

Multimedia Consent Decree 2008 Annual Report

Prepared for

US Environmental Protection Agency

Maryland Department of the Environment

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Prepared by

Severstal Sparrows Point LLC

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1.0 Introduction

The Multimedia Consent Decree (Decree), originally entered into by Bethlehem Steel Corporation (BSC), the U.S. Environmental Protection Agency Region III (EPA) and Maryland Department of the Environment (MDE), defines specific actions required at the Sparrows Point facility "Facility" located in Baltimore County, Maryland. The Decree became effective on October 8, 1997 (Civil Action JFM-97-558).

Specific actions outlined in the Decree include requirements for annual reporting of information and activity progress. During 2008, the Facility was operated by ISG Sparrows Point LLC, as a part of Mittal Steel USA until May. In May 2008, ownership of the Facility was transferred to Severstal Sparrows Point, LLC (Severstal). This report provides information and activity progress for 2008 that was accomplished both during operation as ISG Sparrows Point, LLC as well as by Severstal. In addition, this report includes a listing of each work provision in the Decree, an evaluation of the completion status at the end of 2008, remaining tasks and estimate of timeframe for completion.

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.

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.

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.

This Annual Report provides information on actions undertaken in 2008 that comply with the requirements of these three paragraphs.

2.0 Consent Decree Status Update

Table 1 presents information and an evaluation of the current status for pertinent sections of the Consent Decree including: Section V., Corrective Measures Work to Be Performed, Section VI., Waste Minimization Plan and Section VII., Compliance Requirements. Information provided includes the following:

- Consent Decree Requirement
- Section
- Current Status
- Major Submittals and Dates
- Milestone Dates of Work Performed
- Additional Tasks for Completion and Comments

The information presented provides a listing and description of the completion status of tasks as requested by the Maryland Department of the Environment in correspondence dated November 25, 2008. Outstanding tasks and estimate of timeframes for completion are identified in Table 2.

Information on actions undertaken in 2008 is presented in following sections of this report that complies with the reporting requirements of the Decree. Section 3.0 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 Severstal to implement the Decree.

3.0 Waste Minimization Plan

A summary of waste minimization activities completed during 2008 is presented in the following sections. To satisfy Decree Section XVIII on pollution prevention expenditures, each section also lists the costs incurred in 2008.

Sump/Tank Work Plan

Description of 2008 Activity:

Repairs and/or replacements of sumps and storage tanks as specified in the Consent Decree and the approved "Sump/Tank Work Plan and Schedule" were completed in 2003.

Repairs completed for sumps and tanks included the following actions:

- Corrosion repair
- Repainting
- Replacement of structural tank supports and brick foundations
- Concrete joint repair within sumps
- Rubber liner repair for sumps and associated piping
- Installation of epoxy liners for trenches containing pickling acid solutions

As part of the operating maintenance activities for the facility, upgrades to tank support structures and secondary containment were completed in 2008 for above ground storage tanks identified in the Work Plan.

2008 Expenditures: \$125,000

Recycle of Blast Furnace Gas Cleaning Slurry Solids

Description of 2008 Activity:

Full-scale pilot testing and evaluation of technologies have been completed for recycle of blast furnace gas cleaning slurry solids/filter cake. A full-scale pilot hydrocyclone facility was constructed and run successfully during the 2nd to 4th 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 current status and implementation schedule for this project is as follows:

Phase 1 Engineering – Evaluate current status of water treatment system. This
engineering was completed by end of October 2006;

- Phase 2 Engineering Develop modifications for the water treatment system including solids management and recycling systems. Completed by end of 4th Qtr 2007.
- Capital Project Appropriation Submittal Develop and provide cost-benefit basis for corporate approval – 3rd quarter 2009
- Implementation/Construction of Project Anticipated to start 2010

2008 Expenditures:

\$25,000

Recycling of BOF Fume Sludge

Description of 2008 Activity:

Recycling of BOF fume sludge was suspended during 2008 because of air emission compliance concerns. Options to amend the fine-grained nature of the material to a substrate more suitable for recycling at the BOF are currently being evaluated.

Approximately 1900 tons of BOF fume sludge were recycled for the year.

2008 Expenditures:

\$9,500

Recycling of Humphreys Creek Wastewater Treatment Plant Sludge

Description of 2008 Activity:

Technology review is ongoing to provide an evaluation of various processes to recycle the wastewater treatment plant sludge. Humphreys Creek Waste Water Treatment Plant (HCWWTP) sludge has presented a challenge for recycling because of its oil content and its relatively low concentration of iron. A number of projects have been evaluated over the past few years that were developed to find ways of de-oiling or reusing this sludge and similar materials. These projects were not deemed successful as viewed from the perspective of technology, feasibility or cost. The projects have included biological de-oiling, solvent extraction de-oiling and calcination. Additionally, reuse of this material in the sinter plant has been further restricted due to air emission limits on volatile organic compounds.

Current levels of oil and grease in the sludge have been lowered as a result of recent waste minimization efforts to eliminate oil and grease discharges to Tin Mill Canal. It is anticipated that Humphreys Creek sludge materials will be evaluated further to determine if they can be cost-effectively de-oiled and pelletized to provide a feedstock to the sinter plant. This study effort will be continued in 2009 in an effort to realize the cost benefits of the iron value in the sludge as well as to reduce the landfill needs of the facility.

2008 Expenditures: \$0

Maintenance Dredging of the Tin Mill Canal

Description of 2008 Activity:

Maintenance dredging operations were conducted in late 2008 that included the removal of approximately 500 cubic yards of material from a location in Tin Mill Canal near the sewer outlet of the Hot Strip Mill. The Sludge Drainage Pad was used for temporary storage and dewatering of the material. Testing procedures for this material were completed in 2008 prior to disposal to provide waste characterization of the 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 that documented that the waste materials were non-hazardous (included in Appendix A). The waste materials will be disposed of at Greys Landfill.

2008 Expenditures: \$20,000

Facility Wide Waste Minimization Plan

A Facility-wide Waste Minimization Plan (October 2006 Plan Update) was submitted in November 2006 in accordance with requirements of the Decree outlined in Section VI, Paragraph 3.c.

Goals and effectiveness of the Waste Minimization Program at Sparrows Point will continue 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 ISO 14001 certification received by the facility.

4.0 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
- Coke Oven Area Interim Measure

Rod & Wire Mill Sludge Bin Remediation Area

During 2008, Severstal Sparrows Point, LLC operated the groundwater pump and treat Interim Measure at the former Rod & Wire Mill Sludge Bin Storage Area at Sparrows Point in accordance with the scope and schedule submitted in the July 2000 Work Plan for Re-Establishment of Interim Measures, Former Sludge Bin Storage Area, Rod & Wire Mill that was approved by U. S. EPA on November 3, 2000. The interim measure tasks included:

- Maintaining institutional controls at the former in situ leaching area,
- Groundwater treatment system monitoring, operation and maintenance,
- · Semi-annual groundwater elevation monitoring, and
- Semi-annual sampling and analysis of groundwater.

Specifics of the interim measures tasks completed in 2008 are 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 continuation of an authorization program to conduct work in the area.
- Operation and maintenance of the groundwater recovery wells, transfer pipeline and treatment process equipment located at the existing wastewater treatment facility.
- Evaluation of the groundwater pump and treat system, including documentation of treatment flow, review of semi-annual groundwater elevation data, and 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 6,585,185 gallons of water was extracted from the two Former Sludge Bin Storage Area groundwater pumping wells (RW15-PZM020 and RW10-PZM020) during 2008. This compares to 6,846,277 gallons extracted in 2007. The average total pumping rate for 2008 was 18,042 gallons per day (gpd), or 12.5 gallons per minute (gpm). A total of 301 pounds (lbs) of cadmium and 15,222 lbs of zinc were removed and treated during 2008. This compares to 355 pounds (lbs) of cadmium and 16,601 lbs of zinc removed in 2007. The reduction in removed masses from 2007 to

2008 is due to a combination of reduced cadmium and zinc concentrations in groundwater at the pumping wells and a slight decrease in the volume of treated groundwater.

Groundwater elevation data indicate groundwater drawdown with a radius of influence that captures the contamination plume in the intermediate groundwater zone (approximately 20 to 30 feet below the ground surface) at the average annual 2008 pumping rate of 6.3 gallons per minute (gpm) for recovery well RW15-PZM020 and the same for recovery well RW10-PZM020. The groundwater elevation data for the shallow zone (groundwater table surface to 15 feet below this surface), combined with the chemistry data document a water table situation where contamination migration is effectively controlled in this groundwater zone. Groundwater elevation data for the deeper groundwater zone (greater than 50 feet in depth) suggest that heads in this zone may not be influenced by the pump and treat system; however, the chemistry data (further discussed below) indicate that contaminant migration in this zone is effectively controlled.

Groundwater monitoring data collected during 2007 suggests some improvement in groundwater quality as compared to 2006.

<u>Cadmium</u>—Cadmium concentrations in the two pumping wells (RW10-PZM020 and RW15-PZM020) are generally lower than observed in prior years. At most of the non-pumping wells the 2008 cadmium concentrations are similar to prior years, with the following exceptions where the cadmium concentrations are lower compared to recent prior years:

At RW03-PZM003 (shallow zone) the 2008 2nd quarter cadmium concentration (0.21 mg/l) was lower than historically has been observed.

