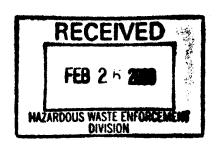
Multimedia Consent Decree 2002 Annual Report



Prepared for

U. S. Environmental Protection Agency

Maryland Department of the Environment

Prepared by

Bethlehem Steel Corporation

Sparrows Point Division



February 2003

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	WASTE MINIMIZATION PLAN	3
3.0	CORRECTIVE MEASURES	8
4.0	COMPLIANCE REQUIREMENTS	11
5.0	DECREE MANAGEMENT REPORTING	13

APPENDICES

APPENDIX A	DREDGE SPOIL MATERIALS, TIN MILL CANAL SAMPLING AND ANALYSIS RESULTS
APPENDIX B	BOF SHOP ROOF MONITOR RECORDS
APPENDIX C	RELEASE REPORTING RECORDS

1.0 Introduction

This Annual Report is prepared in accordance with a Multimedia Consent Decree (Decree) entered into by Bethlehem Steel Corporation (BSC), the U.S. Environmental Protection Agency Region III (EPA) and Maryland Department of the Environment (MDE). The Decree was signed in February 1997, entered by the Court and became effective on October 8, 1997.

There are three sections in the Decree that require annual reporting of information;

Section VI	Paragraph 4	Waste Minimization Plan,
Section XII	Paragraph 5	Notification and Certification of Documents,
Section XVIII	Paragraph 2	Civil Penalties and Pollution Prevention Credits.

Section VI, Paragraph 4, (Waste Minimization Plan), requires a report on the previous year's status of implementing each Work Plan required under Section VI including sampling data related to hazardous waste regulatory determinations. Text from the Decree specific to this requirement is as follows:

4. BSC shall submit to EPA and MDE an annual report due February 15 for the previous calendar year which describes the status of implementing each Work Plan under this Section VI, and includes sampling data related to hazardous waste regulatory determinations.

Section XII, Paragraph 5, Notification and Certification of Documents, requires a progress report on actions completed as required in Sections V (Corrective Measures Work) and VII (Compliance Requirements) of the Decree. Text from the Decree specific to this requirement is as follows:

- 5. In addition to any other requirement of this Consent Decree, BSC shall submit to EPA and MDE a written annual report on the work undertaken pursuant to Sections V and VII that, with respect to such work:
 - a) Describes and assesses the progress and percentage of completion of all actions which have been taken toward achieving compliance with this Consent Decree during the reporting period;
 - b) Includes a summary of all results of sampling and tests and all other data and reports received or generated by BSC or their contractors or agents in the reporting period;
 - c) Includes any modifications to the work plans or other schedules or personnel that BSC has proposed to EPA and MDE that have been approved by EPA and MDE;

- d) Summarizes all contacts with representatives of the local community, or public interest groups during the reporting period relevant to the activities in this Consent Decree;
- e) Summarizes all problems or potential problems encountered during the reporting period, including but not limited to, unresolved or anticipated delays encountered by BSC that may affect the future schedule for implementation of the requirements of this Consent Decree;
- f) Describes actions being taken to rectify problems;
- g) Describes changes and additions to pertinent BSC personnel and contractors during the reporting period;
- h) Describes all actions, including but not limited to, data collection and implementation of work plans, which are scheduled for the next reporting period; and
- i) Describes all releases reportable under any federal and/or state law which took place at the Facility during the reporting period, the status of mitigation of such releases, and the government oversight agency, contact name and telephone number.

Annual reports of actual pollution prevention expenditures during the previous calendar year for pollution prevention projects described in Section VI are also required by Section XVIII, Paragraph 2, Civil Penalties and Pollution Prevention Credits. Text from the Decree specific to this requirement is as follows:

2. On or before February 15 of each calendar year, BSC shall submit to MDE and EPA a written report, including supporting documentation, which describes actual pollution prevention expenditures during the previous calendar year for the pollution prevention projects described in Section VI of this Consent Decree.

This Annual Report provides information on actions undertaken in 2002 that complies with the requirements of these three paragraphs. Section 2.0 provides the status on the Waste Minimization Plan required in Section VI of the Decree and includes project cost information for the plan as required in Section XVIII. Sections 3.0 and 4.0 provide progress reports as required in Sections V (Corrective Measures) and Section VII (Compliance Requirements) respectively. Section 5.0 presents other supporting information required in Section XII including community relations, spill release reporting and changes to the overall management structure utilized by Bethlehem to implement the Decree.

2.0 Waste Minimization Plan

The following Work Plans or Reports are required by the Consent Decree:

- Sump/Tank Work Plan
- Tin Mill Canal Discharge Report
- Strong Caustic Solution Reuse Work Plan
- Blast Furnace Gas Cleaning Slurry Recycle Work Plan
- Recycling of BOF Fume Sludge Work Plan
- Humphreys Creek Wastewater Treatment Plant Sludge Work Plan
- Dredging of the Tin Mill Canal Work Plan
- Facility Wide Waste Minimization Plan

A summary of the current status of these projects as of the year 2002 is presented in the following sections. To satisfy Decree Section XVIII on pollution prevention expenditures, each section also lists the costs incurred in 2002.

Sump/Tank Work Plan

Description of 2002 Activity:

BSC continued with repairs and/or replacements of sumps and storage tanks for the program as specified in the Consent Decree and the approved "Sump/Tank Work Plan and Schedule". The Sump/Tank Work Plan and Schedule was submitted by BSC on October 10, 1998 and approved by the US EPA on January 18, 1999. The Consent Decree specified:

"BSC shall submit a work plan and schedule for an inventory and visual inspection of all active sumps and associated trenches that are located in the Cold Sheet Mill and the Tin Mill that contain significant amounts of acid, caustic, plating, or coating solutions, and an inventory and visual inspection of all above ground storage tanks with capacity greater than 500 gallons that store hazardous substances (exclusive of oil)."

The Consent Decree also required that BSC provide to EPA and MDE the following documents:

- (a) A report which summarizes the results of the inventory;
- (b) A list of repairs and/or replacements of sumps that BSC was able to perform during the initial inspection period; and
- (c) A work plan with a schedule to repair and/or replace sumps and/or aboveground storage tanks where necessary.

This report was prepared and submitted to the Agencies on September 18, 2001. The report included the following: a summary of the inventory, the list of repairs and replacements completed during the initial inspection period, and a work plan and schedule for additional repairs that were recommended as part of the initial inspection.

Additional repairs have been completed for sumps and tanks during 2002. These repairs are itemized in the following table and included the following actions:

- Corrosion repair
- Repainting
- Replacement of structural tank supports and brick foundations
- Tank Repair

ID NUMBER	LOCATION	CONTENTS	REPAIRS	WORK SCHEDULE
TM#2TL - 1	Tin Mill - No. 2 Line Tank	Caustic Soda	Evaluate Corrosion	Tank is ok – inspection done 12/02
TM#2TL - 2	Tin Mill – No. 2 Line Tank	Caustic Soda	Evaluate Corrosion	Tank is ok – inspection done 12/02
TM#2TL – 3	Tin Mill – No. 2 Line Tank	Caustic Soda	Repair valves Clean up valve area of product after repair Install grating along wall side	Tank is not used (out of service)
TMG-3	Tin Mill Tank	Spent Pickle Liquor	Repair valve Install Pipe support and repair pipe if needed Repaint Tank	1. Completed 2. Completed 3. Completed 9/02
TMG-4	Tin Mill Tank	Spent Tin Plating Solution	Establish improved transfer procedures Repaint Tank Replace manway cover Repair steamlines	1) Completed 8/01/02 2. Completed 10/01/02 3. Completed 10/02 4. Completed Once – ongoing process
	Tin Mill Tank	Sulfuric Acid	Repaint tank and supports Close all covers not in use for process Replace bolts in manway cover	New Tank Installed Completed Completed
TMG-6	Tin Mill Tank	Sulfuric Acid	Repaint tank and supports Replace bolts in manway cover	1. Completed 2. Completed
TM#1TL- A	Tin Mill – No. 1 Line – Entry Sump	Caustic Soda Solution	Repair cracks and deteriorated/disintegrated concrete	Completed as of 01/15/02
TM#1TL- B	Tin Mill – No. 1 Line – Spent Pickle Liquor Sump - Interior	Sulfuric Acid	Repair West elevation brick and concrete	Completed as of 01/165/02
TM#1TL- F	Tin Mill – No. 1 Line – Delivery End Sump	Sodium Dichromate	Correct Leaks. Repair Mortar joints. Repair hole, if required.	Completed as of 01/15/02
TM#8TFS - B	#8 Tin Free Steel Line - #8 Tin Free Steel Line Basement Wash Water Sump	Non-chromium bearing process wash water – dilute sulfuric acid, caustic soda, water	Repair substrate and liner, as appropriate	Line runs 5 - 7 tums every two weeks. Repairs to sump will be scheduled in 2003.
TM#2TL-B	Tin Mill – No. 2 Line – Spent Pickle Liquor Sump	Spent Pickle Liquor	Repair concrete areas as needed	Complete during next major repair outage in 2003

2002 Expenditures:

\$134,000

Tin Mill Canal Discharge Report

This report was reviewed, finalized, and submitted in July 1998. No further action is required on this item.

