



State of Ohio Environmental Protection Agency

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George V. Voinovich
Governor

40-8448
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January 14, 1994

RE: SHIELDALLOY METALLURGICAL
GUERNSEY COUNTY
DERR CORRESPONDENCE

Secretary,
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
ATTN: Docketing and Services Branch

Dear Sir or Madam,

On November 26, 1993, the Nuclear Regulatory Commission (NRC) issued in the Federal Register a notice of its intent to perform an Environmental Impact Statement (EIS) on the Shieldalloy Metallurgical Corporation site in Cambridge, Ohio. The purpose of the EIS is to determine whether on-site stabilization and disposal of radioactive waste is acceptable for decommissioning and to evaluate other decommissioning alternatives. This correspondence constitutes the Ohio EPA's comments to the EIS proposal.

In a phone discussion between the NRC and Ohio EPA on January 11, 1994, NRC expressed that the planned EIS will only address the environmental problems that are directly related to the two waste piles containing low level radioactive waste that currently exist at the site. The NRC has indicated that the risks associated with hazardous substances mixed with radioactive materials in the piles will be addressed in the EIS. NRC has stated that other contaminants, outside of the waste piles, will apparently not be addressed under the scope of the EIS or the decommissioning process.

Since the EIS process is evaluating alternatives for the waste piles, and since the waste piles contain other materials besides low level radioactive slag, Ohio EPA recommends that the National Contingency Plan (NCP) (40 CFR 300) process for evaluating risks to human health and the environment at a site, and the NCP process for evaluating and selecting remedial actions or cleanups, should be utilized in this EIS. On January 11, 1994, Ohio EPA discussed the EIS with U.S.EPA and it appears USEPA is in general agreement with the NCP approach for the EIS. Since there are many, complex environmental problems existing at this site, which appear to span several jurisdictional boundaries, it is important for NRC, USEPA and the State of Ohio to work together to address all of the problems at the site at this time. Ohio EPA would like the NRC to consider expanding the proposed EIS to address all environmental problems at the SMC site. This could save time and money for all involved parties by ensuring that

NHID 11

when decommissioning has been concluded, re-evaluation of this site by Ohio EPA and/or U.S.EPA under CERCLA will not be necessary.

Ohio EPA has commented on the proposed EIS with the anticipation that all of the environmental problems, chemical and radiological, will be addressed. The following are Ohio EPA's comments on the EIS proposal and the decommissioning alternatives being evaluated.

1. The EIS should be consistent with the National Contingency Plan (40 CFR part 300) (NCP) in order to ensure that all environmental problems that exist at the site (radiological and chemical) will be evaluated and addressed and that the current and future cumulative risks associated with the entire site can be adequately evaluated.
2. The alternatives should be developed and evaluated using the nine criteria specified in the NCP. The criteria are: overall protection of human health and the environment; compliance with applicable and relevant and appropriate federal and state laws and regulations; long-term effectiveness and permanence; reduction of toxicity, mobility or volume through treatment; short-term effectiveness; implementability; cost; state acceptance; and community acceptance.
3. As indicated above, the EIS and the chosen decommissioning alternative, should address both chemical and radiological contaminants in the waste piles and for the entire site.
4. The NRC, USEPA and the State of Ohio need to determine all applicable Federal, State and Local laws and regulations that may impact the alternatives that are being reviewed under the EIS. Each alternative should be evaluated in terms of compliance with the identified laws and regulations prior to the selection of the most appropriate alternative.
5. The EIS should include the performance of an Ecological Assessment, to evaluate the impact on the biota, at and near the site, due to the placement of the waste piles in a wetland and on a 100-year floodplain. The Ecological Assessment will also play a role in determining what impact the implementation of a selected alternative will have on the environment at

the site. The Ecological Assessment should follow current USEPA guidelines for performing such an assessment, and be performed by trained professionals that have experience in performing ecological assessments.

6. The EIS should determine the current extent of the wetlands at and near the site and the extent of the wetlands prior to the creation of the waste piles.
7. The EIS should identify the data gaps that exist and obtain the information needed to perform the alternative evaluation process. The determination of the total extent of surface water contamination due to the presence of the waste piles and the impact of the waste piles on ground water has not been adequately determined. USEPA has performed two studies of surface and ground waters at the site, which indicate that additional sampling and evaluation are necessary.
8. Besides the criteria listed in comment 2, the EIS specifically should evaluate each alternative in terms of the waste piles being present in wetlands and in a 100-year floodplain; that the depth of ground water below the waste piles and the impact of the waste piles on ground water have not been adequately determined; and the potential long-term impact on Cambridge's municipal water supply that serves 12,000 people.
9. Please find attached a list of guidance documents that the State of Ohio utilizes in the performance of environmental investigations, evaluations of alternatives and the design and implementation of a selected alternative. We encourage the NRC to follow these guidelines in developing an alternative to address the radiological and non-radiological issues present at this site.