<u>Zinc</u>—Zinc concentrations in the two pumping wells (RW10-PZM020 and RW15-PZM020) are generally lower than observed in prior years. At most of the non-pumping wells the 2008 zinc concentrations are similar to prior years, with the following exceptions:

- At RW06-PZM001 (shallow zone) the 4th quarter 2008 zinc concentration (110 mg/l) is higher than historically has been observed.
- At RW12-PZM004 (shallow zone) the 2008 2nd and 4th quarter zinc concentrations (4.3 and 5.8 mg/l, respectively) are lower than historically has been observed.
- At RW20-PZP000 (shallow zone) the 2008 4th quarter zinc concentrations (100 mg/l) is higher than historically has been observed (see the Table 3-3 footnote).
- At RW20-PZM020 (intermediate zone) the 4th quarter 2008 zinc concentration (2.0 mg/l) is lower than lower than historically has been observed

The Proposed Operating Plan for 2009 is to: maintain institutional controls at the former storage area, continue operation, maintenance, and monitoring of the groundwater pump and treat system and complete semi-annual monitoring of groundwater.

Site Wide Investigation

Work completed for the Site Wide Investigation during 2008 included the following activities:

Ecological Risk Assessment Program

An ecological risk assessment program for the facility was developed and presented to the agencies on November 21, 2005. A path forward for ecological assessment tasks was agreed to on November 21, 2005. The proposed steps were as follows:

- Gain approval of strategy for evaluating ecological risks at the site from the USEPA and the Maryland Department of the Environment (MDE);
- Participate in a coordinated site visit with the USEPA to facilitate their understanding of the potential ecological issues at the Site;
- Conduct qualitative ecological surveys of on-site and off-site areas. The on-site and off-site surveys may be conducted at different times;
- Develop ERA Work Plan. Components to be factored into the Work Plan include:
 - Tiered approach consisting of completion of the SLERA, followed by the BERA, if necessary. It is assumed that the SLERA will include, in addition to a quantification of on-site screening-level risks, a comparison of groundwater concentrations to ecological surface water benchmarks. The results and conclusions of the SLERA will determine the need for a BERA.
 - Development of on-site Work Plan. Plan will identify areas of overlap between suitable ecological habitat and areas potentially impacted by SWMUs and AOCs, and identification of potential receptors in these areas of overlap;

The strategy document for the ecological risk assessment tasks at Sparrows Point was submitted for approval in February 2006. Comments were received from the US EPA in March 2006 and, where applicable, were incorporated into the development of the On-Site Ecological Work Plan.

The Ecological Risk Assessment Work Plan for On Site Areas was developed and submitted for agency review in June 2006. Based on the agreed upon approach for the facility, the Ecological Risk Assessment Work Plan for On Site Areas was finalized and submitted to the agencies in January 2007.

Milestones achieved for the Ecological risk Assessment Program in 2008 include:

- Submitted Screening Level Ecological Risk Assessment for On-Site Areas Draft (April, 2008, URS)
- Analysis of supplemental sampling of ponds in County Lands 1B parcel to support On-Site ERA - Supplemental Report County Land Parcel 1B Ponds Draft (January, 2009, URS)) submitted January 2009

Coke Oven Area Interim Measure

Interim measure activities were conducted in the Coke Oven Area in 2008. These activities included:

 Operation of a skimmer pump system to recover light non- aqueous phase liquid (LNAPL) from monitoring well CO04-PZM004 that was installed in March 2007,

LNAPL Skimmer System

A Xitech REM2500ES remote LNAPL skimmer system was installed in CO04-PZM004 on March 15 to recover LNAPL detected in the well. The system consists of:

- a skimmer pump that pumps LNAPL from the well
- a control panel, solar panel, battery, air dryer, and air compressor that operate the skimmer pump
- a weather-proof storage box that houses the control instruments
- 55-gallon drums and containment tray for storing recovered LNAPL
- a high-tank shut off that turns the system off when the LNAPL storage drums are full

Recovery of LNAPL from CO04-PZM began on March 15, 2007. Approximately 30 gallons of oil product has been recovered from the well. The frequency and duration of the skimmer pump cycling has been adjusted to optimize LNAPL recovery based on system operation data.

5.0 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 for the compliance requirements for visible emissions from the Basic Oxygen Furnace (BOF) Shop roof monitor during 2008 was conducted in accordance with the requirements outlined in the Maryland State Implementation Plan (SIP) that was promulgated by the State of Maryland on 10/2/2000 and approved by the US EPA on 11/6/2001 as provided for in Section VII Paragraph A.4. and Section XVII 1.c. of the Consent Decree. With approval of the SIP by the US EPA, compliance requirements for visible emissions from the BOF Shop roof monitor are now implemented by requirements of the SIP and not the Consent Decree.

Kish Reduction

Kish reduction requirements outlined in the Consent Decree and subsequent tasks associated with approved kish reduction work plans have been completed. Ongoing components of kish reduction activities at the facility are the maintenance of control structures and equipment for kish emissions from BOF slag skimmer ladle dumping and Blast Furnace dust catcher operations.

BOF Slag Skimmer Ladle Dumping

In August of 2003, the Skimmer Slag Ladle Dumping process was relocated to the No.2 Soaking Pit Building located northeast of the Caster. This structure provides cover that controls and significantly reduces fugitive kish emissions from the dumping of slag ladles from the slag skimming operation. Originally this process was to be moved under cover in the No 4 Open Hearth Building but was relocated because the open hearth was slated for demolition .

Ongoing maintenance of the No 2 Soaking Pit Building was completed in 2008 and included roof repairs of the structure. In addition, operational procedures were improved for the bowl dumping process, including;

 Written procedures were developed for the contractors performing slag skimmer ladle dumping activities in the No 2 soaking Pit including the use of operational standards for dumping area depth and locations within the building; Facility personnel performed routine inspections of the building, dumping areas and dumping procedures completed by the contractors;

Blast Furnace Dust Catcher

A wet dust suppression system has been established for the blast furnace dust catcher discharges. This system operates to reduce fugitive dust from the dust catcher operation in accordance with requests from the Maryland Department of the Environment to control these discharges.

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.

Activities conducted in 2008 for the landfills were as follows:

Greys Landfill

The approved landfill compliance improvements at Greys Landfill initiated in 2005 were completed in 2008. A summary of activities completed for Greys Landfill is as follows:

Items Completed:

- Sediment/stormwater storage basin and outlet controls
- Final stormwater controls and stormwater swales
- Cement Deep Soil Mixing Stabilization Program
- Clearing and Grubbing
- 3-ft diversion swale excavated and riprap lined
- Landfill counter berms and slope regrading
- Final cap system to elevation 85
- Final seeding and slope stabilization measures

As-built engineering requirements and associated submittals will be completed in 2009 for the completed construction project. Also to be finalized will be a groundwater monitoring compliance program for the landfill facility.

Coke Point Landfill

An engineering analysis of the Coke Point Landfill area was completed in 2004. The analysis included a geotechnical report summarizing the results of a specific subsurface investigation and slope stability evaluation of the landfill site. Grading recommendations and a Concept Plan for

future uses of the landfill were also completed. The engineering analysis was submitted to MDE on January 3, 2005 for review and comment.

Comments and recommendations on the engineering analysis and conceptual design of the Coke Point Landfill were received from MDE on September 26, 2005. The recommendations were incorporated into the conceptual design and development of the landfill during 2006.

In 2008, the detailed design of a sediment and erosion control plan was developed and submitted to Baltimore County Soil Conservation District for review (August, 2008). Comments were received from the District and will be addressed in 2009.

6.0 Decree Management Reporting

Community Relations

There were several community relation activities during the year, but none more noteworthy than the commitment made by Sparrows Point to develop a community outreach plan in support of communication efforts for the Multimedia Consent Decree environmental projects..

The intent of the community outreach plan is to provide a forum for discussion of community interests and concerns and maintain ongoing and proactive relations with local community participants and regional environmental organizations. Specific components of the plan include the following:

- Identify local communities within the Baltimore Area that are adjacent to the Sparrows Point facility;
- Identify regional environmental organizations, community governments, or other environmental entities in each of those communities (e.g., regional nonprofits, etc.).
 Identify contact information for each of those entities;
- Contact (by letter) and solicit representatives from each entity identified as being
 potentially interested to participate in outreach activities; the effort may initially include
 verbal contact with a few key individuals first to seek their recommendations for
 communications. This may involve letters or other communications with a broader
 audience;
- New brochure on Severstal Sparrows Point;
- Convene regular meetings as necessary and appropriate during ongoing environmental
 activities and development of new projects. If suggested; we plan to present information
 about the facility at offsite locations, rather than asking interested parties to attend a
 meeting;
- Consider development of an Environmental Committee that would have representation from appropriate entities representing local and regional interests. The Committee would be appointed at such time in the future to best support and interpret environmental actions being undertaken at the facility;

Contacts with key individuals were initiated for the outreach plan and an introductory meeting was held at Sparrows Point on December 11, 2008. The initial meeting was held at the facility and feedback from the meeting indicated a desire to conduct ongoing meetings which will be scheduled as appropriate.