Strong Caustic and Spent Pickle Liquor Solution Reuse Work Plan

This plan has been implemented and caustic/ spent pickle liquor solutions are currently being beneficially reused. Spent pickle liquor (SPL) solutions generated at the facility were either beneficially reused on-site in the wastewater treatment process or shipped off-site for beneficial reuse or disposal at other various facilities.

Recycle of Blast Furnace Gas Cleaning Slurry Solids

Description of 2002 Activity:

Full-scale pilot testing and evaluation of technologies are underway for recycle of blast furnace gas cleaning slurry solids/filter cake. A full-scale pilot hydrocyclone facility was constructed and run successfully during the 2^{nd} to 4^{th} quarter of 2002. The patented hydrocyclone process was shown to effectively remove zinc producing a suitable iron and carbon rich revert (hydrocyclone underflow) for recycling to the sinter plant.

The pilot hydrocyclone facility had the capacity to process about 70% of the blast furnace filter cake solids. Facility engineering is now developing a full-scale design and plans for capital appropriation of the required equipment.

2002 Expenditures: \$155,000

Recycling of BOF Fume Sludge

Description of 2002 Activity:

Recycling of BOF fume sludge is currently being conducted at Sparrows Point. The use of processed BOF fume sludge referred to as RS was temporarily suspended in 2002 due to excessive wear issues that were being experienced at the BOF particulate capture hood structures. After a review of the issue, use of RS resumed in September and has continued to date.

RS is a blend of sludge filter cake and slag; the recipe of the RS can be adjusted according to the need of the BOF steelmaking operation. Overall, approximately 4000 tons of RS were recycled for the year. This usage rate provided recycling and reuse of approximately 5% of the BOF fume sludge filter cake for the year. Currently, approximately 20% of the BOF fume sludge filter cake is being recycled with increases in the recycle rate projected for later in 2003.

2002 Expenditures: \$88,000

Recycling of Humphreys Creek Wastewater Treatment Plant Sludge

Description of 2002Activity:

Testing and evaluation of several technologies are underway for recycle of Humphrey's Creek Wastewater Treatment Plant (HCWWTP) oily sludge within the Sparrows Point iron and steelmaking operations. Several waste recycling vendors were contacted in 2002 to determine if viable recycling options or technologies exist for this equipment. This technology review is ongoing.

2002 Expenditures: \$0

Maintenance Dredging of the Tin Mill Canal

Description of 2002 Activity:

Construction of a Sludge Drainage Pad (SDP) required to support maintenance dredging was completed in 2001. The design of the SDP was in accordance with the design outlined in the work plan submitted in October 8, 1998. The storage area provides a secure temporary location to de-water and aerate the dredged solids and allow for disposal testing requirements prior to subsequent removal of the solids to the required disposal facility.

Maintenance dredging operations were conducted in 2002 that included the removal and disposal of approximately 500 cubic yards of material from a location in Tin Mill Canal near the sewer outlet of the Hot Strip Mill. The SDP was used for temporary storage of the material for dewatering and testing of the material.

Testing procedures completed prior to disposal included a sampling and analysis program designed to provide waste characterization of the stored materials. Sampling procedures included the recovery of discrete random and composite samples of the waste materials. Toxicity characteristic leaching procedure analyses were completed for the recovered samples to document the presence of parameters that exceeded hazardous waste regulatory limits. The material was determined to be non-hazardous based on the sampling and analytical results and was disposed of on-site in Greys Landfill. Results of the sampling and analysis program have been attached to this report in Appendix A.

2002 Expenditures: \$48,000

Facility Wide Waste Minimization Plan

BSC has implemented a Facility Wide Waste Minimization Plan. The goal of this plan is to identify, if possible, ways to further reduce the volume, mobility and/or toxicity of solid wastes, hazardous wastes, and hazardous constituents generated at the Facility.

The Plan submitted in 1999 included both waste minimization projects associated with the Consent Decree as well as numerous voluntary waste minimization programs.

Major components of this plan were completed prior to 2001. As required by the Decree, a triannual review and assessment of the effectiveness of this plan was conducted in 2002. The review report was submitted to the agencies on April 10, 2002. A summary of the findings of the report as submitted in April 2002 is as follows:

Projects completed or underway associated with the Waste Minimization Plan and requirements of the Environmental Policy have or will provide substantial reductions in waste volumes for various medias at the Sparrows Point Division. Overall reductions achieved in 2001 as compared to 1999 include:

- Recycling of approximately 26,000 tons of BOF scrubber sludges;
- Sale of 300,000 tons of steelmaking slag;
- Elimination of 200 tons/year of lubricant use at various facilities;
- Elimination of 3000 gallons per minute of contact wastewaters that discharged to the Tin Mill Canal and contained 9000 lbs/day of total suspended solids and 3000 lbs/day of oil and grease;
- Beneficial reuse of 24,000 gallons of strong caustic solutions;
- Continued beneficial reuse of approximately 6, 000,000 gallons of spent pickle liquor for wastewater treatment on-site; this effort was already being implemented prior to 1999;
- Continued sale and beneficial reuse of approximately 11,000,000 gallons of spent pickle liquor for wastewater treatment at various off-site facilities; this effort was also already being implemented prior to 1999;

Goals and effectiveness of the Waste Minimization Program at Sparrows Point will continued to be evaluated as part of the requirements of the Consent Decree as well as with the environmental management system implemented at the facility in conjunction with the recent ISO 14001 certification received by the facility.

3.0 Corrective Measures

Paragraph 5 of Section XII of the Decree requires a description of the work undertaken in Sections V (Corrective Measures) and VII (Compliance Requirements) of the Decree. This section provides a status report for corrective measures projects included in Section V of the Decree as follows:

- Rod & Wire Mill Sludge Bin Remediation Area
- Site Wide Investigation

Rod & Wire Mill Sludge Bin Remediation Area

This remediation activity is an ongoing Interim Measure that has been included in the Consent Decree. A groundwater treatment facility was constructed in 1986 in response to a site investigation of a cadmium and zinc contaminated area near the Rod and Wire Mill. Groundwater pumping and treatment was conducted from 1987 to 1998. The groundwater pumping was discontinued and the treatment plant dismantled in 1999 to support a demolition project at the Rod and Wire Mill and to allow for reassessment of the interim measure. Sampling and reassessment of this interim measure was conducted in 1999 and 2000.

BSC submitted a Work Plan to re-establish Interim Measures at the former Rod & Wire Mill Sludge Bin Storage Area on July 26, 2000; including activities to establish institutional controls around the former in-situ leaching area, upgrade the groundwater monitoring network, perform water-level and water-quality monitoring, and install a groundwater pump-and-treat system. This Work Plan was approved by the Agencies in November 2000. With the exception of abandoning some existing groundwater monitoring wells that are no longer required for the interim measure, activities defined in the approved Work Plan are 100% complete. It is anticipated that the wells will be abandoned in 2003.

A separate annual report is required for this interim measure. Detailed information about sampling, analytical results and trends are found in these reports. The reassessment report for 2002 was submitted on schedule on January 30, 2003 and outlined the following findings:

Specifics of the interim measures tasks completed in 2002 were as follows:

- Institutional controls were maintained at the former sludge bin storage area to
 minimize and manage activities that could disturb soils at the site. These controls
 consist of notice sign boundary markers and implementation of an authorization
 program to conduct work in the area;
- Operation and maintenance of the groundwater treatment process equipment at the existing wastewater treatment facility;
- Evaluation of the groundwater pump and treat system, including: 1) documentation
 of treatment flow, 2) review of monthly groundwater elevation data, and 4) review
 of effectiveness;
- Semi-annual sampling, analysis and evaluation of the groundwater impacted by former operations at the sludge bin storage area.

A total of 4,222,485 gallons of water were extracted from the two Former Sludge Bin Storage Area groundwater pumping wells during 2002. The average pumping rates for the pump and treat system for 2002 were 11,568 gpd, or 8.03 gallons per minute (gpm). A total of 373 pounds (lbs) of cadmium and 12,757 lbs of zinc was removed and treated from the Rod & Wire Mill area in 2002.

Monthly groundwater elevation data document groundwater drawdown within a radius of influence that effectively captures the contamination plume in the intermediate zone at the established pumping rates of approximately 6 gallons per minute for each recovery well. Monthly groundwater elevation data for the shallow zone also document the groundwater drawdown that is effectively controlling contamination in this groundwater zone. Groundwater elevation data for the deeper groundwater zone is inconclusive with regard to influence from the pump and treat system.

Groundwater monitoring data collected during 2002 did not indicate significant changes in groundwater quality as compared to 2001.

The Proposed Operating Plan for 2003 is to continue operation, maintenance, and monitoring of the groundwater pump and treat system and semi-annual monitoring of groundwater.

