PREASSESSMENT SCREEN AND DETERMINATION

Sweetwater Mine and Mill Complex, Reynolds County, Missouri
West Fork Mine and Mill Complex, Reynolds County, Missouri
Glover Smelter Site, Iron County, Missouri

By
U.S. Fish and Wildlife Service
Missouri Department of Natural Resources

This is the Preassessment Screen (PAS) and determination for the Sweetwater Mine and Mill Complex and West Fork Mine and Mill Complex and surrounding areas in Reynolds County, Missouri and the Glover Smelter Site and surrounding area in Iron County, Missouri (collectively the "Sites"). The Glover Smelter was constructed adjacent to the Viburnum Trend, originally to refine and smelt ore produced from the Sweetwater and West Fork mines and mills. This document has been prepared by the U.S. Department of the Interior (DOI) and Missouri Department of Natural Resources (MDNR) who are Trustees for natural resources at the Sites (collectively referred to hereinafter as "Trustees") in accordance with Natural Resource Damage Assessment (NRDA) procedures. 43 C.F.R. Part 11.

I. AUTHORITY

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended, 42 U.S.C. § 9601 *et seq.*, the Oil Pollution Act of 1990 (OPA), 33 U.S.C. § 2701 *et seq.*, and the Federal Water Pollution Control Act (FWPCA), as amended, 33 U.S.C. § 1251 *et seq.*, authorize the United States, States and Indian tribes to recover damages for injuries to natural resources and their supporting ecosystems, belonging to, managed by, appertaining to, or otherwise controlled by them.

In accordance with 42 U.S.C. § 9607(f)(2)(B) and the National Contingency Plan, 40 C.F.R. § 300.600 (NCP), the Director of the MDNR has been designated the natural resource trustee by the Governor of Missouri. The MDNR acts on behalf of the public as Trustee for natural resources, including their supporting ecosystems, within the boundary of Missouri or belonging to, managed by, appertaining to, or otherwise controlled by Missouri.

The U.S. Fish and Wildlife Service (Service) is acting on behalf of the Secretary of the Interior as trustee for natural resources. The President has designated the Secretary of the Department of the Interior to act on behalf of the public as trustee for natural resources and their supporting ecosystems, managed or otherwise controlled by the DOI. Executive Order 12580, Section 1(c), January 23, 1987; 40 C.F.R. § 300.600. The official authorized to act on behalf of the Secretary at the Sites and surrounding areas is the Regional Director for Region 3 of the U.S. Fish and Wildlife Service.

II. PURPOSE

The purpose of this PAS is to provide a review of readily available information on discharges or releases of hazardous substances and the potential resulting impacts on natural resources at the Sites and surrounding areas for which the DOI and/or MDNR may assert trusteeship under section 107(f) of CERCLA.

Federal regulations at 43 C.F.R. Part 11 sets forth methods for the assessment of natural resources damages resulting from releases of hazardous substances under CERCLA. Adherence to the methods set forth in these regulations is not mandatory and does not preclude the Trustees' use of alternate methods of assessing damages or arriving at a negotiated settlement with potentially responsible parties.

The CERCLA natural resources damages assessment regulations provide for the Trustees to complete a PAS and make a determination as to whether there is a reasonable probability of making a successful claim for natural resources damages before additional assessment efforts are undertaken. 43 C.F.R. § 11.23(a). The regulations provide guidance on the content of the PAS, including the type of information the Trustees should examine and evaluate as well as how to identify the resources potentially at risk for purposes of determining whether to conduct an assessment. 43 C.F.R. §§ 11.24 and 11.25.

The regulations provide that if the Trustees already have "a process similar to the preassessment screen, and the requirements of the preassessment screen can be satisfied by that process, the processes may be combined to avoid duplication." 43 C.F.R. § 11.23(f)(4). In accordance with this provision, the Trustees determined that the process of preparing and submitting a claim for natural resources damages in the ASARCO, LLC bankruptcy proceedings for the Sweetwater, West Fork and Glover Sites is similar to the process of preparing a PAS. For purposes of filing a claim in the ASARCO LLC bankruptcy, the Trustees reviewed readily available site-specific information to determine whether injury to natural resources resulted from the releases of hazardous substances from the mining, milling and smelting operations at these three sites. Eight experts were hired later in the bankruptcy proceedings to review the data relied upon by the Trustees and ultimately support the Trustees' natural resources damages claims for the Sites (and other sites). The supporting documentation developed by and for the Trustees to support the ASARCO LLC bankruptcy claim for natural resources damages satisfies the requirements of the PAS, with few exceptions. These limited exceptions are addressed by the Trustees in Sections III thru VI of this PAS. Further, combining the ASARCO LLC bankruptcy claim process for Sweetwater, West Fork and Glover with the PAS is reasonable and cost-effective and avoids duplication.