Other community activities conducted during 2008 are represented as follows:

- Presentations to Baltimore County business and environmental representatives
- Community leaders meeting with Maryland Port Authority and Baltimore County
 officials on dredge material site selection process with respect to potential use of Sparrows
 Point;

Project Management

Project management at the Sparrows Point facility for the Consent Decree includes Mr. Russell Becker, project coordinator for the Consent Decree. URS Corporation has been selected as a subcontractor to support activities associated with Section V of the Consent Decree. Notification of the change in project coordinator was provided in accordance with Section X on October 22, 2008.

Release Reporting

Appendix B contains spill reports for the facility that were reported in 2008. These reports document the status of mitigation of the releases, and the government oversight agency, contact name and telephone number.

REQUIREMENT	SECTION	CURRENT STATUS	MAJOR SUBMITTALS AND DATES	MILESTONE DATES OF WORK	ADDITIONAL TASKS FOR COMPLETION
Operate and Monitor the	À	institutional controls established at former	Work Plan for Re-Establishment of Groundwater Remediation System for R&W Mill Sludge Bin Storage Area, July 2000	November 2000 - Approval of Work Plan for Re-Establishment of Groundwater	AND COMMENIS
Remediation System.		Annual reporting requirement by Jan 31.	Operation and Maniforing Description	Remediation System	 Implement linal corrective action: Corrective action to be risk based and
Former Sludge Bin Storage		semi-annual groundwater monitoring	Operation and Monitoring Reports, annually since 1997	Sentence 2001	will require completion of human health
Area. R&W Mill		program, groundwater treatment at HCWWTP, discharge through NPDES nermit		September 2001 – Operation of the groundwater pump and treat remediation	and ecological risk assessments;
Site Wide Investigation Description of Current	V.B.1.	Report complete	Description of Current Conditions. (January 1998, Rust	System resumed December 1998 – Conditional approval	
Conditions Report			Environment & Infrastructure)	granted by EPA for report	
Site Wide Investigation	V.B.2. V.B.3	Completed Work	Site Wide Investigation Work Plan -Phase 1. (March, 1999.		
Site-wide investigation	V.B.4.	 Groundwater Study, community 	(this document was superseded by the following)	March 2000 - Americal of	Ongoing on a phased approach with
conditions at facility:	V.B.5	relations plan, data management plan		hydrogeological portion of SWI Phase 1	approvals granted for specific work plans.
including associated phased Work Plans to address		 Release Site Characterization Study 	Site wide investigation Work Plan - Groundwater Study (June 2000. CH2MHill)	Work Plan	Additional work plans anticipated to be completed:
investigation of areas of		 Nature & Extent of Releases to 	Site Wide Investigation Work Plan - Community Relations		Dolono of Tability National Control
Conditions Report		Groundwater from Special Study Areas	Plan (June 2000, CH2MHill)		Investigations
		 Screening Level – Current Human Health Exposures 	Site Wide Investigation Work Plan – Data Management Plan (June 2000, CH2MHill)		 Groundwater/Surface Water Discharge Areas Investigation Balance of On-Site Ecological Risk
		On-Site Ecological Risk Assessment Indervoy Greening land	Site Wide Investigation Groundwater Study Report (December, 2001, CH2MHill)	December 2001 - Hydrogeological site conceptual model complete	Assessment Off-Site Ecological Risk Assessment Current and Father Human Health Dick
		submitted and comments received from US EPA	Release Site Characterization Planning Memorandum – Humphrey Impoundment and Tin Mill Canal/Finishing Mill Areas (May 2001, CH2MHill)		Assessment Final Site Wide Investigation Report
		 Supplemental Ecological Risk Assessment screening level report submitted January 2009 	Release Site Characterization Planning Memorandum – Coke Point Landfill and Coke Oven Area (Jul 2001, CH2MHill)		
			Release Site Characterization Planning Memorandum - Greys Landfill (Sept. 2001, CH2MHill)	2001 - Approval of Site Characterization	
			Special Study Area Release Site Characterization Data Collection Quality Assurance Plan (June 2001, CH2MHill)	Work	
			Site Wide Investigation Release Site Characterization Study (June 2002, CH2MHill)	June 2002 - Submittal of Release Site	
			Site Wide Investigation Work Plan to Evaluate the Nature and Extent of Releases to Groundwater from the Special Study	Characterization Study results	
			Areas (July, 2002, CH2MHill modified by URS Corp in 2004)	Extent Work Plan	
			Site Wide Investigation Report of Nature & Extent of Releases to Groundwater from Special Study Areas (Jan 2005, URS Corp)	Jan 2005 – Submittal of Groundwater	

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		V Corrective Measures West To Re Performed (continued)	- Ld JA	
CONSENT DECREE	SECTION CURRENT STATUS	MAJOR SUBMITTALS AND DATES	MILESTONE DATES OF WORK	ADDITIONAL TASKS FOR COMPLETION
		Workplan to Evaluate Current Human Exposures (October 2004, URS)	August 2005 – EPA approval of Current Human Exposure Risk Findings	
		CA725 Facility Investigation and Human Health Risk Evaluation (HHRE) Findings (June 2005, URS)	January 2007 – Submittal of approved Ecological Risk Assessment Work Plan for On-Site Areas	
		Ecological Risk Assessment Work Plan for On-Site Areas Draft (June 2006. URS)	March 2007 – skimmer pump system	
		Ecological Risk Assessment Work Plan For On-Site Areas Final (January 2007, URS)	Oven Area	
		Screening Level Ecological Risk Assessment for On-Site Areas Draft (April, 2008, URS)	November 2007 – Submittal of Nature and Extent Final Response to comments received from EPA February 2007	
		Supplemental Report County Land Parcel 1B Ponds Draft (January, 2009, URS)	April 2008 – Submittal of Screening Level Ecological Risk Assessment report	
			January 2009 – Comments received from EPA for draft Screening Level Ecological Risk Assessment Report	
Corrective Measures Study Draft CMS Report and	V.C. Future Requirement			 Complete analysis of required corrective measures for facility based on results of Site Wide Investigation Work Define and select appropriate corrective
Final CMS Report		•		measureSubmit Draft CMS ReportNegotiate record of decision for
				Submit Final CMS Report

CONSENT DECREE REQUIREMENT	SECTION	CURRENT STATUS	MAJOR SUBMITTALS AND DATES	MILESTONE DATES OF WORK	ADDITIONAL TASKS FOR
Compliance Requirements for Visible Emissions from Basic Oxygen furnace	VII.A.	Compliance requirements for visible emissions from the BOF Shop roof monitor are now	BOF Fugitive Emissions Report (January, 1998, Bethlehem	PERFORMED	COMPLETION AND COMMENTS The Maryland State Implementation Plan (SIP) was promulated by the State of
(BOF) Shop Roof Monitor		MACT and State Implementation Plan.	Sieci Corporation)		Maryland on 10/2/2000 and approved by the US EPA on 11/6/2001. With approval of the SIP by the US EPA, compliance requirements for visible emissions from the BOF Shop roof monitor are now implemented by requirements of the SIP and
Compliance Requirements for Kish Reduction	VII.B.	Kish Reduction Plan, including additional	Vil Dilatin III		not the Consent Decree as specified in VII.A.
Kish Reduction Plan to		measures to control kish emissions from BOF slag skimmer ladle dumping, was completed in 2004.	Kish Reduction Work Plan (January 1998, Bethlehem Steel Corporation)	2004 - Completion of Kish Reduction Plan including improvements to control	No further requirements.
minimize, to the extent practicable, the emissions of		In August of 2003, the Skimmer Slag Ladle Dumping Process was relocated to the No.2	Kish Reduction Work Plan Revised (August 1998, Bethlehem Steel Corporation)	kish emissions from BOF Slag Skimmer Ladle Dumping	
JUL .		Soaking Pit Building. Additional wall sheeting. lighting, fire protection, internal grading and ramps for dumping were installed	Kish Reduction Plan Report (October 2000, Bethlehem Steel Corporation)		
		Additional improvements to the No. 2 Soaking Pit Building were completed in 2004 including the installation of a fabricated wall sheet to close in the	BOF Slag Skimming Station Evaluation & Recommendations (July 2000. Guimond & Associates. Inc)		
		east side of the building and further minimize fugitive emissions from the building.	Work Plan to Evaluate the Control of Kish Emissions from BOF Siag Skimmer Ladle Dumping (June 2001, Bethlehem Steel Corporation)		
Compliance Requirements	VIIO	Ongoing maintenance of the No. 2 Soaking Pit Building has occurred since including fabricated wall sheets and repairs to wall and roof sheeting.			
for Coke Point and Grevs Landfill Operation	č	soucy and real initially submitted July 1998. An engineering analysis of the Coke Point Landfill area was completed in 2004. Grading recommendations and a Concept Plan for future use	Sparrows Point Plant Landfill Compliance Plan (July 1998, Bethlehem Steel Corporation)	July 1998 – submittal of engineering study and Landfill Compliance Plan for Coke Point and Greys Landfills	 Develop final landfill engineering design – Coke Point Landfill Obtain approval of detailed design
Coke Point and Greys Landfill Operations		of the landfill were also completed. Approval of the conceptual design of the Coke Point Landfill was received from MDE on September 26, 2005.	Revised Compliance Plan for Greys Landfill (October 1999, Bethlehem Steel Corporation)	April 2001 - MDE approval of Compliance Plan for Greys Landfill	of a sediment and erosion control and stormwater management plan for the landfill submitted to the
			Greys Landfill Closure Plan (April 2002, Whitman Requardt and Assoc)	March 2004 – MDE approval of Greys Landfill Closure Plan	 BCSCD in 2008: Submit plans to MDE for approval Implement compliance
			Revised Closure Plan Greys Landfill (October 2003, Whitman Requardt and Assoc)	September 2005 – MDE comments and general acceptance of Coke Point Landfill conceptual design	improvements - Coke Point Landfill Implement landfill groundwater
			Maryland (January 2005, Whitman Requardt and Assoc)	December 2008 – Compliance requirements in place for continued operation at Greek 1 and 11	monnorms requirements