Site Wide Investigation

Work completed for the Site Wide Investigation during 2002 included the following activities:

Release Site Characterization Study

The Site Wide Investigation program developed by BSC includes site-specific release site characterizations of the five Special Study Areas defined by the Consent Decree (Release Site Characterization Study). The Release Site Characterization Study was initiated in 2001 and completed during 2002.

Specific actions completed for the Release Site Characterization Study in 2002 included the following:

- Completion of field investigation programs for the special study areas, including the following activities;
 - Geological investigations, including cone penetration testing and installation of conventional hollow stem auger borings and soil sampling at the Special Study Areas;
 - Hydrogeological investigations, including dissipation testing, collection of water level data, collection of major ion data from groundwater sampling and analysis;
 - Groundwater sampling and analysis, including the collection of approximately 130 groundwater samples to be analyzed for specific subsets of Appendix IX parameters that will provide characterization of the special study areas;
- Completion of data analysis, evaluation and submission of Release Site Characterization Report (July 1, 2002);

Work Plan to Evaluate the Nature and Extent of Releases to Groundwater from the Special Study Areas

A work plan was developed and submitted (July 1, 2002) that delineated the scope and schedule for investigation procedures to be implemented to define the horizontal and vertical extent of hazardous constituents in the groundwater system impacted by releases from the Special Study Areas. Objectives were developed to provide data to support requirements for area-specific characterizations for the Special Study Areas as outlined in Attachment B of the Consent Decree and also as required by groundwater system characteristics that are present at the site.

Meetings were held with the Agencies on September 6th and September 19th, 2002 to discuss findings of the Release Site Characterization Study and present the Nature and Extent Work Plan. As a result of discussions and comments received from the agencies during the review meeting, an addendum to the work plan was prepared and submitted on September 30, 2002. The work plan, and subsequent addendum, was approved by the US EPA on October 9, 2002.

Additional field investigation programs for the special study areas, with specific groundwater investigation sampling and analysis tasks as outlined in the nature and extent work plan, were initiated in December 2002.

2003 Activities

Activities planned in 2003 for the Site Wide Investigation will include the following:

- Complete the Nature and Extent Study for Releases to Groundwater from the Special Study Areas and submission of report;
- Schedule and hold meeting(s) with the Agencies to discuss findings of the Nature and Extent Study;
- Develop and submit work plans to support approvals and initiation of additional site investigations in support of requirements of the Consent Decree or findings of the Nature and Extent Study;
- Prepare a conceptual human health model for the facility to provide information in support of a future Environmental Indicator (EI) evaluation;

4.0 Compliance Requirements

Paragraph 5 of Section XII of the Consent Decree requires a description of the work undertaken in Sections V (Corrective Measures) and VII (Compliance Requirements) of the Decree. Projects included in Section VII are as follows:

- Visible Emissions from BOF Shop Roof Monitor
- Kish Reduction
- Coke Point and Greys Landfill Operation

Visible Emissions from BOF Shop Roof Monitor

Monitoring records for the compliance requirements for visible emissions from the Basic Oxygen Furnace (BOF) Shop roof monitor during 2002 have been attached in Appendix B. Monitoring was conducted in accordance with the stipulations outlined in Section VII. A. of the Consent Decree. No exceedances of the 15% opacity, based on the 3-observation rolling arithmetic average calculation method outlined in the Consent Decree, occurred during 2002. This monitoring program will continue in 2003.

Kish Reduction

The Kish Reduction Work Plan was submitted for review and approval on January 6, 1998. MDE returned detailed comments to the plan on February 20, 1998. A revised plan was submitted by BSC in August 1998. Approval was received from the Agencies on December 1, 1999.

Actions and work completed during 2002 for kish reduction is summarized as follows.

- A supplemental Work Plan to Evaluate the Control of Kish Emissions from BOF Slag Skimmer Ladle Dumping was submitted by BSC to MDE on June 1, 2001. This work plan identified objectives and procedures to evaluate possible solutions to control specific kish emissions from the dumping of slag ladles from the slag skimming operation.
- Activities completed for the Work Plan for Slag Skimmer Ladle Dumping included:
 - 1. Standard Operating Procedure for dumping Skimmer Slag Bowls was developed by the on-site contractor responsible for slag skimmer ladle dumping (Langenfelder).
 - 2. Cost estimates were developed for utilizing an existing structure for dumping Skimmer Slag Bowls.
 - 3. Cost estimates were developed for building a structure to dump Skimmer Slag bowls.
 - 4. Electronic monitor was installed to enhance Charging Crane Operators control of tilting Iron Ladles for skimming slag. It is anticipated that the monitor will enable improved positioning of the iron Ladle for more effective kish capture and reduced iron run-over.

The Work Plan Report was finalized and submitted to the Maryland Department of the Environment on March 27, 2002.

A study is currently underway to define the scope, cost and schedule to relocate the desulfurizer skimmer kish bowl dumping into the No. 4 Open Hearth Building. Details of this relocation were provided in a correspondence to the Department on November 20, 2002. It is anticipated that this project will continue to move forward in 2003 to support completion of kish reduction requirements outlined in the Consent Decree.

Coke Point and Greys Landfill Operation

The Consent Decree required the preparation of a landfill operations plan and an engineering plan for Greys Landfill and Coke Point Landfill (Landfill Compliance Plan). The Landfill Compliance Plan was submitted on July 15, 1998. The Consent Decree also required the submittal of a plan and timetable for future uses and closure of the landfills. This document was prepared and submitted by BSC on April 8, 1999.

In subsequent meetings with MDE, BSC indicated that the implementation scope for improvements at the landfills would focus initially on Greys Landfill and that Coke Point Landfill would follow. In the interim time period, disposal operations at Coke Point Landfill would be minimized to the practical extent possible. A revised submittal for the Compliance Plan for Greys Landfill was submitted by BSC to MDE on September 30, 1999.

BSC completed a wetlands jurisdiction and permitting program in 2001 to support the construction of the approved erosion and sediment control plan at Greys Landfill. Actions and work completed during 2002 for the landfills is summarized as follows.

- Final engineering and the development of appropriation documents for Greys
 Landfill continued as planned. Engineering drawings and the associated closure
 plan for Greys Landfill were submitted to MDE for review and approval on April 10,
 2002. Modified drawings for engineering improvements that were approved by the
 Baltimore County Soil Conservation District were submitted for review on July 8,
 2002.
- Comments on the engineering drawings and closure plan were received from MDE on August 14, 2002. Responses to the comments were prepared and submitted by BSC on August 30, 2002.

Activities planned for 2003 at Greys Landfill will include: 1) finalization of engineering modification and closure plan, 2) obtain approval of the closure plan from MDE, 3) obtain corporate funding, and 4) initiate bidding process for the rework of the north, south and west walls of the facility.

5.0 Decree Management Reporting

Community Relations

There were several community relation activities during the year, but none more noteworthy than the commitment made by the Division President that Sparrows Point, despite its financial condition, would continue with its commitments for environmental projects. A chronology of activities is as follows:

January and ongoing Participation in the Dundalk Renaissance Corp., with Sparrows Point representative serving as President. February 23 <u>& 28, 2002</u> Participation in Community Outreach Forum at CCBC Dundalk Campus on community objectives. March 18, 2002 Port Land Use meeting at Maryland Transportation Authority. Meeting with DEPRM on property development issues. March 19, 2002 April 9, 2002 Presentation to Maryland Port Authority on Sparrows Point surplus plant properties. April 11, 2002 Clean Air Partners planning meeting at MDE. April 25, 2002 Sparrows Point Educational Center in Environmental Studies program at Sparrows Point High School. April 26, 2002 Ozone Action Day Conference presented by Clean Air Partners. May to October 2002 Sparrows Point Division participation in Code Red "Bad Air Alert" Program June 7, 2002 Meeting with Baltimore County Department of Public Works and Recreation and Parks on air emissions. Participant in developing Ozone Action Day survey for June 25, 2002 public awareness. September 23, 2002 Community leaders meeting with Maryland Port

Authority on harbor dredge material sites.

October 2, 2002 Community Commitment Initiative report out meeting with Multimedia Steering Committee to discuss Consent

Decree progress and future work scope.

October 9, 2002 Sparrows Point Division Community Commitment Initiative meeting with Community Leaders with the

following agenda:

State of the Business

Environmental Management System

Multimedia Update

Hot Metal Dumping Facility Update

Caster Permit Modification

Port Land Use meeting at Dundalk Marine Terminal October 17, 2002

Clean Air Partners Annual Meeting and Awards November 7, 2002

Presentation.

Community leaders meeting with Maryland Port November 26, 2002

Authority and Baltimore County officials on dredge

material site selection process.

Project Management

BSC announced on October 15, 2001 that it has filed Chapter 11 bankruptcy proceedings. While Decree-required environmental projects are moving forward as expeditiously as possible, MDE's consideration was requested in 2002 for modifications to the implementation schedule that was originally proposed for the landfill compliance plan. Adjustments to the originally proposed schedule dates were proposed to facilitate the cash flow management requirements. MDE has approved the modified schedule request for the landfill compliance program.

No other schedule changes were requested in 2002 other than the updates provided for ongoing tasks of the Site Wide Investigation.