This PAS incorporates by reference the following documents and expert reports prepared for the ASARCO LLC bankruptcy. References for primary sources, such as peer-reviewed, published scientific literature and/or underlying data may be found in the references section of the 2007 IEc Report, "Tri-State Mining District and Southeast

Missouri Lead Mining District: Preliminary Aquatic and Terrestrial Injury Determination and Partial Restoration Draft Report."

- Angelo, R. 2007. Injuries to Freshwater Mussel Communities Associated with Former Lead and Zinc Mining and Ore Processing Operations in the Spring River Basin (Kansas, Missouri, and Oklahoma) and the Big River Basin (Missouri). Kansas Department of Health and Environment.

- Bull, R.W. Expert Report. Mineral Concentration of the Lead-Zinc Ores of the Tri-State, Old Lead Belt and Viburnum Trend Districts. A report prepared for the Department of Justice. July 2007.

- Donlan, M., 2007. Expert Report Concerning Estimation of Natural Resource Damages in the Southeast Missouri Lead Mining District in the ASARCO LLC Chapter 11 Bankruptcy Matter *including Attachments 1 and 2:*

  1. IEc., 2007. Tri-State Mining District and Southeast Missouri Lead Mining District: Preliminary Aquatic and Terrestrial Injury Determination and Partial Restoration Draft Report.

  2. U.S.FWS and MDNR, July 2007. ASARCO Bankruptcy Natural Resource Damage Assessment and Restoration Costs Estimates. U.S. Department of the Interior, Fish and Wildlife Service and Missouri Department of Natural Resources.

- Galbraith, H. 2007. Injuries to Avian Habitat and the Risk of Direct Toxicity to Birds at Mining Sites in Southeastern Missouri and Tri-State. Galbraith Environmental Sciences.

- Kapustka, L. A. Technical Memorandum - Expert Opinion Regarding Phytotoxicity Due to metals in the soils of the Tri-State and Southeastern Missouri Lands Owned or Operated by Asarco, Inc. and the subject of US Department of Justice Case 05-21207. July 2007.

- Ingersoll, C. 2007. Expert Report on the Development and Application of Sediment Quality Guidelines to Assess the Toxicity of Metals in Sediment. US Department of Justice. July 24, 2007.

- MacDonald, D.D., Ingersoll, C.G. and Berger, T.A. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. Arch. Environ. Contam. Toxicol. 39, 20-31

- Medine, A.J. 2007. Analysis of Contaminant Source, Fate and Transport in the Tri-State Mining District and Southeast Missouri Mining District. Prepared for the Department of Justice in re: ASARCO LLC, et al., Debtors Case No. 05-21207.

- Schmitt CJ. 2007. Effects of Metals from Lead-Zinc Mining on Aquatic Organisms Inhabiting Streams Draining Mining Districts in Missouri, Kansas, and Oklahoma, 2980-2007.

All of these reports are available at the U.S. FWS Ecological Services Office located at 101 Park Deville Drive, Suite. A in Columbia, Missouri and at MDNR offices located at 1730 Elm Street in Jefferson City or by request.

This document fulfills the development of a PAS in accordance with 43 C.F.R. §§11.23-11.25 and follows the structure of Federal Regulations at 43 CFR Part 11.

III. SITE INFORMATION

Under 43 C.F.R. § 11.24(a), certain categories of information shall be included in the PAS. These categories are:

1) Time, quantity, duration, and frequency of the discharge or release;
2) Hazardous substances released;
3) History of the current and past use of the Site(s);
4) Relevant operations occurring at or near the Site(s);
5) Additional hazardous substances potentially released from the Site(s); and
6) Potentially Responsible Parties

Categories 1-4 are discussed extensively in the Trustees' Report, "ASARCO Bankruptcy Natural Resource Damage Assessment and Restoration Costs Estimates" (July, 2007) (Attachment 2 to Mr. Donlan's expert report) as well as in Dr. Medine's report entitled, "Analysis of Contaminant Source, Fate and Transport in the Tri-State Mining District and Southeast Missouri Mining District."

Additional hazardous substances potentially released from the Sweetwater Mine and Mill Complex and West Fork Mine and Mill Complex Sites, Reynolds County, Missouri include copper (CAS # 7440-50-8), nickel (CAS # 7440-02-0), barium (CAS # 7440-39-3), and cobalt (CAS#7440-48-4).

