

Janice K. Brewer Governor

Arizona Department of Environmental Quality

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Director

March 4, 2010 FPU 10- 214

Attention: Leah Butler, EPA Region IX Mail Code SFD62 75 Hawthorne Street San Francisco, CA 94105

RE: Iron King Mine-Humboldt Smelter EPA request for ARARs for upcoming Feasibility Study

Dear Ms. Butler:

Enclosed are the requested identification of Applicable or Relevant and Appropriate Requirements (ARAR's) per your letter dated December 17, 2009 with a request date for a reply by March 13, 2010.

If you have any questions e-mail me at Stonebrink. Brian@azdeq.gov or call (602) 771-4197.

Sincerely,

Brian Stonebrink, Project Manager

Federal Projects Unit,

Brian Stonelrink

Waste Programs Division, ADEQ

cc: Leah Butler, EPA (via email)

Joellen Meitl, ADEQ project Hydrologist

Harry Hendler, ADEQ Federal Projects Unit Manager

Project and Reading File

Enclosure: ARAR's letter (4 pages)

Potential Applicable or Relevant and Appropriate Requirements

Iron King Mine & Humboldt Smelter Superfund Site Upcoming Feasibility Study

In compliance with sections 104, 106 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by Superfund Amendments and Reauthorization Act (SARA), and after consideration of the State of Arizona environmental and siting laws, potential Applicable, or Relevant and Appropriate Requirements (ARARs) of the proposed feasibility study for the site were determined and are presented below. More detailed information and the exact language is available from the Arizona Department of Environmental Quality (ADEQ) main website page under the Laws, Rules and Policy tab and under Legislation and Rules at the following link. http://www.azdeq.gov/function/laws/index.html or at http://www.azsos.gov/PUBLIC SERVICES/Title 18/18-07.htm

Soil Remediation ARAR

CITATION: Arizona Revised Statutes (A.R.S.) §§ 49-151 and 49-152 and the rules promulgated there under Article Two of Arizona Administrative Code (A.A.C.) R18-7-201 through 209, including Appendix A. Soil Remediation Levels (SRLs) for cleaning up contaminants in soil are contained in the Appendix A. The SRLs were revised on May 5, 2007 and amended by final rulemaking at Arizona Administrative Register, Volume 13, Page 971 (13 A.A.R. 971).

APPLICABLE: The listed contaminants in the soil at the Site must be cleaned up to the appropriate SRL. They are a set of consistently-derived health-based guidance levels which have been subjected to the Arizona rule-making process. Since there are no federal standards for the cleanup of contaminants in soil, the SRLs are more stringent and thus are the standard for cleanup.

REQUIREMENT: The Arizona Department of Environmental Quality has implemented the rules that present standards for soil remediation. Appendix A lists chemicals for which there were sufficient data to develop health-based guidance levels for chemicals in soils. After remedial action, the contaminants remaining in the soil shall be in compliance with the above cited statute and rules.

Arizona Water Quality Control ARAR

CITATION: A.R.S. §§ 49-223 and 49-224

REQUIREMENT: All aquifers in the state identified under § 49-222 are classified as drinking water aquifers. As such, the goal of remediation is to restore the affected aquifer to drinking water quality with regard to chemical contamination.

RELEVANCY: Arizona law is more stringent than Federal standards. The preferred alternative must meet this ARAR. This ARAR has been presented and made an ARAR in the Record of Decision (ROD) of every National Priorities List (NPL) sites in the state that has an approved ROD.

CITATION: A.R.S. § 49-221: AAC §R18-11-101 et seq.

DESCRIPTION: Regulates discharges to surface water

APPLICABLE: Discharge from treatment systems must comply with Arizona State Water Quality Standards for Surface Water. This requirement is applicable at times when treated water is discharged to surface water.

CITATION: A.R.S. § 49-222

DESCRIPTION: Provides standards for navigable waters.

RELEVANT AND APPROPRIATE: These standards assure water quality for protection of public health and takes into consideration its use and value for public water supplies, the propagation of fish and wildlife, recreational, agricultural, industrial and other purposes including navigation.

CITATION: A.C.C. R18-11

DESCRIPTION: Specific waters in Arizona have chemical specific requirements, such as the Aqua Fria River.