BSC has reorganized the management structure for the Consent Decree to provide project management at the Sparrows Point facility. As of 2003, Mr. Robert Abate is the project coordinator for the Consent Decree. Science Applications International Corporation (SAIC) has also been selected as a subcontractor to support activities associated with the Site Wide Investigation.

Release Reporting

Appendix C contains spill reports for the facility that were reported in 2002. These reports document the status of mitigation of the releases, and the government oversight agency, contact name and telephone number.

) i	•	·		
			·	

APPENDIX A

DREDGE SPOIL MATERIALS, TIN MILL CANAL SAMPLING AND ANALYSIS RESULTS

Sampling and Analysis Plan Tin Mill Canal Dredge Material

1. Introduction

Approximately 500 cubic yards of dredged material is located in one continuous pile inside the containment area adjacent to the Tin Mill Canal (Figure 1). The material was dredged from the face of the Hot Strip Mill (HSM) discharge to the canal in July 2002. The purpose of this sampling plan will determine whether the dredged materials are non-hazardous and suitable for disposal at Greys landfill. This sampling plan was developed in accordance with Section V Handling of Dredged Material of the "Workplan for the Handling of Tin Mill Canal Dredging Material.

2. Sample Collection

In accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-), simple random sampling is recommended as the optimum sampling strategy for dredged material from the Tin Mill Canal. A plastic shovel was used to collect samples from 12 locations from a pile that is estimated to be 75' x 90' x 2' (500 cubic yards). A total of 12 samples were collected and composited together to form a homogeneous sample that was split into three separate sample containers. One for TCLP Inorganics, TCLP Organics and the other for Ignitibility, Corrosivity, and Reactivity. Four samples were taken and tested by the Paint Filter Test Method 9095A.

3. Sample Analyses

Sample analyses include the TCLP inorganic and TCLP organic parameters along with Ignitabliity, Corrosivity, and Reactivity. The results will be compared to the regulatory limits cited at 40 CFR 261.24, 261.21, 261.22, 261.23.

Inorganic Parameters:

Arsenic	Barium	Cadmium	Chromium
Lead	Mercury	Selenium	Silver

Organic Parameters:

Benzene	Carbon Tetrachloride	Chloroform
Total Cresols (o,m,p)	1,4-Dichlorobenzene	1,2-Dichloroethane
2,4-Dinitrotoluene	Hexachlorobutadiene	Hexachlorobenzene
Hexachloroethane	Methyl Ethyl Ketone	Nitrobenzene
Pentachlorophenol	Pyridine	Tetrachloroethylene
Trichloroethylene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
Vinyl Chloride	-	

4. Chain of Custody

A blank Chain of Custody form is attached to this sampling plan

5. Health & Safety Protocols

Level "D" PPE will be utilized for sample collection.

Walter W. Farson III July 12, 2002

Sampling and Analysis Plan Tin Mill Canal Dredge Material

1. Introduction

Approximately 500 cubic yards of dredged material is located in one continuous pile inside the containment area adjacent to the Tin Mill Canal (Figure1). The material was dredged from the face of the Hot Strip Mill (HSM) discharge to the canal in July 2002. The purpose of this sampling plan will determine whether the dredged materials are non-hazardous and suitable for disposal at Greys landfill. This sampling plan was developed in accordance with Section V Handling of Dredged Material of the "Workplan for the Handling of Tin Mill Canal Dredging Material.

2. Sample Collection

In accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-), simple random sampling is recommended as the optimum sampling strategy for dredged material from the Tin Mill Canal. A plastic shovel was used to collect samples from 12 locations from a pile that is estimated to be 75' x 90' x 2' (500 cubic yards). A total of 12 samples were collected and composited together to form a homogeneous sample that was split into three separate sample containers. One for TCLP Inorganics, TCLP Organics and the other for Ignitibility, Corrosivity, and Reactivity. Four samples were taken and tested by the Paint Filter Test Method 9095A.

3. Sample Analyses

Sample analyses include the TCLP inorganic and TCLP organic parameters along with Ignitabliity, Corrosivity, and Reactivity. The results will be compared to the regulatory limits cited at 40 CFR 261.24, 261.21, 261.22, 261.23.

Inorganic Parameters:

Arsenic	Barium	Cadmium	Chromium
Lead	Mercury	Selenium	Silver

Organic Parameters:

Benzene	Carbon Tetrachloride	Chloroform
Total Cresols (o,m,p)	1,4-Dichlorobenzene	1,2-Dichloroethane
2,4-Dinitrotoluene	Hexachlorobutadiene	Hexachlorobenzene
Hexachloroethane	Methyl Ethyl Ketone	Nitrobenzene
Pentachlorophenol	Pyridine	Tetrachloroethylene
Trichloroethylene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
Vinyl Chloride	•	

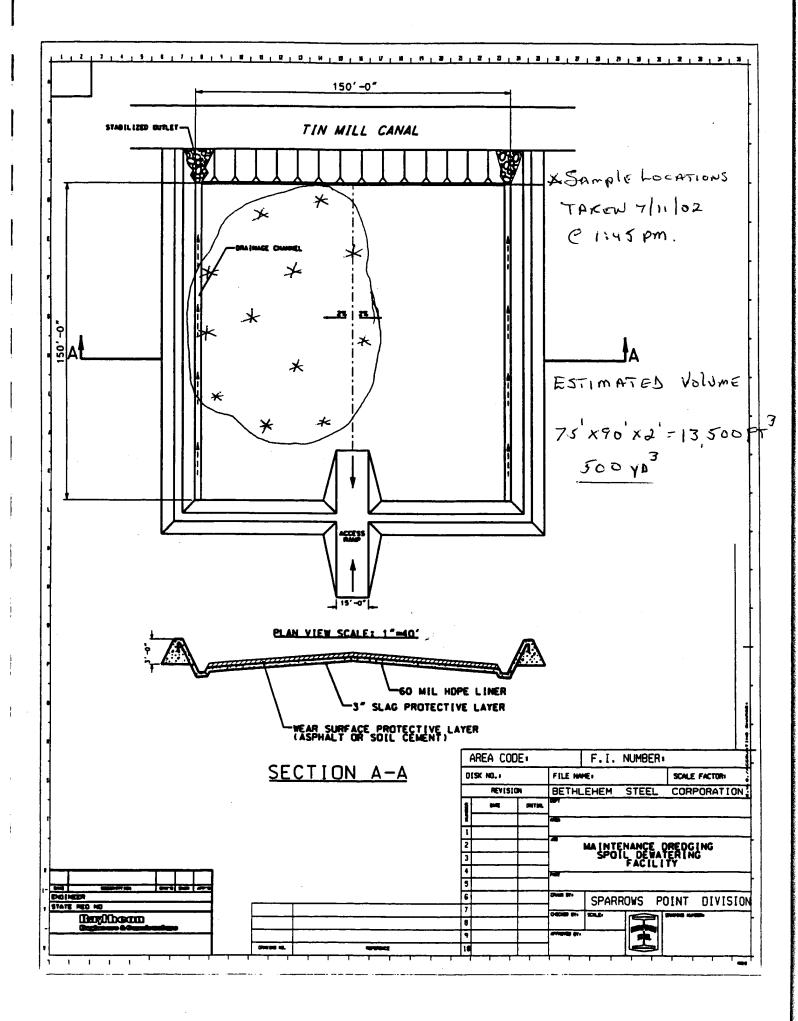
4. Chain of Custody

A blank Chain of Custody form is attached to this sampling plan

5. Health & Safety Protocols

Level "D" PPE will be utilized for sample collection.

Walter W. Farson III July 12, 2002



SAMPLE SUBMITTAL - CHAIN-OF-CUSTODY

SAMPLE TYPE CODES	CODES	GAS	COYNE	GASCOYNE LABORATORIES, INC	C.	LAB USE ONLY	
Field Blank FB Sludge Soil SO Trip Blank Oil(s) OL Waste- Liquid Paint Chips PC Solid Wipes	SL Drinking Water TB Ground Water L Surface Water S Waste Water	DW GW SW WW	Van Demai 410-633-1	2101 Van Deman Street • Baltimore, MD 21224 410-633-1800 • FAX: 410-633-5443	Temp. Blk.	# MK	
Test Results to:		Sample Site/Project		20	TEST	JIRED	_
Contact: War Franson		Sampler/MDOE #		x3;	1 4		
Phone No.		Gascoyne Quote #		1	- Lavis	<u> </u>	
FAX No.		Client's P.O. #			\ \ \ };		
RESULTS NEEDED BY: ROUTINE	☐ PRIORITY* BY:	TIME DAY DATE	<u> </u>	Sec. Sec.		\	
LIMS SAMPLE NO. TYPE SAMPLE LAB CODES (Keep brief ONLY if applicable	SAMPLE IDENTIFICATION (Keep brief - 14 Characters Max)	DATE TIME M COL. COL. S LECTED LECTED 1 F	G NUMBER R OF A CON- B TAINERS	Lyson Son Son Sold		COMMENTS (i.e. Data Package, methods, detection limits, etc.)	-
11 W W 11	Locare	XS4:129/1/2		\ \			
2/w/w/	tsm mint	1 1		1			
				Barlum C	Codmium	Chromium	
		Organic	c Parameters	Wercury 7012			
				Carbon Tetrachloride = 14-Dicholorbenzene	1.2-Dicholorethane	Chloroform 1,1-Dichloroethylene	
		24-Dinitrotoluene	rotoluene		Hexachlorobutadiene Methyl Ethyl Ketone	Hexachlorobenzene Nitrobenzene	
		Pentachlorophenol 2,4,5-Trichlorophenol	phenol	2	Tetrachloroethylene Vinyl Chloride	Trichlorethylene	- T
							