Many of the issues raised in this letter have been raised in a June 30, 1993 Ohio EPA comment letter on the SMC Technical Basis Document for Decommissioning. The NRC has sent our comments, along with their own, to SMC. In order to fully evaluate alternatives for decommissioning, the EIS should adequately address the State of Ohio's June 30, 1993 comments. Unless these comments are sufficiently addressed, it appears that it will be very difficult for the NRC to select, and the State to accept, an alternative for decommissioning that would be consistent with CERCLA.

NRC Secretary
January 14, 1994
Page 4

To address these issues, Ohio EPA recommends that the NRC develop an EIS workplan for the performance of the EIS, similar to a CERCLA Remedial Investigation/Feasibility Study workplan. The workplan should include a review of all information and data generated to date and determination of any data gaps that may exist. The workplan should then specify how to address these data gaps and outline the sampling requirements. The development of a workplan would provide the NRC the opportunity to solicit U.S. EPA's and Ohio EPA's expertise in investigating non-radiological contaminants and in the evaluation and selection of an alternative that addresses, not only the radiological threats, but also the non-radiological threats to human health and the environment associated with the waste piles.

If you should have any questions concerning these comments please feel free to call at 614-385-8501

Sincerely,

David Hunt

David Hunt
Site Coordinator
Division of Emergency and Remedial Response

Enclosure

cc: Jenifer Kwasniewski, OEPA-DERR, CO
Catherine Stroup, OEPA-Legal, CO
Jennifer Wendel, USEPA-Region V
Jim Payne & Bob Karl, Ohio Attorney General's Office
Dwain Baer & Bob Owen, ODH-Radiological Health
Chad Glenn, NRC

OHIO EPA AND U.S. EPA GUIDANCE DOCUMENTS

1. How Clean is Clean, Final, Ohio EPA, Division of Emergency and Remedial Response, Policy No. DERR-00-RR-009, July 26, 1991
2. Background Guidance, Final, Ohio EPA, Division of Emergency and Remedial Response, July 26, 1991
- * 3. Guidance for Conducting Remedial Investigation and Feasibility Studies under CERCLA, Interim Final, OSWER 9355.3-01, EPA/540/G-89/004, October 1988
- * 4. Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites, OSWER Directive 9355.3-11, EPA/540/P-91/001, February 1991
5. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part A), Interim Final, EPA/540/1-89/002, December 1989
6. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B), "Development of Risk-based Preliminary Remediation Goals," OSWER Directive 9285.7-01B, December 1991, Interim
7. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part C), "Risk Evaluation of Remedial Alternatives," OSWER Directive 9285.7-01C, December 1991, Interim
8. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors," OSWER Directive 9285.6-03, March 1991, interim final
9. Risk Assessment Guidance for Superfund: Volume II - Environmental Evaluation Manual, OSWER Directive 9285.7-01, EPA/540/1-89/001A, March 1989, interim final
10. Superfund Exposure Assessment Manual, OSWER Directive 9285.5-1, EPA/540/1-88/001, April 1988
11. Exposure Factors Handbook, EPA/600/8-89/043, March 1990
12. RCRA Ground Water Monitoring Technical Enforcement Guidance Document (TEGD), OSWER Directive 9950.1, September 1986

