



PLAN

FINAL

PUBLIC COMMUNICATIONS PLAN FOR THE FORMER SATRALLOY SITE

Jefferson County, Ohio

Submitted To: Ohio Environmental Protection Agency
2195 Front Street
Logan, Ohio 43138

Submitted By: Cyprus Amax Minerals Company

Prepared By: Golder Associates Inc.
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Columbus, Ohio

September 17, 2020

Project No. 123-93309-07

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1.0 INTRODUCTION

1.1 Purpose of this Document

This plan describes how the public will be kept informed about activities at the Former Satralloy Site (the Site) located at 4243 County Road 74 in Mingo Junction, Ohio (Figure 1). Site investigation and remediation is being conducted at the Site by Cyprus Amax Minerals Company (Cyprus Amax, a wholly owned subsidiary of Freeport-McMoRan Inc.) under oversight by the Ohio Environmental Protection Agency (OEPA).

1.2 Contact Information

1.2.1 *Ohio Environmental Protection Agency (OEPA)*

Kevin O'Hara
Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
Logan, Ohio 43138

Phone: (740) 380-5244
Fax: (740) 385-6490
Email: kevin.ohara@epa.ohio.gov

1.2.2 *Cyprus Amax Minerals Company*

Barbara Nielsen
Cyprus Amax Minerals Company
333 N. Central Avenue
Phoenix, AZ 85004

Phone: (480) 313-2895
Fax: (602) 366-7307

1.3 Site Background

The Site consists of approximately 333.5 acres of land and includes an abandoned ferrochromium alloy processing plant. The Site is located in Cross Creek Township, Jefferson County, Ohio, approximately four



miles south of Steubenville, Ohio. The Site is bordered on the north, west, and south by Cross Creek, a perennial stream that discharges into the Ohio River.

The Site contains two production mill buildings, an office building, baghouses, and a number of ancillary support buildings. The mill produced chromium and ferrochromium from chromium ores by smelting in four electric arc furnaces housed in the two mill buildings. The furnaces were shut down in 1982 when primary ore processing operations ceased.

The topography of the Site rises about 500 feet above the lowland floodplain of Cross Creek to a plateau surface. The eastern portion of the Site consists of a relatively flat lowland area (Plant Area), while the western portion of the Site is an upland plateau used for process material placement, primarily slag, from chromium ore processing operations. In the north, the Site is largely an upland plateau and consists of heavily wooded areas with slag from former Site operations. The upland area also contains abandoned coal mine workings from the underground room-and-pillar Kolmont No.1 Coal Mine operated by the Wayne Coal Company in the 1930s. The upland area includes a 5.3-acre area where chromite ore was stockpiled as part of the U.S. Government's strategic mineral stockpile program.

The Site was initially developed in 1958 by the Vanadium Corporation of America ("VCA"). In 1967, VCA merged with the Foote Mineral Company ("Foote Minerals"). In 1973, Foote Minerals sold the Site to Satralloy, Inc., with the exception of the 5.3-acre parcel leased to the U.S. Government and supplies of slag which had accumulated at the plant during operation. Foote Minerals was sold in 1998 to Chemetall GmbH, and renamed to Chemetall Foote Corporation.

Operations continued at the Site under the ownership of Satralloy, Inc. from 1974 until 1982, when the electric arc furnaces were shut down. In 1982, Satra Concentrates, Inc. began operations at the Site. It is believed that Satra Concentrates, Inc. and Satralloy, Inc. had common ownership. Satra Concentrates primarily reprocessed existing high-carbon slag to separate residual chromium from spent slag. Satra Concentrates ceased operations at the Site in 1994.

The Site property owned by Satralloy was then sold in 1994 by Jefferson County for unpaid property taxes to Ms. Catherine Glorious at a sheriff's auction. Ms. Glorious passed away in April 2001. The Site was resold at auction for unpaid property taxes to Cyprus Amax on May 17, 2010.