	plan to reduce waste volumes, mobility or toxicity generated at the facility required	3	Facility Wide Waste Minimization Plan VI.3 Waste Minimization Plan completed		Waste Minimization/Recycling Projects VI.1.b.6) Plan implemented	Work Plan – HCWWTP Solids VIII.0.3) I conhology evaluation underway – feasible technology not identified as of 12/2008	No.	V1.1.b.4)	<u>s</u> VI.1.b.3)		wastewater reatment Plant	se of Caustics lumphreys Creek	Work plan complete and implemented	L	Identification and quantification of report complete discharges to Tin Mill Canal. Ongoing evaluation to reduce	Transe Finantization Recycling Projects VI. I.b. Identification and one	ļ	sumps. associated trenches and above ground storage tanks.	visual Inspections and report of	Activities tanks and modifications reported as
Facility-Wide Waste Minimization Plan October 2006 Plan Update (October 2006. Bethlehem Steel Cornoration)	Tri-Annual Review Report for the Waste Minimization Plan (April 2002, Bethlehem Steel Corporation)	Steel Corporation)	Facility Wide West Minimine in the control of the c	work Plan for the Handling of Tin Mill Canal Dredging (October 1998, Bethlehem Steel Corporation)		t identified as Work Plan for the Recycling of Humphreys Creek Wastewater Treatment Plant Sludge (October 1999, Bethlehem Steel Corporation)	ge materials as Work Plan for the Recycling of Basic Oxygen Furnace Fume ad the potential Sludge (April 1999, Bethlehem Steel Corporation) limits	Work Plan for the Recycling of Blast Furnace Gas Cleaning Slurry Solids (October 1998, Bethlehem Steel Corporation)	design	Letter Response dated August 7, 1998	Letter Response dated May 15th, 1998	(December 1997. Bethlehem Steel Corporation)	nd implemented Beneficial Reuse of Strong Caustic Solutions Work Plan	d updates	A THE PARTY CARRAI STUDY Characterization (July 1997, Ch2MHill) reduce	Ti kill O	Plan	Sump/lank work Plan Report (Guimond Ass	· · ·	
		10 -year program complete		drying pad construction	W. T	ater	Recycling underway 2003, suspended in 2008 due to air emission concerns				at one Them combined	February 1998 - EPA/MDE review of			ll) July 1997 – Report submitted			2004 - Repairs complete - ongoing	Sump Tank Work Plan	
		No further requirements	material analyses, if any	No further requirements other than notification requirement prior to dredging and annual submittal of	Full scale development	Technology evaluation Feasibility study Design engineering	Technology evaluation Feasibility study Design engineering Full scale development	complete, anticipated installation 2010, project identified on Environmental Capital Plan				Flan implemented. SPL approved. no further requirements	Task complete;			Task complete, no further requirements			No further requirements as part of the Consent Decree obligations.	

			•	
			•	

Interim Measures Operate and Monitor the Remediation		TIMEERAME FOR
Interim Measures Operate and Monitor the Remediation		TO THE TOTAL TOTAL
Interim Measures Operate and Monitor the Remediation		COMPLETION
System, Former Sludge Bin Storage Area, R&W Mill	 Implement final corrective action; Corrective action to be risk based and will require completion of human health and ecological risk assessments; 	Final corrective action to be implemented subsequent to completion of corrective measures study for facility
Site Wide Investigation	Ongoing on a phased approach with approvals granted for specific work plans,	48 months dependent upon
Site-wide investigation study of	 Balance of Facility Nature & Extent Investigations 	agency review cycle
including aggointed about Well-	 Groundwater/Surface Water Discharge Areas Investigation 	
Plans to address investigation of areas	Balance of On-Site Ecological Risk Assessment	
of concern outlined in Current	 Off-Site Ecological Risk Assessment 	,
Conditions Report	 Current and Future Human Health Risk Assessment Final Site Wide Investigation Report 	
Corrective Measures Study	Complete analysis of required corrective manning for facility 1	
	results of Site Wide Investigation Work	12 months subsequent to
Draft CMS Report and Final CMS	Define and select appropriate corrective measure	investigation for facility
Report	Submit Draft CMS Report	dependent inon agency regions
	 Negotiate record of decision for corrective measure requirements for facility 	cycle
	Submit Final CMS Report	
Waste Minimization/Recycling Projects	 Project engineering substantially complete, anticipated installation 2010, 	End 2011 (tentative)Capital
Work Plan - Blast Furnace Gas	project identified on Environmental Capital Plan	investment will be allocated
Cleaning Solids Recycle Program		based on economic
Waste Minimization/Dangin		performance of facility
Projects	Technology evaluation	To be determined
Work Plan – BOF Sludge Recycle	 Feasibility study 	
Program	Design engineering Full scale development	
Waste Minimization/Recycling	Technology evaluation	·
Projects	• Feasibility study	l o be determined
work Plan – HCW WTP Solids	Design engineering	
Compliance Requirements Cor Colo	• Full scale development	
Point and Cross Landing Of Coke	Develop final landfill engineering design	To be determined
Landfill Compliance Plan for Cote	Obtain approval of detailed design of a sediment and erosion control and stormwater	
Point Landfill Operations	Submit plans to MDE for example 10008;	
	Implement compliance improvements	
Compliance Requirements for Coke	Compliance requirements are in place for continued continued.	
Landfill Compliance Plan for Greys	monitoring requirements to be determined	End 2009
Landilli Operations		

APPENDIX A RESULTS OF SAMPLING/MONITORING

Tin Mill Canal Drying Pad Sampling

Severstal Sparrows Point removed approximately 500 tons of material during maintenance dredging of the Tin Mill Canal. The material was placed on the drying pad adjacent to the Canal. Sampling of the material was conducted in association with the Maryland Department of the Environment (MDE) on November 19, 2008. Grab samples were taken from the "West Pit" of the drying pad as shown on the attached diagram. Approximately nine (9) full "sterile scoops" from the "West Pit" were taken and placed into a 1 gallon sterile glass jar. The composite sample was stirred then shaken until adequately mixed. Two (2) 8-ounce samples were then taken from the composite sample. One (1) sample kept by Severstal and one (1) sample was provided to MDE for their analysis.

The same process was used with new sterile scoops and new 1 gallon sterile glass jar when sampling the "East Pit" of the drying pad.

Severstal Sparrows Point sent one (1) "West Pit" and one (1) "East Pit" composite sample to Microbac Laboratories for analysis. Each sample was tested for the following: TCLP Organic, TCLP Inorganic, Ignitability, Corrosivity, and Reactivity. The analysis showed that the material is non-hazardous and can be disposed at Greys Landfill. A copy of the analysis has been included with this submittal.



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COVER LETTER

Russ Becker Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219

December 09, 2008 Report No.: 08K0485

RE: NON-NPDES

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 11/20/2008 15:27.

The enclosed results were obtained from and applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories, Inc.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

12/5/2008

Final report reviewed by:

Peter B. Kelly For Michael D. Arbaugh/Customer Services Manager

Report issue date

All samples received in proper condition and results confirm to ISO 17025 standards unless otherwise noted.

If we have not met or exceeded your expectations, please contact the Director or Trevor Boyce, President at thoyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@microbac.com.