The Potentially Responsible Party[1] at the West Fork Mine and Mill Complex and Glover Smelter is The Doe Run Resources Corporation d/b/a The Doe Run Company. At the Sweetwater Mine and Mill Complex, the Doe Run Resources Corporation d/b/a The Doe Run Company and British Petroleum America remain as Potentially Responsible Parties.

[1] ASARCO, LLC is also a potentially responsible party at the Sites, however ASARCO LLC filed for bankruptcy on August 9, 2005. The Trustees filed a Proof of Claim in the bankruptcy proceedings for natural resource damages at Sweetwater, West Fork and Glover where ASARCO LLC also had owner/operator liability. The settlement agreement for a general unsecured claim was approved by the U.S. Bankruptcy Court in the Southern District of Texas on May 12, 2008. The plan of reorganization is not yet confirmed, however.

IV. NO STATUTORY EXCLUSIONS FROM LIABILITY UNDER CERCLA APPLY AT THESE SITES

In accordance with 43 C.F.R. § 11.24(b), the Trustees determined that no statutory exclusions from liability under CERCLA apply at any of the three sites.

Injuries to natural resources and damages resulting from the discharge or release of the hazardous substances at the Sites were not identified in any environmental impact statement, pursuant to the National Environmental Policy Act (NEPA), as amended (42 U.S.C. 4321 et seq.), or any similar review or document.

The release or discharge of the hazardous substances at the Sites are ongoing and did not occur wholly before enactment of CERCLA, nor the 1977 amendments to the FWPCA. Injuries to natural resources and damages to the public from the release or discharge of the hazardous substances are ongoing and did not occur wholly before enactment of CERCLA, nor the 1977 amendments to the FWPCA.

The hazardous substances at the Sites are not pesticide products registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended (7 U.S.C. 135-135k). Injuries to natural resources and damages resulting from the discharge or release of the hazardous substances at the Sites did not result from the application of a FIFRA registered pesticide product.

Injuries to natural resources and damages resulting from the discharge or release of the hazardous substances at the Sites did not result from any federally permitted release as defined in CERCLA §101 (10).

The hazardous substances are not recycled oil products as described in CERCLA §107(a)(3) or (4). Injuries to natural resources and damages resulting from the discharge or release of the hazardous substances at the Sites did not result from release of a recycled oil product.

No exclusion from damages is applicable to these Sites, pursuant to the CERCLA and FWPCA.

V. OTHER CONSIDERATIONS: ASARCO LLC BANKRUPTCY

The Trustees filed a claim for natural resources damages for the Sites, including Adair Creek, Scoggins Branch, Big Creek, and West Fork of the Black River in the bankruptcy proceeding in the U.S. Bankruptcy Court in the Southern District of Texas. Based on the analysis performed for the ASARCO bankruptcy, the natural resources damages for the Sites exceed the reasonable costs of assessment.

VI. PRE-ASSESSMENT SCREEN DETERMINATION

Based upon a review of readily available data and an evaluation of the preassessment determination criteria, summarized in this document, the Trustees have reached the following conclusions with regard to the Sites:

1. Discharges or releases of hazardous substances have occurred;
2. Natural resources for which the Trustees may assert trusteeship under CERCLA and FWPCA have been adversely affected by the discharge or release of hazardous substances;
3. The quantity and concentration of the released hazardous substances are sufficient to potentially cause injury to natural resources;
4. Data sufficient to pursue an assessment are readily available or likely to be obtained at a reasonable cost; and
5. Response actions planned will not sufficiently restore, replace, or provide compensation for injured natural resources without further action.

The Trustees hereby determine that further investigation and assessment is warranted and should be carried out at these Sites in accordance with Federal Regulations at 43 C.F.R. §11, Subparts C and E. The Trustees further determine that current information indicates that there is a reasonable probability of making a successful natural resources damages claim pursuant to section 107 of the CERCLA and section 311 of the FWPCA and that all criteria and requirements in 43 CFR Part 11, generally, and 43 CFR 11.23(a)-(g), §11.24 and § 11.25, specifically, have been satisfied.

The information provided and conclusions made in this PAS, including those documents and reports incorporated by reference herein, shall be used to direct further investigations and assessments and is not intended to preclude consideration of other resources later found to be affected or other parties found to be responsible for releases.

This PAS may be executed in counterparts. A copy with all original executed signature pages affixed shall constitute the PAS. The date of execution shall be the date of the final Trustee signature.

<SIGNATURE PAGES FOLLOW>

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