A Consent Order for Preliminary Injunction (COPI) (State of Ohio, 2010) between Cyprus Amax, Chemetall Foote Corporation, and the State of Ohio to perform a Remedial Investigation / Feasibility Study (RI/FS) for the Site was entered on November 3, 2010. The COPI required, among other things, certain interim action



activities related to baghouse dust and site security. Implementation of a final remedy at the Site will require a separate Consent Order.

The 5.3-acre parcel owned by Chemetall Foote Corporation (later renamed Rockwood Lithium, Inc) was sold in auction for unpaid property taxes in 2015 to Mr. Gary Smith. In 2015, Rockwood Lithium, Inc. changed its name to Albemarle U.S., Inc.



2.0 OVERVIEW OF CLEANUP LAWS AND REGULATIONS

2.1 Cleanup Law

Under the COPI, the work at the former Satralloy Site is being performed in a manner consistent with the National Contingency Plan (NCP) promulgated pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). CERCLA was enacted for the specific purpose of facilitating the remediation of abandoned industrial sites across the country. The primary goal of CERCLA is to ensure that abandoned industrial sites are cleaned up to a level that is protective of human health and the environment. A secondary goal of CERCLA is to return abandoned sites to productive use after they have been remediated.

2.2 Applicable or Relevant and Appropriate Requirements (ARARs)

Under CERCLA, cleanups must not only be protective of human health and the environment, but must be “relevant and appropriate” to the circumstances as well. These goals are met by requiring that cleanups comply with certain “applicable or relevant and appropriate requirements” (ARARs). “Applicable” requirements are those cleanup standards and other substantive requirements promulgated under federal or state law that apply specifically to the cleanup of a particular type of substance at an abandoned industrial site. “Relevant and Appropriate” requirements are those cleanup standards and other substantive requirements that, while not legally applicable to a particular situation, address conditions that are sufficiently similar to those found at a given site such that they are well-suited for use in the remediation. The ARARs for the cleanup of the former Satralloy Site will be determined in cooperation with the OEPA based on the results of the investigation of the property.

2.3 Site Permits

The Site maintains the following permits:

- Industrial Storm Water General Permit (OHR000006)
- Construction Storm Water General Permit (OHR000005)
- Air permit-to-install and operate 400 TPH crusher (P0114196)
- Air permit-to-install and operate unpaved roadways and parking areas (P0113889)
- Clean Water Act (CWA) 404 Nationwide Permit 38



3.0 SOURCES OF INFORMATION ON THE SITE

3.1 Public Document Repository

A repository of documents for public access is maintained electronically at:

www.formersatralloysite.com

A list of documents in the public repository as of the date of this plan is provided in Attachment A. Relevant documents will be added to this repository as they become available.

In addition, Cyprus Amax has arranged for public access to the electronic documents near the Site at the Steubenville Library, 407 S. 4th Street, Steubenville, Ohio 43952, (740) 282-9782, via electronic device purchased by Cyprus Amax and placed at the Steubenville Library for public use.

3.2 OEPA Website

General information about OEPA programs for site investigation and remediation is available online at:

<https://www.epa.state.oh.us/>

Information on the site cleanup program and some information on specific sites is available online at:

<https://epa.ohio.gov/derr/remedial/remedial.aspx#1712610297-site-highlights>

Questions regarding OEPA's website can be directed to Mr. Kevin O'Hara of OEPA at (740) 380-5244.

3.3 Public Notices

During specific stages of the work, OEPA will provide notices about public comment periods to the public. These notices will provide general information about the Site, contact information for submitting comments, and times and locations of public meetings or hearings.



4.0 PUBLIC PARTICIPATION

Members of the public may ask questions of, submit informal comments to, or share information germane to the Site and the associated regulatory process at any time to OEPA. Interested parties may contact the OEPA at any time and do not need to wait for a formal comment period.