		Total Number of Containers	ers	Duta Package Required	1 2 3		
Relinquished By (gnature):	Printed Name/Affiliation:	Date:	20/11/2	Received By Olymature):	Printed Name/Affiliation:	Pate: Time:	- 1
Relinquished By (signature):	Printed Name/Affiliation:	3		Received by tolgnature):	Printed Name/Affiliation:	Date: Time:	
Relinquished By (signature):	Printed Name/Affiliation:	a de la companya de l		Received By expendence)	Printed Name/Affiliation:	Date: Time:	
Relinquished By (signature):	Printed Name/Affiliation:			Res cived By Calgnature):	Printed Name/Affiliation:	Date: Time:	$\overline{}$
* May Require Surcharge	WHITE	WHITE COPY - LAB YELLOW - I	YELLOW - REPORT COI'Y	PINK - CLIENT SAMPLE SUBMITTAL RECEIPT	:IPT	501 3.99	စ္

T. M. M. M. Darounce HSM 6 (28/02

Tin Mill Dredging at HSM Outfall comp	28-Jun-02 0207013-001A	TCLP_HG	Mercury	~0.01	>
Tin Mill Dredging at HSM Outfall comp	28-Jun-02 0207013-001A	TCLP MET S	Arsenic	<0.5	
Tin Mill Dredging at HSM Outfall comp	28-Jun-02 0207013-001A	TCLP_MET_S	Barium	\$€	>
Tin Mill Dredging at HSM Outfall comp	28-Jun-02 0207013-001A	TCLP_MET_S	Cadmium	<0.05	¬
Tin Mill Dredging at HSM Outfall como	28-Jun-02 0207013-001A	TCLP_MET_S	Chromium	6.1	⊃
Tin Mill Dredging at HSM Outfall comp	28-Jun-02 0207013-001A	TCLP MET S	Lead	<0.5	>
Tin Mill Dredging at HSM Outfall comp	28-Jun-02 0207013-001A	TCLP_MET_S	Selenium	<0.5	, ⊃
Tin Mill Dredging at HSM Outfall comp	28-Jun-02 0207013-001A	TCLP MET S	Silver	<0.05	.

Sample Spir Wira MDE 6/28/02

Lo sharp. W

lution Factor	10	-	-	-	-	-	-	-
o over	7439-97-6	7440-38-2	7440-39-3	7440-43-9	7440-47-3	7439-92-1	7782-49-2	7440-22-4
DateReceived Watth:	01-Jul-02 Sludge	01-Jul-02 Sludge	01-Jul-02 Sludge	01-Jul-02 Sludge	01-Jul-02 Sludge	01-Jul-02 Sludge	01-Jul-02 Sludge	01-Jul-02 Sludge
to Analyzed Analyst	08-Jul-02 APS	05-Jul-02 APS	05-Jul-02 APS	05-Jul-02 APS	05-Jul-02 APS	05-Jul-02 APS	05-Jul-02 APS	05-Jul-02 APS
rting Limit Nethod	0.01 EPA 1311/7470A	0.5 EPA 1311/6010B	5 EPA 1311/6010B	0.05 EPA 1311/8010B	0.1 EPA 1311/6010B	0.5 EPA 1311/8010B	0.5 EPA 1311/8010B	0.05 EPA 1311/6010B
Units	mg/L -TC	mg/L -TC	mg/L -TC	mg/L -TC	mg/L -TC	mg/L -TC	mg/L -TC	mg/L -TC

.

177/070	HSM Area comp	11-Jul-02 0207221-001A	S_IGNIT_S	Ignitability	>200		ų.
	HSM Area comp	11-Jul-02 0207221-001A	TCLP HG	Mercury	6 .01		ma/L -TC
0207221	HSM Area comp	11-Jul-02 0207221-001A	TCLP MET S	Arsenic	<0.5		ma/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP MET S	Barium	\$	_	ma/L-TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_MET_S	Cadmium	<0.05	5	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_MET_S	Chromium	0 .1	5	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_MET_S	Lead	<0.5	D	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_MET_S	Selenium	<0.5	>	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_MET_S	Silver	<0.05	¬	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_SV_S	1,4-Dichlorobenzene	6 .1	, ⊃	ma/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	2.4.5-Trichlorophenol	0.1	n	mo/l -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	2.4.6-Tribromophenol	130	•	DI- I/om
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	2.4.6-Trichlorophenol	0.1	=	.T- 1/0m
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	2.4-Dinitrotoluene	0.1	· =	mo/1 - T.C
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	2-Fluorobipheny	74)	
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	2-Fluorophenol	. 6		71- I/om
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	4-Terphenyl-d14	88		ma'l-TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	Hexachlorobenzene	0.1	П	DT- I/om
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	Hexachlorobutadiene	0) <u>-</u> =	7 - 1/0m
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	Hexachloroethane	0.1	ح, د) - 1/0m
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	meta/para-Cresol	0.1	· ⊃	mo/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP SV S	Nitrobenzene	0.1	د ِت	ma/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_SV_S	Nitrobenzene-d5	82	٠	mo/L-TC
0207221	HSM Area comp	11-Jul-02 0207221-001A	TCLP_SV_S	ortho-Cresol	. 0	<u>,</u>	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_SV_S	Pentachlorophenol	<0.5	D	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_SV_S	Phenol-d5	99		mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_SV_S	Pyridine	<0.5	Ð	mg/L-TC
	HSM Area comp	11-Jul-02 0207221-001A	TCLP_SV_S	Total Cresols	6.1		mg/L -TC
0207221	HSM Area comp	11-Jul-02 0207221-001B	CORR_S	Corrosivity	4.6		pH Units
	HSM Area comp	11-Jul-02 0207221-001B	CORRS	Temperature	77		ပ္
	HSM Area comp	11-Jul-02 0207221-001B	REACT_CN_S	Cyanide, Reactive	: ⊽	' ⊃	mg HCN/Kg
	HSM Area comp	11-Jul-02 0207221-001B	REACT_S_S	Sulfide, Reactive	×10	-	mg H2S/Kg
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	1,1-Dichloroethene	<0.0114375	_	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	1,2-Dichloroethane	<0.0114375	⊃.	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	1,2-Dichloroethane-d4	1		mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	2-Butanone	<0.114375	· >	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	4-Bromofluorobenzene	12		mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	Benzene	<0.0114375	_	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	Carbon tetrachloride	<0.0114375		mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	Chloroform	<0.0114375	.	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	Dibromofluoromethane			mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	Tetrachloroethene	<0.0114375	ָם	mg/L -TC
	HSM Area comp	11-Jul-02 0207221-001B	TCLP_VOL_S	Toluene-d8	9.8		mg/L -TC
	HOM Area com	C 700 1000 100 100 100 100 100 100 100 10	0.00				
_		**************************************		Trichloroethene	<0.0114375		

