox"/> Relevant and Appropriate</p> <p>Location Specific <input type="checkbox"/></p>	<p>Prohibits operation of a source that emits air pollutants that are or can become injurious to human health or welfare, to animal life, to plant life, or to property, or that interfere with the enjoyment of life and property unless authorized under the statute and rules.</p> <p>Rules prohibit the emission of fugitive dust from certain construction, renovation, or demolition activities in quantities which cause injurious effects to human health, animal life, plant life, or significant economic value, and/or property. Establishes common measures to mitigate the generation of fugitive dust during construction work.</p>	<p>The Part 55 rules apply to remedial alternatives that generate air emissions (e.g., fumes, gas, mist, odor, equipment emissions and dust from excavation, soil stabilization, or compaction). Air emissions must comply with substantive requirements of permits and monitoring would be required.</p> <p>The restrictions on fugitive dust emissions at R 336.1372(8)(b) are relevant and appropriate for remedial actions where contaminated soil may become airborne during construction, renovation or demolition activities that would generate fugitive dust and air emissions at trigger levels. Onsite CERCLA actions are exempt from administrative requirements such as administrative reviews and permitting; however, for certain remedial alternatives, air emissions must comply with substantive requirements and monitoring may be required.</p>
<p>NREPA, Part 91 - Soil Erosion and Sediment Control</p> <p>Mich. Comp. Laws 324.9112(1) & (2), 9116</p> <p>Mich. Admin. Code, R. 323.1702, 1703, 1704, 1708, 1709, 1710</p>	<p>Chemical Specific <input type="checkbox"/></p> <p>Action Specific <input checked="" type="checkbox"/> Applicable or Relevant and Appropriate</p> <p>Location Specific <input checked="" type="checkbox"/></p>	<p>Establishes rules for the control of soil erosion and sedimentation during earth-change operations</p>	<p>Relevant and appropriate to the excavation of contaminated soil. Applicable if more than 1 acre will be disturbed or for any disturbance within 500 feet of the water's edge of a lake or stream, or if an earth change activity otherwise would cause or result in violation of substantive provisions of Part 91. Onsite CERCLA actions are exempt from administrative requirements such as administrative reviews and permitting; however, the substantive requirements must be met.</p>

Van Etten Lake (VEL) Interim Remedial Action State ARARs – March 3, 2022

Regulation	ARAR Status	Requirement	Analysis
<p>NREPA, Part 111-Hazardous Waste Management</p> <p>Mich. Comp. Laws 324.11105, 11123, 11128, 11135, 11138,</p> <p>Mich. Admin. Code, Rules:</p> <p>299.9212 characteristics of hazardous waste</p> <p>299.9216-7 methods/identification of hazardous wastes</p> <p>299.9302 hazardous waste determination</p> <p>299.9305 pre-transport requirements</p> <p>299.9306 Accumulation time</p> <p>299.9309 manifest requirements</p> <p>299.9310 pre-transport requirements (onsite)</p>	<p>Chemical Specific <input type="checkbox"/></p> <p>Action Specific <input checked="" type="checkbox"/></p> <p>Applicable or Relevant and Appropriate</p> <p>Location Specific <input type="checkbox"/></p>	<p>Prohibits generation, disposal, storage, treatment, or transport of hazardous waste except in compliance with Part.</p> <p>Establishes requirements for hazardous waste generators, transporters, and treatment/storage/disposal facilities.</p> <p>Administrative rules define hazardous waste based on analytical procedures, usage, and process of generation</p> <p>Pre-transport regulations (299.9305) establish minimum standards for preparing hazardous waste for shipment offsite and will only apply if hazardous waste is generated as part of the IRA.</p> <p>Accumulation time regs (299.9306) establish minimum standards for managing hazardous wastes onsite. The requirements of 40 CFR 265 are incorporated by reference. R. 299.9306 will only apply if hazardous waste is generated as part of the IRA</p> <p>Manifest requirements for generated wastes being shipped if necessary to arrange for transportation to appropriate facility. R 299.9309 and R 299.9310 will only apply if hazardous waste is generated as part of the IRA</p>	<p>Remedial activities may generate waste material that may be classified as hazardous waste as part of IRA. Used for characterizing and identifying hazardous wastes and determining appropriate disposal options.</p> <p>Haz waste determination (299.9302) is applicable to all wastes managed on site. Used for characterizing and identifying hazardous wastes and determining appropriate disposal options. Determining whether wastes qualify as hazardous will often establish the applicability of other regulations.</p> <p>The permit and fee provisions of MCL 324.11123 and 11135 are not ARARs; only the substantive provisions of these sections (prohibited actions involving hazardous wastes and manifest requirements) apply if hazardous waste is generated as part of the IRA.</p> <p>Pre-transport requirements are applicable if hazardous waste is generated and managed onsite prior to offsite shipment and disposal</p> <p>Accumulation time regs are applicable if hazardous waste is generated and managed onsite prior to offsite shipment and disposal</p>
<p>NREPA, Part 413, Invasive Species</p> <p>Mich. Comp. Laws 324. 41301 and 324.41305</p>	<p>Chemical Specific <input type="checkbox"/></p> <p>Action Specific <input checked="" type="checkbox"/></p> <p>Potentially Relevant and Appropriate</p> <p>Location Specific <input type="checkbox"/></p>	<p>Lists nonnative species that are prohibited or restricted in Michigan; prohibits possession or introduction of listed species unless authorized under Part.</p>	<p>Any remedial actions should not introduce a listed prohibited or restricted species, a genetically engineered or nonnative bird, crustacean, fish, insect, mammal, mollusk, or aquatic plant in this state at any specific location where the organism is not already naturalized, unless otherwise allowed by Part 413.</p> <p>Would not be considered an ARAR unless federal invasive species standards are less stringent.</p>