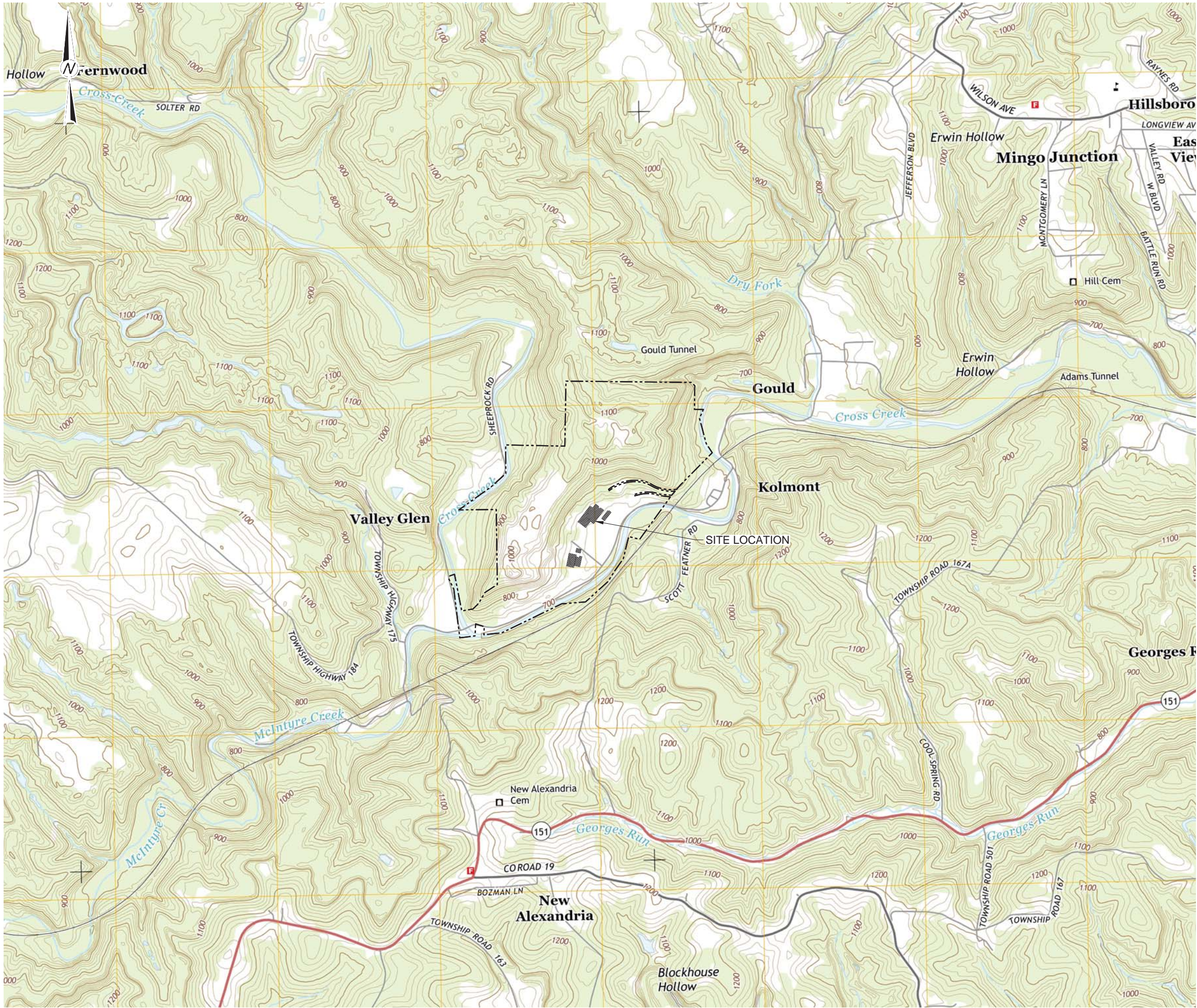
4.1 Public Meetings

Meetings with the public may be held from time to time. These may be formal meetings with a presentation followed by question-and-answer, or open house format for informal sharing and discussion. Notice of such meetings and open houses will be posted on the public repository web site (see web address above) and in the local newspaper.