Date Analyzed Analyst	DateReceived Matrix 12-Jul-02 Sludge	ers.	Dilution Factor
18-Jul-02 APS	12-Jul-02 Sludge	7439-97-6	. 6
18-Jul-02 CSG	12-Jul-02 Sludge	7440-38-2	-
18-Jul-02 CSG	12-Jul-02 Sludge	7440-39-3	-
18-Jul-02 CSG	12-Jul-02 Sludge	7440-43-9	-
18-Jul-02 CSG	12-Jul-02 Sludge	7440-47-3	-
18-Jul-02 CSG	12-Jul-02 Sludge	7439-92-1	•
18-Jul-02 CSG	12-Jul-02 Sludge	7782-49-2	-
18-Jul-02 CSG	12-Jui-02 Sludge	7440-22-4	-
17-Jul-02 MLJ	12-Jul-02 Sludge	106-46-7	
17-Jul-02 MLJ	12-Jul-02 Sludge	95-95-4	-
17-Jul-02 MLJ	12-Jut-02 Sludge	118-79-6	•
17-Jul-02 MLJ	12-Jul-02 Sludge	88-06-2	-
17-Jul-02 MLJ	12-Jul-02 Sludge	121-14-2	-
17-Jul-02 MLJ	12-Jul-02 Sludge	321-60-8	-
17-Jul-02 MLJ	12-Jul-02 Sludge	367-12-4	-
17-Jul-02 MLJ	12-Jul-02 Sludge	1718-51-0	-
17-Jul-02 MLJ	12-Jul-02 Sludge	118-74-1	-
17-Jut-02 MLJ	12-Jul-02 Sludge	87-68-3	
17-Jul-02 MLJ	12-Jul-02 Sludge	67-72-1	-
17-Jul-02 MLJ	12-Jul-02 Sludge		
17-Jul-02 MLJ	12-Jul-02 Sludge	98-95-3	-
17-Jul-02 MLJ	12-Jul-02 Sludge	4165-60-0	-
17-Jul-02 MLJ	12-Jul-02 Sludge		_
17-Jul-02 MLJ	12-Jul-02 Sludge	87-86-5	-
17-Jul-02 MLJ	12-Jul-02 Sludge	4165-62-2	•
17-Jul-02 MLJ	12-Jul-02 Sludge	110-86-1	-
17-Jul-02 MLJ	12-Jul-02 Sludge	1319-77-3	-
18-Jul-02 LCR	12-Jul-02 Sludge		_
18-Jul-02 LCR	12-Jul-02 Sludge		-
18-Jul-02 RED	12-Jul-02 Sludge	57-12-5	-
18-Jul-02 RED	12-Jul-02 Sludge		-
17-Jul-02 THP	12-Jul-02 Sludge	75-35-4	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	107-08-2	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	17080-07-0	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	78-93-3	0.4575
17-Jui-02 THP	12-Jul-02 Sludge	460-00-4	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	71-43-2	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	56-23-5	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	67-66-3	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	1868-53-7	0,4575
17-Jul-02 THP	12-Jul-02 Sludge	127-18-4	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	2037-26-5	0.4575
17-Jul-02 THP	12-Jul-02 Sludge	79-01-6	0.4575
17, Let 02 TUD	An Lat On Claritate	75.04.4	3737

APPENDIX B BOF SHOP ROOF MONITOR RECORDS

BOF Roof Monitor Visible Emission Report

Report Time Period Selection

Beginning Date: December ▼ 2002 ▼ Ending Date: January ▼ 2003 ▼

Date of Observation	Observed 6 Minute Value	Rolling 3-day Average	Observer
01/04/02	0.8	0.6	Campeggi
01/08/02	10.4	3.7	Kolb
01/09/02	0.0	3.7	Kolb
01/11/02	7.9	6.1	Kolb
01/15/02	1.3	3.1	Campeggi
01/16/02	3.8	4.3	Campeggi
01/17/02	1.5	2.2	Campeggi
01/22/02	1.7	2.3	Kolb
01/23/02	4.4	2.5	Kolb
01/24/02	1.0	2.4	Kolb
01/30/02	0.0	1.8	Campeggi
01/31/02	7.1	2.7	Campeggi
02/01/02	0.0	2.4	Campeggi
02/05/02	2.5	3.2	Kolb
02/06/02	3.8	2.1	Gorschboth
02/07/02	1.7	2.7	Kolb
02/13/02	0.6	2.0	Campeggi
02/14/02	14.4	5.6	Campeggi
02/15/02	1.9	5.6	Campeggi
02/19/02	8.3	8.2	Kolb
02/20/02	17.7	9.3	Janssen
02/21/02	0.0	8.7	Kolb
02/26/02	1.3	6.3	Campeggi
02/27/02	1.5	0.9	Campeggi
02/28/02	0.0	0.9	Campeggi
03/05/02	5.2	2.2	Kolb
03/06/02	2.9	2.7	Kolb
03/07/02	0.2	2.8	Kolb
03/12/02	0.8	1.3	Campeggi
03/13/02	2.3	1.1	Campeggi
03/14/02	2.1	1.7	Campeggi
03/19/02	2.3	2.2	Kolb

03/20/02	4.6	3.0	Kolb
03/21/02	2.1	3.0	Kolb
03/26/02	0.8	2.5	Campeggi
03/27/02	0.2	1.0	Campeggi
03/28/02	0.6	0.5	Campeggi
04/02/02	9.4	3.4	Kolb
04/03/02	4.6	4.9	Kolb
04/04/02	0.8	4.9	Lang
04/10/02	3.8	3.1	Campeggi
04/11/02	0.4	1.7	Campeggi
04/12/02	0.4	1.5	Campeggi
04/16/02	7.9	2.9	Kolb
04/17/02	8.5	5.6	Kolb
04/18/02	2.7	6.4	Kolb
04/23/02	4.4	5.2	Campeggi
04/24/02	7.3	4.8	Campeggi
04/25/02	1.7	4.5	Campeggi
05/01/02	0.0	3.0	Kolb
05/02/02	0.0	0.6	Kolb
05/03/02	9.6	3.2	Kolb
05/07/02	0.2	3.3	Campeggi
05/08/02	0.0	3.3	Campeggi
05/09/02	2.3	0.8	Campeggi
05/15/02	1.0	1.1	Kolb
05/16/02	7.1	3.5	Kolb
05/17/02	7.9	5.3	Janssen
05/21/02	3.8	6.3	Campeggi
05/22/02	1.0	4.2	Campeggi
05/23/02	14.8	6.5	Campeggi
05/29/02	0.0	5.3	Kolb
05/30/02	0.2	5.0	Kolb
05/31/02	0.4	0.2	Kolb
06/04/02	0.8	0.5	Campeggi
06/05/02	1.5	0.9	Campeggi
06/07/02	1.0	1.1	Campeggi
06/11/02	0.0	0.8	Kolb
06/12/02	0.4	0.5	Kolb
06/13/02	0.0	0.1	Kolb
06/18/02	8.8	3.1	Campeggi
06/19/02	5.6	4.8	Frushour
06/20/02	7.1	7.2	Campeggi

06/25/02	0.2	4.3	Kolb
06/26/02	1.0	2.8	Kolb
06/27/02	2.1	1.1	Kolb
07/02/02	3.8	2.3	Campeggi
07/03/02	1.0	2.3	Campeggi
07/05/02	0.8	1.9	Campeggi
07/09/02	3.1	1.6	Kolb
07/10/02	3.3	2.4	Kolb
07/11/02	13.3	6.6	Kolb
07/16/02	0.8	5.8	Campeggi
07/17/02	0.4	4.8	Campeggi
07/18/02	2.7	1.3	Campeggi
07/23/02	0.8	1.3	Kolb
07/24/02	1.9	1.8	Janssen
07/25/02	0.6	1.1	Campeggi
07/30/02	2.7	1.7	Campeggi
07/31/02	0.8	1.4	Campeggi
08/01/02	0.0	1.2	Campeggi
08/06/02	4.2	1.7	Kolb
08/08/02	0.0	1.4	Kolb
08/09/02	8.5	4.2	Kolb
08/13/02	1.9	3.5	Campeggi
08/14/02	5.0	5.1	Campeggi
08/15/02	0.8	2.6	Campeggi
08/20/02	3.3	3.0	Kolb
08/21/02	0.4	1.5	Kolb
08/22/02	1.7	1.8	Kolb
08/27/02	0.6	0.9	Campeggi
08/28/02	5.6	2.6	Kolb
08/29/02	0.0	2.1	Campeggi
09/04/02	6.0	3.9	Kolb
09/05/02	10.8	5.6	Kolb
09/06/02	3.1	6.6	Kolb
09/10/02	1.3	5.1	Campeggi
09/11/02	1.7	2.0	Campeggi
09/12/02	1.0	1.3	Campeggi
09/17/02	2.9	1.9	Kolb
09/18/02	2.7	2.2	Kolb
09/19/02	10.4	5.3	Kolb
09/24/02	0.6	4.6	Campeggi
09/26/02	1.0	4.0	Campeggi

09/27/02	0.0	0.5	Campeggi
10/01/02	9.6	3.5	Kolb
10/02/02	0.0	3.2	Kolb
10/03/02	1.3	3.6	Lang
10/08/02	0.6	0.6	Campeggi
10/09/02	7.3	3.1	Janssen
10/10/02	2.5	3.5	Campeggi
10/15/02	2.5	4.1	Kolb
10/17/02	11.3	5.4	Kolb
10/18/02	0.8	4.9	Kolb
10/21/02	0.6	4.2	Campeggi
10/22/02	0.4	0.6	Campeggi
10/23/02	0.0	0.3	Campeggi
10/29/02	0.4	0.3	Kolb
10/30/02	0.0	0.1	Kolb
10/31/02	0.0	0.1	Kolb
11/05/02	0.6	0.2	Campeggi
11/06/02	0.0	0.2	Campeggi
11/12/02	0.6	0.4	Campeggi
11/13/02	2.7	1.1	Campeggi
11/14/02	0.8	1.4	Campeggi
11/15/02	0.0	1.2	Campeggi
11/19/02	6.0	2.3	Lang
11/20/02	1.0	2.3	Campeggi
11/22/02	1.9	3.0	Campeggi
11/25/02	0.0	1.0	Kolb
11/26/02	4.6	2.2	Kolb
12/03/02	5.2	3.3	Kolb
12/04/02	0.0	3.3	Campeggi
12/05/02	7.1	4.1	Campeggi
12/06/02	2.5	3.2	Campeggi
12/10/02	2.5	4.0	Kolb
12/11/02	0.0	1.7	Kolb
12/12/02	30.0	10.8	Janssen
12/17/02	0.6	10.2	Campeggi
12/18/02	5.0	11.9	Campeggi
12/23/02	4.2	3.3	Kolb
12/26/02	11.0	6.7	Kolb
12/27/02	3.1	6.1	Kolb
12/30/02	1.9	5.3	Campeggi
12/31/02	0.4	1.8	Campeggi

APPENDIX C RELEASE REPORTING RECORDS

SPARROWS POINT DIVISION 5111 NORTH POINT BOULEVARD BALTIMORE, MARYLAND 21219-1014



April 5, 2002

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Richard Collins
Maryland Department of the Environment
Hazardous and Solid Waste Administration
2500 Broening Highway
Baltimore, Maryland 21224

Dear Mr. Collins:

This letter will serve as the required spill report for the Sparrows Point Division for the First Quarter of 2002. There was one spill during that quarter and the report for that spill is attached.