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CERTIFICATE OF ANALYSIS

Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219 Project: NON-NPDES
Project Number: NON-NPDES
Project Manager: Russ Becker

Report: 08K0485

Reported: 12/05/2008 11:56

SAMPLE SUMMARY

Sample ID	Laboratory ID Mat		Туре	Date Sampled	Date Received
East Pit	08K0485-01	Solid	Composite	11/19/2008 00:00	11/20/2008 15:27
West Pit	08K0485-02	Solid	Composite	11/19/2008 00:00	11/20/2008 15:27

Microbac Laboratories, Inc., Baltimore Division



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Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219 Project: NON-NPDES
Project Number: NON-NPDES
Project Manager: Russ Becker

Report: 08K0485

Reported: 12/05/2008 11:56

East Pit 08K0485-01 (Solid) Sampled: 11/19/2008 00:00; Type: Composite

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
	Micr	obac Laborat	ories, Inc., Ba	ltimore Divisio	n	-		
Wet Chemistry								
% Solids	82.47	0.05	% by Weight	120108 0406	120108 0415	LCR	SM (20) 2540G	
pН	7.5	0.10	pH Units	112608 1128	112608 1217	LCR	SM (20) 4500H B	
Reactive Cyanide	ND	1.0	mg HCN/Kg	112608 1615	120208 1458	VAS	SW846 CH 7.3	
Reactive Sulfide	ND	10	mg H2S/Kg	112208 1615	120308 0424	LCR	SW846 CH 7.3	н
General Chemistry					_			
Ignitability	>200 °F	0	°F	112208 1500	112208 1500	вмс	EPA 1020A	Q
CLP Extraction by EPA 1311								`
lnitial pH	8.0		N/A	112408 1616	120108 0831	EDP	EPA 1311	
Final pH	5.1		N/A	112408 1616	120108 0831	EDP	EPA 1311	
Rotation Time (Hrs)	18		N/A	112408 1616	120108 0831	EDP	EPA 1311	
TCLP Extraction Fluid	1.0		N/A	112408 1616	120108 0831	EDP	EPA 1311	
TCLP Filterable Solids	0.0		N/A	112408 1616	120108 0831	EDP	EPA 1311	
CLP Metals by 6000/7000 Series Me	ethods							
Silver	ND	0.0050	mg/L	112508 1404	112608 1015	APS	EPA 6010B	
Arsenic	ND	0.50	mg/L	112508 1404	112608 1015	APS	EPA 6010B	D
Barium	0.55	0.50	mg/L	112508 1404	112608 1015	APS	EPA 6010B	D
Cadmium	ND	0.50	mg/L	112508 1404	112608 1015	APS	EPA 6010B	D
Chromium	ND	0.010	mg/L	112508 1404	112608 1015	APS	EPA 6010B	D
Mercury	0.00020	0.00020	mg/L	112608 1230	112608 1335	HG.	SW846 7471A	_
ead	ND	0.50	mg/L	112508 1404	112608 1015	APS	EPA 6010B	D
elenium	ND	0.50	mg/L	112508 1404	112608 1015	APS	EPA 6010B	D

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CERTIFICATE OF ANALYSIS

Severstal Sparrow's Point 1430 Sparrows Point Blvd

Project: NON-NPDES Project Number: NON-NPDES Project Manager: Russ Becker

08K0485 Report:

Reported: 12/05/2008 11:56

Sparrows Point, MD 21219

East Pit

08K0485-01 (Solid) Sampled: 11/19/2008 00:00; Type: Composite

	0010405-01 (5	5011 2) 52315						
Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
	Micro	obac Laborato	ries, Inc., Bal	ltimore Division				
TCLP Volatile Organic Compounds by	v EPA Method 13	11/8260B						
•	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12. A2, U
Benzene Carbon Tetrachloride	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12. A2. I
	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12, A2, I
Chloroform	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12, A2, 1
Chloroform	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12, A2, t
1,2-Dichloroethane	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12, A2.
1,1-Dichloroethene	ND	0.057	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12, A2,
Methyl Ethyl Ketone (2-Butanone)	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12. A2.
Tetrachloroethene	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12. A2.
Trichloroethene	ND	0.011	mg/L	112108 1130	113008 1338	EMG	EPA 1311/EPA 8260B	A12. A2.
Vinyl chloride	1410	98.0%	80-120	112108 1130	113008 1338		EPA 1311/EPA 8260B	
urrogate: Dibromofluoromethane .			80-120	112108 1130	113008 1338		EPA 1311/EPA 8260B	
urrogate: 1,2-Dichloroethane-d4		100%			113008 1338		EPA 1311/EPA 8260B	
urrogate: Toluene-d8		79.2%	75-120	112108 1130			EPA 1311/EPA 8260B	
urrogate: 4-Bromofluorobenzenc		87.3%	60-149	112108 1130	113008 1338		LI A ISTILL A 0200D	
FCLP Pesticides by EPA Method 1311	1/8081A							
	ND	0.00050	mg/L	112608 0945	120108 1551	MST	EPA 1311/8081A	
gamma-BHC	ND ND	0.00050	mg/L	112608 0945	120108 1551	MST	EPA 1311/8081A	
Heptachlor	ND ND	0.00050	mg/L	112608 0945	120108 1551	MST	EPA 1311/8081A	
Heptachlor epoxide		0.00030	mg/L	112608 0945	120108 1551	MST	EPA 1311/8081A	
Endrin	ND	0.0010	mg/L	112608 0945	120108 1551	MST	EPA 1311/8081A	
Methoxychlor	ND		mg/L	112608 0945	120108 1622	MST	EPA 1311/8081A	
Toxaphene	ND	0.030	_	112608 0945	120108 1622	MST	EPA 1311/8081A	
Technical Chlordane	ND	0.010	mg/L		120108 1622		EPA 1311/8081A	
Surrogate: Tetrachloro-m-xyelene		27.0%	30-109	112608 0945			EPA 1311/8081A	
		73.0%	30-112	112608 0945	120108 1622		EPA ISTICOUOTA	

30-112

73.0%

Microbac Laboratories, Inc., Baltimore Division

Surrogate: Decachlorobiphenyl

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





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CERTIFICATE OF ANALYSIS

Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219

Project: NON-NPDES Project Number: NON-NPDES Project Manager: Russ Becker

Report: 08K0485

Reported: 12/05/2008 11:56

East Pit

08K0485-01 (Solid) Sampled: 11/19/2008 00:00; Type: Composite

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
	Micr	obac Laborat	ories, Inc., Ba	altimore Division	1			
TCLP Semivolatiles by EPA Method	1 1311/8270C							
meta/para-Cresol	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	
o-Cresol	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	
Total Cresols	ND	0.20	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA \$270C	
Pyridine	ND	0.50	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	1
1,4-Dichlorobenzene	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	;
Hexachloroethane	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	,
Nitrobenzene	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	į
Hexachlorobutadiene	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	ι
2,4,6-Trichlorophenol	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	Į
2,4,5-Trichlorophenol	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA \$270C	τ
2,4-Dinitrotoluene	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	. U
Hexachlorobenzene	ND	0.10	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	บ
Pentachlorophenol	ND	0.50	mg/L	112608 0945	120308 2208	MST	EPA 1311/EPA 8270C	U
urrogate: 2-Fluorophenol		49.2%	10-83	112608 0945	120308 2208		EPA 1311/EPA 8270C	
urrogate: Phenol-d5		38.1%	13-62	112608 0945	120308 2208		EPA 1311/EPA 8270C	
urrogate: Nitrobenzene-d5		90.6%	40-140	112608 0945	120308 2208		EPA 1311/EPA 8270C	
urrogate: 2-Fluorobiphenyl		96.5%	35-138	112608 0945	120308 2208		EPA 1311/EPA 8270C	
irrogaie: 2,4,6-Tribromophenol		101%	24-142	112608 0945	120308 2208		EPA 1311/EPA 8270C	
rrogaic: Terphenyl-d]4		66.3%	24-129	112608 0945	120308 2208		EPA 1311/EPA 8270C	
	Microba	ic Laboratorie	s, Inc-Chicae	goland Division				
CLP Herbicides								
,4,5-TP (Silvex)	ND	0.0012	mg/L		130309 0000			
,4-D	110	0.0012	mg/L		120308 0000	JLW	EPA 8151A	

2,4,5-TP (Silvex)	ND	0.0012	mg/L	120308 0000	JLW	EPA 8151A
2,4-D	ND	0.0012	mg/L	120308 0000	JLW	EPA 8151A

Microbac Laboratories, Inc., Baltimore Division

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Peter B. Kelly For Michael D. Arbaugh, Customer Services Manager



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CERTIFICATE OF ANALYSIS

Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219 Project: NON-NPDES
Project Number: NON-NPDES
Project Manager: Russ Becker

Report: 08K0485

Reported: 12/05/2008 11:56

West Pit 08K0485-02 (Solid) Sampled: 11/19/2008 00:00; Type: Composite

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
	Micro	obac Laborat	ories, Inc., Balt	imore Division				
Wet Chemistry			,					
рН	7.9	0.10	pH Units	112608 1128	112608 1217	LCR	SM (20) 4500H B	
Reactive Cyanide	ND	1.0	mg HCN/Kg	112608 1615	120208 1458	VAS	SW846 CH 7.3	***
Reactive Sulfide	32	10	mg H2S/Kg	112208 1615	120308 0424	LCR	SW846 CH 7.3	н
General Chemistry								
Ignitability	>200 °F	0	°F	112208 1500	112208 1500	вмс	EPA 1020A	Q1
TCLP Extraction by EPA 1311								
Initial pH	8.2		N/A	112408 1616	120108 0831	EDP	EPA 1311	
Final pH	5.5		N/A	112408 1616	120108 0831	EDP	EPA 1311	
Rotation Time (Hrs)	18		N/A	112408 1616	120108 0831	EDP	EPA 1311	
TCLP Extraction Fluid	1.0		N/A	112408 1616	120108 0831	EDP	EPA 1311	
TCLP Filterable Solids	0.0		N/A	112408 1616	120108 0831	EDP	EPA 1311	
TCLP Metals by 6000/7000 Series	Methods							
	ND	0.050	mg/L	112508 1404	112608 1019	APS	EPA 6010B	D
Silver	ND	0.50	mg/L	112508 1404	112608 1019	APS	EPA 6010B	D
Arsenic	ND	0.50	mg/L	112508 1404	112608 1019	APS	EPA 6010B	D
Barium	ND	0.50	mg/L	112508 1404	112608 1019	APS	EPA 6010B	D
Cadmium	ND	0.010	mg/L	112508 1404	112608 1019	APS	EPA 6010B	D
Mercury	ND	0.00020	mg/L	112608 1230	112608 1337	HG	SW846 7471 A	_
Lead	ND	0.50	mg/L	112508 1404	112608 1019	APS	EPA 6010B	D
Selenium	ND	0.50	mg/L	112508 1404	112608 1019	APS	EPA 6010B	D