13. Guidance for Remedial Actions for Contaminated Ground Water at Superfund Sites, OSWER Directive 9283.1-2, EPA/540/G-88/003, December 1988, interim final
14. Leachate Plume Management, EPA/540/2-85/004, November 1985
15. Data Quality Objectives for Remedial Response Activities, Volume I - Example Scenario, OSWER Directive 9355.0-7B, EPA/540/G-87/004, March 1987
- ** 16. Superfund Remedial Design and Remedial Action Guidance, OSWER 9355.0-4A, June 1986
- * 17. Ecological Assessments of Hazardous Wastes Sites: A Field and Laboratory Reference, EPA/600/3-89/013, March 1989
18. Guidelines and Specifications for Preparing Quality Assurance Project Plans, Ohio EPA, Division of Emergency and Remedial Response, Policy No. DERR-00-RR-008, March 1990
19. CERCLA Compliance with Other Laws Manual - Part I, OSWER Directive 9234.1-01, EPA/540/G-89/006, August 1988, interim final
20. CERCLA Compliance with Other Laws Manual - Part II, OSWER 9234.1-01, EPA/540/G-89/006, August 1988, interim final
21. U.S. EPA Integrated Risk Information System (IRIS) Data Base
22. Guidance for Data Usability in Risk Assessment, OSWER Directive 9285.7-05, EPA/540/G-90/008, October 1990, interim final
23. U.S. EPA Health Effects Assessment Summary Tables, Office of Emergency & Remedial Response, published annually
- * 24. A Compendium of Technologies Used in the Treatment of Hazardous Wastes, EPA/625/8-87/014, September 1987
25. Guide for Conducting Treatability Studies Under CERCLA, EPA/540/2-89/058, December 1989, interim final
26. Guide for Conducting Treatability Studies Under CERCLA: Aerobic

- Biodegradation Remedy Screening, EPA/540/2-91/013A, July 1991, interim guidance
27. Guide for Conducting Treatability Studies Under CERCLA: Soil Vapor Extraction, EPA/540/2-91/019A, September 1991, interim guidance
28. Handbook on In Situ Treatment of Hazardous Waste-Contaminated Soils, EPA/540/2-90/002, January 1990,
29. Handbook for Stabilization/Solidification of Hazardous Wastes, EPA/540/2-86/001, June 1986
30. Stabilization/Solidification of CERCLA and RCRA Wastes - Physical Tests, Chemical Testing Procedures, Technology Screening and Field Activities, EPA/625/6-89/022, May 1989
31. Technical Guidance Document: Final Covers on Hazardous Waste Landfills and Surface Impoundments, EPA/530-SW-89-047, July 1989
- ** 32. Technical Guidance Document: Construction Quality Assurance for Hazardous Waste Land Disposal Facilities, EPA/530-SW-86-031, October 1986
33. Seminar Publication - Requirements for Hazardous Waste Landfill Design, Construction, and Closure, EPA/625/4-89/022, August 1989
- ** 34. Technical Guidance Document: Inspection Techniques for the Fabrication of Geomembrane Field Seams, EPA/530/SW-91/051, May 1991
35. Technical Guidance for Corrective Measures - Subsurface Gas, EPA/530-SW-88-023, March 1985
- ** 36. Handbook - Guidance on Setting Permit Conditions and Reporting Trial Burn Results - Volume II of the Hazardous Waste Incineration Guidance Series, EPA/625/6-89/019, January 1989
- ** 37. Handbook - Hazardous Waste Incineration Measurement Guidance Manual - Volume III of the Hazardous Waste Incineration Guidance Series, EPA/625/6-89/021, June 1989

- ** 38. Handbook - Permit Writer's Guide to Test Burn Data - Hazardous Waste Incineration, EPA/625/6-86/012, September 1986
- ** 39. Handbook - Quality Assurance/Quality Control (QA/QC) Procedures for Hazardous Waste Incineration, EPA/625/6-89/023, January 1990
- 40. Guidance on Remedial Actions for Superfund Sites with PCB Contamination, OSWER Directive 9355.4-01, EPA/540/G-90/007, August 1990
- 41. Assessment of Technologies for the Remediation of Radioactively Contaminated Superfund Sites, EPA/540/2-90/001, January 1990
- 42. Handbook - Dust Control at Hazardous Waste Sites, EPA/540/2-85/003, November 1985
- 43. Closure of Hazardous Waste Surface Impoundments, SW-873, September 1980
- 44. Guide for Decontaminating Buildings, Structures, and Equipment at Superfund Sites, EPA/600/2-85/028, March 1985
- 45. U.S. EPA Alternative Treatment Technology Information Center (ATTIC) Data Base and Reference Library, ATTIC System Operator Phone Number (301) 670-6294

Notes:

- 1) Documents and guidances denoted by an asterisk (*) are those which are important to the Remedial Investigation/ Feasibility Study process but generally will have limited relevance to the Remedial Design/Remedial Action phase of a project.
- 2) Documents and guidances denoted by a double asterisk (**) are those which may be important to the Remedial Design/ Remedial Action phase of a project but generally will have limited relevance to the Remedial Investigation/Feasibility Study process.
- 3) This list of guidance documents is updated periodically. You should check with Ohio EPA to verify that this list is the most current available.