If there are any questions, please refer them to Mr. Joseph Dolan, of my staff, at 410-388-5991 and discuss them with him.

Sincerely,

Robert J. Abate

Safety, Health, and Environment Manager

cc:

SPCC Plan EPA OPA Plan M. S. Vogler J. E. Schindler File

Attachment

Date/Time - March 24, 2002 at approximately 1445 hours

Amount - Approximately 200 gallons to ground and less than 10 gallons to the water

Spilled To - Ground and Outfall 001

Material Spilled - Used oil

Location - No. 2 Mobile Equipment Shop and Outfall 001

On March 27, 2002, at approximately 1445 hours, an oil sheen was noticed on the discharge canal leading to Outfall 001. The discovery was made during a routine check of the effluent canal. An initial investigation determined that there was no oil accumulation at the retention boom at Outfall 001 and that the source of the oil was No. 2 Mobile Equipment Shop.

Further investigation revealed that approximately 200 gallons of used oil was on the ground at the base of the used oil storage at No. 2 Mobile Equipment Shop and an undetermined quantity had entered the plant storm sewer system leading to Outfall 001. Upon discovery of the spill, the pipe leading to the storm sewer was blocked with speedy dry to prevent any additional oil from entering. The source of the oil was a used oil storage tank that had been overfilled. This tank has a containment dike around it but the drain valve for the dike was found in the open position thereby allowing the oil contained in the dike to drain out on the ground. The drain valve was closed and the pump that transfers the oil to the tank was tagged out. A vacuum truck was brought to the scene to remove the standing oil and a payloader followed and removed the contaminated soil. The oil was taken to U. S. Filter for recycling and the contaminated soil was shipped to an approved off site facility for disposal.

Since the spill involved navigable water the Coast Guard responded to the scene. The inspector requested that we install a double layer of sorbent boom upstream of the permanent boom of the outfall and flush the sewer. Arrangements were made to do this the following morning. The Coast Guard also stated that they wanted one of their representatives on site to observe the flushing operation.

The sorbent boom was installed by Atlantic Environmental Services early the following morning. A Bethlehem Steel owned sewer cleaning truck and water truck were used to clean and then flush the sewer line in the presence of two Coast Guard representatives. This was done at approximately 1030 hours. When the outfall was inspected some widely scattered scum was observed floating on the water. The Coast Guard requested that the material be removed and Atlantic Environmental was requested to supply a vacuum truck, two boats, and sufficient material and personnel to do the job. They responded to the outfall approximately one hour after receiving the call. The crew worked until dark to remove the scum and to rinse a small section of shoreline near the mouth of the outfall. Before they left they installed several sections of sorbent sweep to protect the shoreline in the event any residual oil came down the outfall during the evening. They were requested to return on the morning of March 29, 2002 and be ready to collect any additional residue should it be necessary.

On the morning of March 29, 2002 Atlantic was at the outfall when the Coast Guard inspector came in for a followup visit. At that time the inspector indicated that the cleanup was complete and that the sorbent material could be removed from the outfall. Atlantic removed the sorbent material and left the facility.

Personnel who failed to follow established procedures caused the spill. Oil was pumped to the storage tank without first checking the tank to determine whether there was sufficient headspace in the tank to accept the oil. Additionally, the drain valve on the dike was not secured, as it should have been.

To prevent a recurrence the following will be done:

- The drain valve on the dike is to be removed and a pipe plug will be welded in its place. Any rainwater that accumulates in the dike, in the future, will be removed by a vacuum truck.
- The pump that is used to transfer the used oil to the storage can be operated from inside the shop or from a location next to the tank. The controls inside of the building will be locked out.
- There is also a drain valve on the tank. This drain valve will be removed and replaced with
- From now on only the working coordinator or shop foreman will be allowed to operate the
- The procedure for transferring oil to the storage tank will be reviewed with all shop personnel and will be posted at the pump control panel next to the tank.
- The individual who caused the tank to overflow violated procedure and is being given a disciplinary penalty.
- The spill response has been reviewed by the response team from the Safety, Health, and Environment Department to ensure that it followed proper procedures.
- The details of the spill have been shared with all personnel who work in No. 2 Mobile Equipment Shop as well as with all Division Senior management personnel.

SPARROWS POINT DIVISION 5111 NORTH POINT BOULEVARD BALTIMORE, MARYLAND 21219-1014



July 1, 2002

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Richard Collins Maryland Department of the Environment Hazardous and Solid Waste Administration 2500 Broening Highway Baltimore, Maryland 21224

Dear Mr. Collins:

This letter will serve as the required spill report for the Sparrows Point Division for the Second Quarter of 2002. There were no spills during the quarter.

If there are any questions, please refer them to Mr. Joseph Dolan, of my staff, at 410-388-5991 and discuss them with him.

Sincerely,

Robert J. Abate

Safety, Health, and Environment Manager

cc: SPCC Plan

EPA OPA Plan

M. S. Vogler

J. E. Schindler

File

SPARROWS POINT DIVISION 5111 NORTH POINT BOULEVARD BALTIMORE, MARYLAND 21219-1014



October 24, 2002

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Richard Collins
Maryland Department of the Environment
Hazardous and Solid Waste Administration
Montgomery Park Business Center
1800 Washington Blvd. Suite 425
Baltimore, Maryland 21230-1708

Dear Mr. Collins:

This letter and its attachments will serve as the required spill report for the Sparrows Point Division for the Third Quarter of 2002.

If there are any questions, please refer them to Mr. Joseph Dolan, of my staff, at 410-388-5991 and discuss them with him.

Sincerely,

Robert J. Abate

Michael S. Vogler

Safety, Health, and Environment Manager

Attachments

cc:

SPCC Plan EPA OPA Plan M. S. Vogler J. E. Schindler File

Attachment 1

Date/Time – July 6, 2002 at approx. 0915 hours Amount – Approximately 40 gallons Spilled To – Ground Material Spilled – Hydraulic Oil Location – Truck Dock 297B

On July 6, 2002, at approximately 0915 hours, a spill of approximately 40 gallons of hydraulic oil occurred in the area near Truck Dock 297B. All of the oil was contained on the ground and none entered any sewer or waterway.

Our investigation revealed that Crane 1471 was working in the area and a hydraulic hose on the crane ruptured spilling the oil onto the ground. The spill was immediately observed and the crane was shut down. Plant personnel placed speedi dry on and around the spilled oil to contain it and summoned help.

Plant mechanics repaired the hose and moved the crane from the area. Following that, plant forces removed the contaminated speedi dry and soil and placed it into a container that was subsequently taken to an approved off site disposal facility.

Date/Time - July 31, 2002 at approx. 0951 hours

Amount - Approximately 20 gallons

Spilled To - Ground

Material Spilled - Unknown Oil

Location - Road Near 'L' Blast Furnace Mechanical Shop

On July 31, 2002 a spill of, approximately 20 gallons, of an unknown type of oil was found on the roadway in front of the 'L' Furnace Mechanical Shop at approximately 0951 hours. All of the oil was contained on the ground and none entered any sewer or waterway.

As soon as the spill was discovered a small bobcat and a load of sand were dispatched to the area to begin cleanup of the oil and soil. The bobcat spread the sand and subsequently removed the contaminated soil and sand and placed it into a pile. A payloader and dump truck were then brought to the site and the pile of contaminated material was removed and placed into a container for shipment to an approved off site disposal facility.

Initially there was no apparent source found for the spill. However, we did find the lid of a portable container on the ground near the spill site but a subsequent search for the container was not successful. Several days later we found a portable tank, without a lid, being transported near the site of the spill. It is assumed that this was the same portable tank that may have splashed the oil onto the ground. The tank was immediately removed from service and all personnel associated with the use of the portable tank were informed of the spill and reinstructed in the handling of oil in portable tanks. As of this date the incident has not been repeated.

Richard Collins - October 24, 2002

Date/Time - August 6, 2002 at approx. 1315 hours Amount - Approximately 100 gallons Spilled To - Ground/Wastewater Treatment Facility Material Spilled - 14J Lubrication Oil Location - Truck Dock 14A in the Hot Strip Mill

A letter regarding this spill was written to you on August 14, 2002 and is included as Attachment 2.