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Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219

Project NON-NPDES
Project Number: NON-NPDES
Project Manager: Russ Becker

Report: 08K0485

Reported: 12/05/2008 11:56

West Pit

08K0485-02 (Solid) Sampled: 11/19/2008 00:00; Type: Composite

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
	Mic	robac Laborat	ories, Inc., B	altimore Divisio	n			
FCLP Volatile Organic Compounds b	y EPA Method 1	311/8260B						
Benzene	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12. A2, 1
Carbon Tetrachloride	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12, A2,
Chlorobenzene	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12, A2,
Chłoroform	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12. A2. I
1,2-Dichloroethane	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12. A2, (
1,1-Dichloroethene	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12. A2, L
Methyl Ethyl Ketone (2-Butanone)	ND	0.054	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12, A2, U
Tetrachloroethene	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12. A2. U
Trichloroethene	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12, A2, (
Vinyl chloride	ND	0.011	mg/L	112108 1130	113008 1541	EMG	EPA 1311/EPA 8260B	A12. A2, L
irrogate: Dibromofluoromethane		93.0%	80-120	112108 1130	113008 1541		EPA 1311/EPA 8260B	
rrogate: 1,2-Dichloroethane-d4		94.4%	80-120	112108 1130	113008 1541		EPA 1311/EPA 8260B	
rrogate: Toluene-d8		79.0%	75-120	112108 1130	113008 1541		EPA 1311/EPA 8260B	
rrogate: 4-Bromofluorobenzene		86.1%	60-149	112108 1130	113008 1541		EPA 1311/EPA 8260B	
CLP Pesticides by EPA Method 1311/	8081A							
amma-BHC	ND	0.00050	mg/L	112608 0945	120108 1757	MST	EPA 1311/8081A	
leptachlor	ND	0.00050	mg/L	112608 0945	120108 1757	MST	EPA 1311/8081A	;
leptachlor epoxide	ND	0.00050	mg/L	112608 0945	120108 1757	MST	EPA 1311/8081A	1
indrin	ND	0.0010	mg/L	112608 0945	120108 1757	MST	EPA 1311/8081A	1
lethoxychlor	ND	0.0050	mg/L	112608 0945	120108 1757	MST	EPA 1311/8081A	ι
oxaphene	ND	0.030	mg/L	112608 0945	120208 1124	MST	EPA 1311/8081A	τ
echnical Chlordane	ND	0.010	mg/L	112608 0945	120208 1124	MST	EPA 1311/8081A	τ
rogate: Tetrachloro-m-xyelene		33.5%	30-109	112608 0945	120208 1124		EPA 1311/8081A	
rogate: Decachlorobiphenyl		61.5%	30-112	112608 0945	120208 1124		EPA 1311/8081A	

Microbac Laboratories. Inc., Baltimore Division



Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800 Fax: 410-633-6553 www.microbac.com

CERTIFICATE OF ANALYSIS

Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219 Project Non-NPDES
Project Manager: Russ Becker

Report: 08K0485

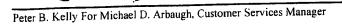
Reported: 12/05/2008 11:56

West Pit

08K0485-02 (Solid) Sampled: 11/19/2008 00:00; Type: Composite

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
amay se	Micro	obac Laborato	ries, Inc., Bal	timore Division				
CLP Semivolatiles by EPA Method	1311/8270C							
	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
meta/para-Cresol	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
o-Cresol	ND	0.20	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
Total Cresols	ND	0.50	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	M5,
Pyridine	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
1,4-Dichlorobenzene	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
Hexachloroethane	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
Nitrobenzene	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
Hexachlorobutadiene	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
2,4,6-Trichlorophenol	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
2,4,5-Trichlorophenol	ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
2,4-Dinitrotoluene	ND ND	0.10	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
Hexachlorobenzene	ND ND	0.50	mg/L	112608 0945	120308 2250	MST	EPA 1311/EPA 8270C	
Pentachlorophenol	IND		10-83	112608 0945	120308 2250		EPA 1311/EPA 8270C	
urrogaic: 2-Fluorophenol		52.0%		112608 0945	120308 2250		EPA 1311.EPA 8270C	
urrogate: Phenol-d5		39.4%	13-62				EPA 1311.EPA 8270C	
urrogate: Nitrobenzene-d5		92.4%	40-140	112608 0945	120308 2250			
Surrogate: 2-Fluorobiphenyl		95.6%	35-138	112608 0945	120308 2250		EPA 1311/EPA 8270C	
Surrogate: 2,4,6-Tribromophenol		106%	24-142	112608 0945	120308 2250		EPA 1311/EPA 827 0 C	
Surrogate: Terphenyl-d14		67.6%	24-129	112608 0945	120308 2250		EPA 1311/EPA 8270C	
	Micro	bac Laborator	ies, Inc-Chic	agoland Division	ı			
TCLP Herbicides								
C. L. S. T.D. (Cilcum)	ND	0.0014	mg/L		120308 0000	JLW	EPA 8151A	
2,4,5-TP (Silvex) 2,4-D	ND	0.0014	mg/L		120308 0000	JLW	EPA 8151A	

Microbac Laboratories. Inc., Baltimore Division





Microbac Laboratories, Inc.

Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800 Fax: 410-633-6553

www.microbac.com

CERTIFICATE OF ANALYSIS

Severstal Sparrow's Point Project: NON-NPDES
1430 Sparrows Point Blvd Project Number: NON-NPDES
Sparrows Point, MD 21219 Project Manager: Russ Becker

Report: 08K0485 Reported: 12/05/2008 11:56

Notes and Definitions

Z8 >200 °F ۷I CCV recovery was above acceptance limits. The concetration was below the reporting limit. U Sample concentration is less than the MDL. Sample Duplicate RPD was out of acceptance limits. The result concentration was within 5 times the reporting limit and the difference R3 was less than the reporting limit. Q١ Sample received with head space. The matrix spike recovery was biased low, the reported result is estimated. M5 The matrix spike recovery was out of acceptance limits. The post digestion spike recovery was acceptable. ΜI L3 The LCS recovery was below the laboratory acceptance limits. The reported result is estimated The LCS recovery was above the laboratory acceptance limits. The target analyte concentration was below the reporting limit. L2 Ll The LCS recovery was above the laboratory acceptance limits. The reported result is estimated. Sample analyzed past maximum recommended holding time. HI D Sample Diluted Results expressed as mg/L TCLP extract after performing total analysis of the sample and adjusting the result to reflex the 20 times A2 dilution in the TCLP extraction procedure. A12 Sample analyzed with headspace. DET Analyte DETECTED ND Analyte NOT DETECTED at or above the reporting limit NR Not Reported Sample results reported on a dry weight basis drv RPD Relative Percent Difference

Microbac Laboratories. Inc., Baltimore Division

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Microbac Laboratories, Inc.

Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800 Fax: 410-633-6553 www.microbac.com

CERTIFICATE OF ANALYSIS

Severstal Sparrow's Point 1430 Sparrows Point Blvd Sparrows Point, MD 21219 Project NON-NPDES
Project Number: NON-NPDES
Project Manager: Russ Becker

Report: 08K0485 Reported: 12/05/2008 11:56

Certifications

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

- A2LA (Microbiology): 410.02 - A2LA (Environmental): 410.01 - AIHA (ELLAP): 100491 - Maryland (Drinking Water): 109

- NELAC (NY): 11158 - Pennsylvania: 68-00339/004

- USDA: S-53726

- Virginia (Drinking Water): 00152

Cooler Receipt Log					
	Cooler Temp: °C				
No	COC/Labels Agree:	No			
	Correct Preservation:	No			
	Correct Number of Containers Received:	No			
	VOAs Without Headspace:	No			
No	Sufficient Sample Volume:	No			
	No No No No No	No COC/Labels Agree: No Correct Preservation: No Correct Number of Containers Received: No VOAs Without Headspace:			

Committee (Committee (# 10 to 2 k SAMPLE ID DATE TOUS OF THE COLL OF THE COL Due Date: 11/20/68 Date & Time: Date & Time: Date & Time: Results due: 7 Calendar Days Relinquished By (signature)

WPDES and NON NPDES Project

Work Order Number: 08/h0 H35

Contact: 410-388-6567

Fax: 410-388-6098

Or 410-388-6549

Microbac Laboratories, Inc. Sparrows Point Plant

(30/CE)

.