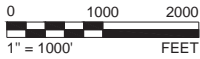
4.2 Public Comment on Documents

To be included in the Site record, comments must be submitted to OEPA. During a formal comment period on a proposed remedy, Ohio EPA will publish a Response to Comments document addressing comments and questions received. If the comments result in significant changes to the proposed remedy, then the proposed remedy will be revised and re-issued for additional public review and comment. If the comments do not result in significant changes, then OEPA will issue a final remedy document.

FIGURES



REFERENCE(S)
1.) MAP TAKEN FROM U.S.G.S. 7.5 MINUTE QUADRANGLE OF STEUBENVILLE WEST, OHIO, DATED 2013.



CLIENT
CYPRUS AMAX MINERALS COMPANY

PROJECT
SATRALLOY REMEDIAL INVESTIGATION

TITLE
SITE LOCATION MAP

| | | |
|------------|------------|------------|
| CONSULTANT | YYYY-MM-DD | 2016-10-25 |
| | DESIGNED | |
| | PREPARED | REDMOND |
| | REVIEWED | LH |
| | APPROVED | LH |

PROJECT NO. 1239330902 CONTROL 600 REV. 1 FIGURE 1

ATTACHMENT A

LIST OF SITE DOCUMENTS IN REPOSITORY

DOCUMENTS FOR PUBLIC REPOSITORY

Former Satralloy Site

Consent Order and Preliminary Injunction (COPI)
Report on Mill Building Floor and Bin Investigation (2007-10-26 draft and 2007-09-28 addendum)
Scoping Study Workplan (2006-10-10)
 [no formal OEPA approval, as done before COPI]
Designation of an Area of Contamination (2012-10-19 OEPA letter)
Director's Final Findings and Orders (02(G) Orders)
Preliminary Evaluation Report and Remedial Investigation/Feasibility Study Workplan (2013-05-08 final)
 OEPA approval of RI/FS Workplan (2013-04-05 letter)
 Addendum No. 1 (2013-08-22 letter)
 Approval of Addendum No. 1 (2014-02-26 letter)
 Addendum No. 2 (Dust Sampling and Analysis Plan, 2014-02-28))
 OEPA comments (2014-03-06 letter)
 Addendum No. 2, revised (2014-03-24)
 OEPA approval of Addendum No. 2 (2014-05-01 letter)
 Addendum No. 3 (2015-06-22 letter)
 OEPA approval of Addendum No. 3 (2015-07-31 letter)
Quality Assurance Project Plan (2012-08-03 final and 2013-05-08 revision)
 (OEPA approval included in RI/FS Workplan approval)
Health and Safety Plan (2012-08-03 final to agency and current version)
Sampling Plan for Selected Piles at the Former Satralloy Site (2013-06-11)
 OEPA approval (email 2013-06-21)
Results from Sampling of the Select Piles at the Former Satralloy Site (2013-08-13 letter)
Draft Public Communications Plan for the Former Satralloy Site (2020-04-03)
 Revised draft 2020-09-08
Workplan for Phase 1 Mine Area Investigation (2020-074-16 letter)

Remedial Investigation Report (2016-12-28 draft), includes:

| | |
|-------------|---|
| Appendix A | Human Health Risk Assessment |
| Appendix B | Ecological Risk Assessment |
| Appendix C1 | 2006 Biocriteria Assessment for Cross Creek |
| Appendix C2 | 2012 Biocriteria Assessment for Cross Creek |
| Appendix D | Hexavalent Chromium Mixing Zone Assessment for Cross Creek |
| Appendix E | Letter from Ohio Department of Natural Resources Regarding Threatened/Endangered Species |
| Appendix F | Letter from Ohio Historic Preservation Office |
| Appendix G1 | Test Pit Logs |
| Appendix G2 | Boring and Well Construction Logs |
| Appendix G3 | Site Surface Water (SSW) Sampling Logs |
| Appendix G4 | Hydraulic Test Data Tables |
| Appendix H | BUSTR Tier 1 Notification |
| Appendix I | Metal Bioaccessibility Methods in Risk Assessment |

OEPA comments on RI Report (2017-05-23 letter)
Response to OEPA comments (2017-06-23)