Groundwater Protection Levels (GPLs)

CITATION: A.R.S. § 49-158

DESCRIPTION: The Soil Rule allows for risk assessments to be developed at site-specific cleanup standards. The Groundwater Protection Levels (GPLs) as described in the document *A Screening Method to Determine Soil Concentrations Protective of Groundwater Quality* by the Leachability Working Group dated September 1996 are similar to other vadose zone models such as VLEACH and SESOIL. 2008 updated instructions can be used to calculate GPLs using the Excel spreadsheet.

APPLICABLE: GPLs can be calculated for residual concentration of contaminants in soil that may threaten or cause contamination to groundwater. The GPLs were developed specifically to determine the level of residual contaminant concentrations in soil that would be protective of groundwater quality at a point of compliance in the underlying aquifer.

Air Quality

REQUIREMENT: During remediation of soil and groundwater, air emissions shall be treated to meet Air Quality Standards as dictated by the Clean Air Act (42 U.S.C. 7401 *et seq.*) National Ambient Air Quality Standards (NAAQS) are numeric limits for contaminants in air emissions. These requirements apply to all treatment systems and discharge emissions.

Landfill ARAR

CITATION: A.R.S. § 49-764

REQUIREMENT: Monitoring and pollution control devices may be required at a solid waste facility if the facility may adversely affect public health or the environment.

RELEVANT: The requirement for monitoring and pollution control devices may be more stringent than federal law and as such should be considered at any time the remedial action affects a landfill in any manner.

Human remains and funerary objects ARAR

CITATION: A.R.S. § 41-841 through § 41-847 and A.R.S. § 41-865

REQUIREMENT: The laws governing archaeological discovery and preservation shall be followed if artifacts or human remains are discovered.

RELEVANT: Artifacts, human remains and funerary objects have been found is areas near the Site. If such items are discovered during remedial activity at the site, such activity shall cease in accordance with state law. Further, the permission, investigative and other requirements of state law must be met.

Exemptions of Superfund Remedial Action Activities:

Exemption from Aquifer Protection Permits (APP) ARAR

CITATION: A.R.S. § 49-243B

DESCRIPTION: CERCLA sites are exempt from APPs by approved Work Plans for those areas used in corrective action. The best available demonstrated control technology (BADCT) for groundwater protection need to be used to reduce or eliminate discharge pollution and be protective of groundwater quality.

New Well Construction & Groundwater Use Requirements ARAR

CITATION: A.R.S. § 45-454.01

RELEVANCY: While A.R.S. § 45-454.01 waives some of the requirements of Title 45 at NPL Sites, significant requirements still apply.

Remedial Action Requirements ARAR

CITATION: A.R.S. § 49-282

REQUIREMENT: Remedial actions must (a) assure the protection of public health and welfare and the environment; (b.) to the extent practicable, provide for the control and management of clean-up of the hazardous substance so as to allow the maximum beneficial use of the waters of the state; and (c) be cost effective over the period of potential exposure to such hazardous substance.

Discharge to Aquifer ARAR

CITATION: A.R.S. § 49-241 et seq.

REQUIREMENT: Any person who discharges shall obtain an Aquifer Protection Permit, A.R.S. § 49-241 *et seq.* Since under CERCLA the requirement to get a permit is waived, the substantive provisions of the permit must be met. Included in the list of "discharges", among others, are surface impoundments, including holding, storage settling, treatment or disposal pits, ponds and lagoons; solid waste disposal facilities; injection wells.

Declaration of Environmental Use Restriction Statutes and Rules

CITATION: A.R.S. § 49-151, § 49-152, § 49-158 and § 49-159

REQUIREMENT: The Declaration of Environmental Use Restriction (DEUR) is a restrictive covenant designed to document institutional and engineering controls; allow closure of a site with contamination above residential soil remediation levels; and ensure appropriate future sue of the contaminated site. The DUER runs with and burdens the land and allows ADEQ to take actions necessary to ensure that engineering or institutional controls are maintained throughout the life of the DEUR, such as annual inspections. The property owner files a DEUR with the country recorders office. More information is available from the ADEQ website following link http://www.azdeq.gov/environ/waste/cleanup/deur.html

Declaration of Environmental Use Restriction Fee

CITATION: A.A.C. R18-7-601 though R18-7-606.

REQUIREMENT: ADEQ is allowed by statute to collect fees necessary for oversight and potential long term maintenance of a DEUR. The DEUR fee must be submitted to ADEQ at the time the DEUR form is submitted for approval. The A.A.C. R18-7-601-606 covers the applicability, fee calculation, DEUR release and modification.