TLS 12/3/07 REVISION 2 APPENDIX B RELEASE REPORTING RECORDS

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ISG Sparrows Point LLC 1430 Sparrows Point Boulevard Baltimore, Maryland 21219

February6, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for ISG Sparrows Point LLC for January 2008. There two spills that occurred during the month. Details regarding each spill are attached.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Manager Safety, Health, and Environment

cc: EPA OPA Book

ISO14000 CFT Members

Mr. Greg Sonberg - February 6, 2008

Date and Time – 1/15/08 at approximately 0915 hours Amount – Approximately 10 Gallons Spilled to – Ground Material Spilled – Mineral Oil Location – 54" Blooming Mill

On January 15, 2008 a spill of approximately ten gallons of mineral oil occurred at the 54" Blooming Mill. All of the oil was contained on the ground and no sewers or waterways were involved. The oil was non PCB.

Our investigation revealed that our demolition contractor punctured three transformers during the course of demolition operations. On the day of the spill the transformers were scheduled to be drained and cleaned by A2Z Environmental. Before beginning this work A2Z took the steps necessary to plug the openings in the transformer carcasses to prevent any oil from spilling during their work. A2Z then completely drained and rinsed each of the transformers and removed all contaminated soil over the course of the next several days. The soil was taken off site for disposal by A2Z Environmental. The oil and rinse liquids were retained for fuel for our on site power generating facility. The transformers are to be dismantled by our demolition contractor and the materials recycled.

The spill was discussed with our contractor and he was instructed to again make his people aware of the rules regarding oil spills and the importance of careful work during demolition operations to prevent future occurrences.

Mr. Greg Sonberg - February 6, 2008

Date and Time – 1/28/08 at approximately 0920 hours Amount – Approximately 50 gallons Spilled to – Ground Material Spilled – No. 2 Fuel Oil Location – Truck Dock 83B at the South End of the Tin Mill

On January 28, 2008, at approximately 0920 hours, a foreman in the Pickling area observed a leak in a Number 2 Fuel Oil Line at Truck Dock 83B. He immediately called maintenance personnel to the area and a shut off valve was located and turned off. All of the oil was contained on the ground and no sewers or waterways were involved.

Our investigation revealed that the cause of the spill was a ruptured half inch supply line that fed the heater in an outbuilding. The valve feeding the supply line was shutdown and the spill ceased. Water which had accumulated in the area contained a light sheen but surrounding soils had been impacted as well.

A2Z Environmental was called in to do the cleanup. They were instructed to bring a vacuum truck, a bobcat, sorbent materials, and a dumpster box. When A2Z arrived, our pipe fitters cut the ruptured pipe line and A2Z was able to capture the remaining oil that drained from the line. A2Z then removed the standing water and contaminated soils. Following that sorbent material was deployed at the foot of the building where oil had sprayed against the walls. The building surfaces were then pressure washed to remove oil contamination. The wash water and sorbent were collected following the washing operation.

Following that fresh sorbent was placed at the foot of the building to prevent any oil that had not been cleaned off of the building to escape during a precipitation event. After a recent rain we noticed no sheen in standing water in the area nor any oil contained on the sorbent material. We will leave the sorbent in place a while longer and then have A2Z remove it. All contaminated materials were disposed of by A2Z at an offsite disposal facility.

To prevent a recurrence we will leave the line disconnected, the valve secured and plugged and we have placed the building on our demolition list.



ISG Sparrows Point LLC 1430 Sparrows Point Boulevard Baltimore, Maryland 21219

March 25, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter and its attachments will serve as the spill report for ISG Sparrows Point LLC for the Month of February 2008. There were three spills that occurred during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Manager Safety, Health, and Environment

cc: EPA

EPA OPA Book

ISO14000 CFT Members

Mr. Greg Sonberg - March 25, 2008

Date and Time – February 28, 2008 at approximately 0900 hours Amount – Approximately 10-15 Gallons Spilled to – Ground Material Spilled – Rectifier Oil Location – Truck Dock 254

On February 28, 2008 a spill of approximately 10 to 15 gallons of rectifier oil occurred at Truck Dock 254. All of the oil was contained on the ground and no sewers or waterways were involved.

Our investigation revealed that the cause of the spill was related to demolition activities which were occurring at the 54 Inch Mill. Our demolition contractor took down an overhead walkway and when it fell it took down an out of service electrical rectifier that was mounted nearby. The rectifier hit the ground and ruptured and spilled the oil to the ground. The demolition crew immediately stopped work and diked the oil to prevent it from spreading.

A2Z Environmental was working in the area and was called to the site to begin cleanup operations. They took a field test of the oil and the test indicated that the oil had a PCB concentration of greater than 50 parts per million (ppm). An additional sample of the oil was sent to the Phase Separation Science Lab for confirmation of the PCB content. In the interim the spill was treated as a PCB incident. The lab results showed that the field test kit was in error and that the oil contained 6.0 ppm of PCB 1260. A copy of the lab work is attached.

The damaged rectifier was cleaned out by A2Z and was scrapped. All contaminated soil was removed by A2Z and placed into a dumpster box. We will be disposing of the contaminated soil at an approved off site facility when the requisite paperwork is approved.

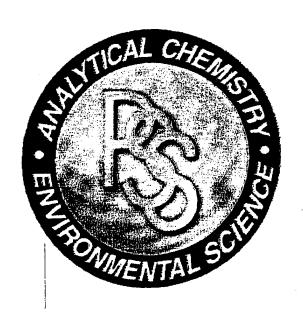
The incident was reviewed with the demolition contractor and he stated that he had missed the rectifier during his inspection of the area prior to beginning demolition activities. He will take actions to better investigate future areas before beginning demolition operations.

Analytical Report for

A2Z Environmental Group

Certificate of Analysis No.: 8022806

Project Manager: Barry Snyder
Project Name: Rectifier Spill
Project Location: Truck Dock #254



February 29, 2008

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770

Fax: (410) 788-8723

OFFICES: 6630 BALTIMORE NATIONAL PIKE ROUTE 40 WEST BALTIMORE, MD 21228 410-747-8770 800-932-9047

PHASE SEPARATION SCIENCE, INC.



February 29, 2008

Barry Snyder
A2Z Environmental Group
311 South Haven St.
Baltimore, MD 21224

Reference: PSS Work Order No: 8022806

Project Name: Rectifier Spill Project Location: Truck Dock #254

Dear Barry Snyder:

The attached Analytical and QC Summary lists the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order numbered 8022806.

All work reported herein has been performed in accordance with referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on April 3, 2008. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 10 years, after which time it will be disposed without further notice, unless prior arrangements have been made.

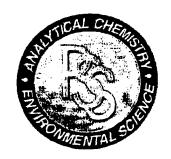
We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

John Richardson

Laboratory Director

OFFICES: 6630 BALTIMORE NATIONAL PIKE ROUTE 40 WEST BALTIMORE, MD 21228 410-747-8770 800-932-9047 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 8022806

A2Z Environmental Group, Baltimore, MD

February 29, 2008

Project Name: Rectifier Spill

Project Location: Truck Dock #254

Sample ID: Rectifier

Matrix: OIL

Polychlorinated Biphenyls

Date/Time Sampled: 02/28/2008 09:02

Date/Time Received: 02/28/2008 11:08

Analytical Method: SW846 8082

Preparation Method: SW3580A

PSS Sample ID: 8022806-001

	Result	Units	Rep Limit Flag	DII	Prepared	Analyzed	Analyst
	ND	mg/kg	4.2	1	02/28/08	02/29/08 11:45	1029
PCB-1016	ND .	mg/kg	4.2	1	02/28/08	02/29/08 11:45	1029
PCB-1221	ND	mg/kg	4.2	1	02/28/08	02/29/08 11:45	1029
PCB-1232	ND	mg/kg	4.2	1	02/28/08	02/29/08 11:45	1029
PCB-1242	ND	mg/kg	4.2	1	02/28/08	02/29/08 11:45	
PCB-1248	ND	mg/kg	4.2	1	02/28/08	02/29/08 11:45	
PCB-1254	6.0	mg/kg	4.2	1	02/28/08	02/29/08 11:45	1029
PCB-1260							



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com email: info@phaseonline.com

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Collected / Relinquished By: (4)	Date	Time	Received By:	5 .							
ABSO Dellimona New											

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723
The ollent (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable tees if collection becomes necessary.

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Phase Separation Science, Inc

Sample Receipt Checklist

Wo Number	8022806	Received	By R	achel Davis
Client Name	A2Z Environmental Group	Date Rece	eived 02	2/28/2008 11:08:00 AM
Project Name	Rectifier Spill	Delivered	By C	ient
Project Number	N/A	Tracking	No No	ot Applicable
110,000		Logged in	n By Ra	achel Davis
Shipping Conta	iner(s)			•
No. of Coo	plers 1	Ice		Present
Custody S	eals Absent	Temp (5.3
Seal Cond	ition None	Temp B	Blank Presen	I ND
Documentation				
	es with sample labels?	res or No		
Chain of C	sustody (COC)	Yes or No		
Sample Contain	ıer			1/
Appropiate	for Specified Analysis? Yes X	No Custody	• •	YesNoX_
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	, NH3, Total Phos X (VOA Vials Rovd Preserved)	(pH<2)		*
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Comments: (An	y "No" response must be o	detailed in the con	nments se	ction below.)
of the section of the	reservation conditions, list eample li my client notification as well as clien hould be analyzed as soon as possii	it instructions Sembles	TOT DIL, CHIOTH	१८ द्याप
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		11		
Samples Inspected	d/Checklist Completed By:	1 James	Date:	2/28/8
	PM Review and Approval:	· CAT	Date: .	2/24/05



ISG Sparrows Point LLC 1430 Sparrows Point Boulevard Baltimore, Maryland 21219

February 22, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg
Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard Suite 620
Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for spill that occurred at the ISG Sparrows Point LLC plant on February 14, 2008. Details regarding the spill are attached.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Manager Safety, Health, and Environment

CC:

EPA OPA Book

ISO14000 CFT Members

Mr. Greg Sonberg - February 22, 2008

Date and Time – 2/14/08 at approximately 0715 hours Amount – Approximately 30-50 Gallons Spilled to – Ground Material Spilled – Royal Purple Lubrication Oil Location – Sinter Plant North Gas Cleaning Fan

On February 14, 2008 a spill of approximately 30-50 gallons of lubricating oil occurred at the North Gas Cleaning Fan at the Sinter Plant. All of the oil was contained on the ground and no sewers or waterways were involved.