Date/Time – August 15, 2002 at approx. 0745 hours
Amount – Approximately 40 gallons
Spilled To – Ground
Material Spilled – No. 6 Fuel Oil
Location – Portable Air Compressor Located on 7th Street

On August 15, 2002, at approximately 0745 hours, a spill of approximately 40 gallons of No. 6 fuel oil was discovered. All of the oil was contained on the ground and none entered any sewer or waterway.

The investigation revealed that the air compressor was being used to blow out a No. 6 fuel oil transfer line so that the line could be dismantled. The compressor had run out of fuel and the No. 6 oil had backed up from the transfer line into the piping of the compressor and ran out of the compressor's condensate drain line and onto the ground.

A GradeAll and dump truck were brought to the scene and the contaminated soil and oil were removed. The material was subsequently taken to an approved offsite disposal facility. The compressor's exterior was cleaned and the unit was sent back to the rental company for internal cleaning.

SPARROWS POINT DIVISION 5111 NORTH POINT BOULEVARD BALTIMORE, MARYLAND 21219-1014



August 14, 2002

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Richard Collins
Maryland Department of the Environment
Hazardous and Solid Waste Administration
2500 Broening Highway
Baltimore, Maryland 21224

Dear Mr. Collins:

At approximately 1100 hours Tank 148, in the Hot Mill – Truck Dock 14A, overflowed approximately 100 gallons of 11J lube oil to the ground beneath the tank. Approximately 20 gallons of that oil flowed into the storm sewer nearby that goes to Humphreys Creek Waste Water Treatment Plant (HCWWTP). HCWWTP is the Division's own waste water treatment plant and it is equipped to recover oil.

Our investigation revealed the following. Tank 148 had just been filled, to about 90% of capacity, from a tanker truck. The running tank for the Hot Strip Mill lubrication system had been emptied so that it could be filled with fresh oil from another tanker truck. The tanker truck used his truck mounted pump to off load the oil into the running tank, located in the mill basement. The truck pump was pumping at about 65 PSI into a transfer line that was equipped with a relief valve that was set at approximately 46 PSI. As the truck was pumping into the basement tank the relief valve opened and, because it was piped to Tank 148, Tank 148 was subsequently overfilled and the spill occurred. These trucks are normally emptied by using plant air to force the oil out of the truck and into the receiving tank. Our people were unaware that the pressure was set so high on the tank truck pump.

As soon as the spill was discovered the pumping operation was stopped and a problem investigation was begun. The tanker pump pressure was then adjusted and the unloading operation finished without incident.

Onyx Precision Services was hired to handle the spill cleanup. A vacuum tank truck was used to remove any standing oil from the ground. The tank and surrounding area were pressure washed to remove any residual oil and the contaminated soil was removed with the aid of the vacuum truck and shovel work.

Collins 8/13/02

To prevent a recurrence the following measures have been taken or are in the process of being done.

- All individuals and supervisors involved with the transfer or oil in the Hot Strip Mill have been made aware of the spill and the circumstances surrounding it.
- Division management and supervisors in other mills have been made aware of the incident so that they can make use of any learnings derived from the incident.
- The oil transfer procedure will be amended as necessary and the new procedure will be shared with all individuals who are involved in oil transfers within the Hot Strip Mill.
- Tank 148 will no longer be filled from a tank truck
- All instrumentation on the distribution and storage system will be checked to ensure that the spill did not cause any damage.

If there are any questions, please refer them to Mr. Joseph Dolan, of my staff, at 410-388-5991 and discuss them with him.

Sincerely,

Robert J. Abate

Safety, Health, and Environment Manager

cc: SPCC Plan
EPA OPA Plan
M. S. Vogler
J. E. Schindler
File

SPARROWS POINT DIVISION 5111 NORTH POINT BOULEVARD BALTIMORE, MARYLAND 21219-1014



January 8, 2003

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Richard Collins Maryland Department of the Environment Hazardous and Solid Waste Administration Montgomery Park Business Center 1800 Washington Blvd. Suite 610 Baltimore, Maryland 21230-1708

Dear Mr. Collins:

This letter and its attachments will serve as the required spill report for the Sparrows Point Division for the Fourth Quarter of 2002.

If there are any questions, please refer them to Mr. Joseph Dolan, of my staff, at 410-388-5991 and discuss them with him.

Sincerely,

Michael S. Vogler
Robert J. Abate Safety, Health, and Environment Manager

Attachments

SPCC Plan CC: EPA OPA Plan M. S. Vogler J. E. Schindler File

SPARROWS POINT DIVISION
5111 NORTH POINT BOULEVARD
BALTIMORE, MARYLAND 21219-1014



November 27, 2002

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Richard Collins
Maryland Department of the Environment
Hazardous and Solid Waste Administration
Montgomery Park Business Center
1800 Washington Blvd. Suite 610
Baltimore, Maryland 21230-1708

Dear Mr. Collins:

At approximately 0900 hours on November 20, 2002 a spill of about 50 gallons of 12C lubricating oil was discovered at Outfall 001. A to Z Environmental was immediately summoned to the site to begin cleanup operations. They responded with a vacuum truck, a boat, a utility truck, and sufficient personnel to accomplish the cleanup.

Our investigation of the incident revealed the following. The source was traced back to a leaking oil cooler that was attached to an air compressor at the No. 4 Open Hearth Air Compressor Station. That compressor was being installed and readied for service. The cooler is of the shell and tube variety and had seen previous service.

Oil had been introduced into the compressor lube system to purge and clean the system prior to the startup of the compressor. Since the compressor was not running there was no water introduced into the cooler. We found that corrosion had created a hole in the cooler structure that allowed the oil to escape the lubricating system and enter the water side of the cooler. From there it flowed into the sewer. The leaking cooler was removed from service and replaced shortly after the spill was discovered.

To prevent a recurrence the following will be done. There are several more compressors to be installed and each will have its oil cooler leak tested before oil is introduced into the lubrication system. Under normal circumstances, when the compressor is running, cooler leaks do not cause oil leaks to the sewer. That is because the water side of the cooler has a higher pressure than the oil side and a hole would allow water to enter the oil reservoir where it would be observed when the oil was inspected. The leaking cooler would then be scheduled for repair.

Mr. Richard Collins - November 27, 2002

On November 20 A to Z removed as much of the standing oil as they could and installed a series of sorbent sweeps throughout the outfall area in order to collect any residual oil that might have remained. They returned on November 21 and removed the sweeps. No oil was visible in the outfall but A to Z was requested to install several more sweeps as a precaution. Those sweeps were removed from the outfall on November 25, 2002.

If there are any questions, please refer them to Mr. Joseph Dolan, of my staff, at 410-388-5991 and discuss them with him.

Sincerely,

Robert J. Abate

Safety, Health, and Environment Manager

cc: SPCC Plan
EPA OPA Plan
Commanding Officer USCG
M. S. Vogler
J. E. Schindler
R. Belbot
D. Dawson

File

SPARROWS POINT DIVISION 5111 NORTH POINT BOULEVARD BALTIMORE, MARYLAND 21219-1014



November 20, 2002

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Richard Collins
Maryland Department of the Environment
Hazardous and Solid Waste Administration
Montgomery Park Business Center
1800 Washington Blvd. Suite 610
Baltimore, Maryland 21230-1708

Dear Mr. Collins:

At approximately 1430 hours on November 13, 2002 a spill of about 100 gallons of ATO-SP5P oil was discovered on the ground beneath Tank EC-4. ATO-SP5P is a rolling oil, used in the Tin Mill, that is composed of primarily white grease and lard. The oil solidifies at room temperature and is stored in a heated tank. The oil solidified, almost immediately, and was contained on the ground. None had entered any sewer or body of water. Onyx Precision Services was immediately summoned to the scene to remove the solidified oil and contaminated soil. Their work was completed during the 3/11 Shift on November 13, 2002. All cleanup materials were placed into a dino box for shipment to an approved off site disposal facility.

Our investigation revealed the following. Tank EC-4 was an old rolling oil storage tank that had been placed out of service many years ago, was empty and cleaned, and was being prepared for demolition. The tank had been isolated from the active portion of the rolling oil storage system by an isolation valve. This valve failed and allowed oil to trickle into the tank. When the cause was determined the piping between Tank EC-4 and the active portion of the system was severed and capped off.

To prevent a recurrence the following will be done. The area was found to contain a myriad of piping some of it in service and some not. All piping that is not in service will be dismantled. Any remaining piping that is not labeled will be labeled. The demolition of Tank EC-4 and EC-5, another old out of service rolling oil tank, will greatly reduce congestion in this area. Furthermore, this incident will be reviewed with all concerned with the rolling oil system and practices will be amended as necessary.

Mr. Richard Collins - November 20, 2002

If there are any questions, please refer them to Mr. Joseph Dolan, of my staff, at 410-388-5991 and discuss them with him.

Sincerely,

Microel S. Vogler
Robert J. Abate

Robert J. Abate
Safety, Health, and Environment Manager

cc: SPCC Plan
EPA OPA Plan
M. S. Vogler
J. E. Schindler
File