Interim Action Workplan (2012-11-15), includes Perimeter Air Monitoring Workplan
 OEPA approval of Area of Contamination (2012-10-19 letter)
 OEPA approval of workplan (2013-04-25 letter)
 Amendment No. 1 (2013-05-13 letter)
 OEPA approval (2013-05-24 email)
 Amendment No. 2 (2014-02-28 letter)
 OEPA comments (2014-03-06 letter)
 Amendment No. 2, revised (2014-03-24 letter)

DOCUMENTS FOR PUBLIC REPOSITORY

Former Satralloy Site

OEPA approval (2014-05-01 letter)
Amendment No. 3 (2014-02-28 letter)
OEPA approval (2014-03-06 letter)
Amendment No. 4 (2015-11-12 letter)
OEPA approval (2015-11-30 letter)
Amendment No. 5 (2018-12-20 letter)
OEPA comments (email 2019-01-15)
Amendment No. 5, revised (2019-03-18 letter)
OEPA approval (2019-06-19 letter)

Completion Report for Phase 1 Interim Action (2017-12-14)
Supplemental Materials Sampling (2019-04-23 letter, related to interim action)
Treatability Study Workplan (Ver. 2, 2016-09-30, submitted to OEPA 2016-10-05)
Treatability Study Report (2017-07-15)

PCB Cleanup Workplan (2016-05-16)
USEPA approval (2016-05-26 letter)
PCB Cleanup Report (2017-12-14)
USEPA comments (2018-01-11 letter)
PCB Cleanup Report, revised (2019-04-03)

Natural Heritage Data Request (2006-06-27 letter to ODNR)
Agency response (2006-06-28 letter)
Section 106 Review Project Summary Form and Phase I Cultural Resources Literature Review Report (2007-03-15)
Materials submitted to Ohio State Preservation Office for concurrence that no historical properties are located at or near the site.
Agency response (2007-03-27)
Biological Evaluation (2007-03-19)
Agency letter on occurrence of ESA-listed species in the vicinity of the site (2007-04-20)
Revised Preliminary Jurisdictional Delineation (2007-03-22)
Materials submitted to US Army Corps of Engineers, Pittsburgh District for project-specific delineation of Waters of the United States
Agency response (2007-08-06)
Final Jurisdictional Delineation Figure (2007-06-05)
Isolated Wetlands General Permit Application, Railroad Spur at the Former Satralloy Site (2010-08-16)
Request for CWA Section 404 Jurisdictional Determination (2014-05-20 to USCOE)
USCOE response (2014-06-23)
CWA Section 404 Nationwide Permit Preconstruction Notification (2015-06-01 to USCOE)
USCOE response (2016-02-08)
Application for Department of the Army Permit (2016-02-25 to USCOE; to re-initiate permit application process from 2015 application)
USCOE response (2016-07-14)
Request for Approved Jurisdictional Determination (2018-09-12 to USCOE)
No agency response received; superseded
Preconstruction Notification, Nationwide Permit 38 (2019-03-15 to USCOE)
USCOE response (2019-08-08)
Revised Project Area, Preconstruction Notification for Remediation Activities (2019-07-26 to USCOE)

Letters from "Friends of Kolmont" (7)
Cyprus response #1 to 5 letters (2019-01-10 to Maria Galanti)
Cyprus response #2 to 2 letters (2019-09)

DOCUMENTS FOR PUBLIC REPOSITORY
Former Satralloy Site

Permits and related correspondence

Air - road/dust

Air - concrete crusher

OEPA letter on NPDES (2007-05-08)

Industrial stormwater Notice of Intent, 2012

Industrial SW permit coverage letter from OEPA, 2010

Industrial SW permit coverage letter from OEPA, 2012

Industrial SW permit coverage letter from OEPA, 2017

Industrial SWPPP

Construction stormwater Notice of Intent, 2011

Construction SWP3

Construction Stormwater permit and SWP3 approval letter (2012-07-25)

NPDES stormwater inspection report (OEPA letter 2018-06-26)

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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