Our investigation revealed that the cause of the spill was related to cold oil. At the time of the spill the Sinter Plant was returning to service from a planned outage. When the fan lubricating system was started we surmise that the oil, whose viscosity had increased due to the cold, caused an over pressure situation inside of the lube oil system and the oil blew out of the fan bearing seals. When the oil warmed, the system returned to normal. We recently placed Royal Purple oil in service in the lubricating system and we did not expect this situation to occur.

Mobile Dredging and Pumping, an onsite based cleanup contractor, was called to the Sinter Plant to do the cleanup. Standing oil and contaminated soil were taken to Kroff Materials Processing, an onsite oil recovery company, where any recovered oil was to be recycled and contaminated soil would be solidified and taken to our plant landfill.

To prevent a recurrence we are working with the vendor to develop procedures to prevent this incident from recurring. The details surrounding this spill and response will be shared with all of the maintenance supervisors in the plant.



ISG Sparrows Point LLC 1430 Sparrows Point Boulevard Baltimore, Maryland 21219

February 13, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for spill that occurred at the ISG Sparrows Point LLC plant on February 3, 2008. Details regarding the spill are attached.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Manager Safety, Health, and Environment

cc: EPA OPA Book

ISO14000 CFT Members

Mr. Greg Sonberg - February 13, 2008

Date and Time - 2/3/08 at approximately 0630 hours Amount - Approximately 50 Gallons Spilled to - Ground Material Spilled - Regal R&O 46 Hydraulic Oil Location - Basic Oxygen furnace No. 3 Scrubber

On February 3, 2008 a spill of approximately 50 gallons of hydraulic oil occurred at the No. 3 Fume Scrubber in the Basic Oxygen Furnace. All of the oil was contained on the ground and no sewers or waterways were involved.

Our investigation revealed that the cause of the spill was a ruptured hydraulic oil line. When the spill was discovered the hydraulic system was shut down and the spill ceased. Veolia, formerly Onyx Precision Services, was called to bring labor, a vacuum truck, and hand tools to remove the standing oil and contaminated soil. All recovered materials were taken to the Kroff Materials Processing facility located on our site. There any oil that could be reprocessed was and contaminated soil was stabilized and taken to our plant landfill.

The ruptured line was replaced, tested, and found to be leak free. The scrubber was then subsequently returned to service.

The details surrounding this spill and response will be shared with all of the maintenance supervisors in the plant.



ISG Sparrows Point LLC 1430 Sparrows Point Boulevard Baltimore, Maryland 21219

April 29, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for ISG Sparrows Point LLC for the Month of March 2008. There were no spills that occurred during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Role / Mutz

Manager Safety, Health, and Environment

cc:

EPA OPA Book

ISO14000 CFT Members



May 28, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for Severstal Sparrows Point for the Month of April 2008. There were no oil spills that occurred during the month.

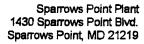
If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Manager, Environmental Affairs

cc: EPA OPA Book ISO14000 CFT Members Plant Maintenance Supervisors





June 3, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for Severstal Sparrows Point for the Month of May 2008. There were no oil spills that occurred during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Manager, Environmental Affairs

cc: EPA OPA Book

ISO14000 CFT Members



July 23, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for Severstal Sparrows Point, LLC for the Month of June 2008. There were no oil spills that occurred during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Division Manager

Environmental Engineering and Affairs

CC:

EPA OPA Book

ISO14000 CFT Members



August 12, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg
Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard Suite 620
Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for Severstal Sparrows Point, LLC for the Month of July 2008. There was one spill that occurred during the month. Details of the spill are attached.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate Division Manager

Environmental Engineering and Affairs

Attachment

CC: EPA OPA Book

ISO 14000 CFT Members

Plant Maintenance Supervisors

Severstal Sparrows Point

T: (410)388-6548

1430 Sparrows Point Bivd.

F: (410) 388-6529

Sparrows Point, MD 21219 USA

E: Bob.Abate@severstaina.com

Date and Time - July 28, 2008 at approx. 1000 hours

Amount - Approximately 15 gallons

Spilled to - Ground

Material - Hydraulic oil (Paradene AW)

Location - Human Resources Building Parking Lot

On July 28, 2008 at approximately 1000 hours a spill of about 60 gallons of Paradene AW, hydraulic oil, occurred at the Human Resources Building parking lot.

Our investigation revealed that a hydraulic hose had burst on a Grade All that was working on the periphery of the parking lot. When the operator noticed the leak he immediately stopped the machine, called for help, and began containment activities. The majority of the spilled oil was contained on the black top but approximately 15 gallons escaped to the soil at the edge of the parking lot before containment actions were completed.

Mobile Dredging and Pumping was tasked to do the cleanup. They provided a pressure washer to clean the blacktop and a vactor to remove the contaminated soil and water. The recovered material was taken to Kroff Materials Processing for solidification before disposal at our plant landfill.

The Grade All was taken to our on site repair shop and inspected and the ruptured hose was the only item found in need of replacement. That hose was replaced, the hydraulic reservoir was refilled, and the repair tested and found to sufficient. The Grade All was subsequently placed back in service.



September 29, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg
Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard Suite 620
Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter and its attachment will serve as the spill report for Severstal Sparrows Point, LLC for the Month of August 2008. There was one spill that occurred during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Division Manager

Environmental Engineering and Affairs

CC: EPA OPA Book

ISO 14000 CFT Members

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E: Bob.Abate@severstaina.com

Mr. Greg Sonberg - September 29, 2008

Date and Time - August 8, 2008

Amount - Approximately 2800 gallons

Spilled to - Inside of Containment Area

Material - Lubrication Oil

Location - Hot Strip Mill TD 15

On August 8, 2008, at approximately 0835 hours, the plant Environmental Engineering and Affairs Department was notified of a tank overfill of approximately 2800 gallons of lubrication oil at TD 15 in the Hot Strip Mill area of the plant. The bulk of the oil was contained in a paved containment area beneath the tank. An unknown amount went to a sewer, located within the containment area, that reports to our waste water treatment plant. Our investigation revealed that the spill was the result of human error and mechanical failure.

On the morning of the spill the delivery truck driver reported to the Hot Strip Mill Receiving Office and announced that he had a delivery of lubrication oil to make to Tank 148. An employee was then dispatched to assist the driver in the delivery. During the pre-delivery conference the driver and receiving employee confirmed the oil was to be delivered to Tank 148 and after reading the tank level gauge the receiving employee gave permission to deliver the oil to the tank.

The driver delivered his full compliment of oil to the tank, and thinking all was well, left the plant. The receiving employee left the plant, at the conclusion of his shift, prior to the completion of the delivery and did not make provisions for another individual to monitor the transfer. The tank is located in alley just west of the unloading rack, and the spill was not noticed by the truck driver because the tank was not in his field of view. It was noticed shortly after the transfer by an employee walking near the tank.

The spill occurred as a result of several circumstances. First, the receiving employee misread the level gauge and determined that there was sufficient room in the tank to accept the entire delivery when indeed there was not. Second, the truck driver did not monitor the level gauge while he was making the delivery. Third, the tank overfill alarm did not function.

Cleanup operations were handled by Mobile Dredging and Pumping Company. The spilled oil was recovered and the tank and containment area were pressure washed to remove the spilled oil. The recovered oil and water were taken to Kroff Material Processing, our on site used oil recovery facility, for recovery and processing. Oil that entered the sewer was captured by oil recovery devices associated with our waste water treatment plant and was taken to Kroff for recovery and processing.

Mr. Greg Sonberg – September 29, 2008

To prevent a recurrence the following actions are/have been taken.

- All individuals who transfer oil to this tank have been made aware of the mistakes
 and were made aware of the proper procedure to unload oil to Tank 148. A copy
 of this spill report will also be forwarded to all departments in the plant who
 transfer oil as part of their daily routine.
- The tank overfill alarm has been inspected and is undergoing repair.
- The tank level gauge was checked and found to be accurate.
- The tank filling procedure is to be reviewed and updated where necessary and a copy will be placed into the plant document management system where it will receive automatic reviews at prescribed intervals.
- The unloading rack will be inspected and all extraneous piping, gauges, signage, and hoses will be removed.
- The unloading hose will be inspected and if found to be defective will be replaced.



October 6, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter and its attachment will serve as the spill report for Severstal Sparrows Point, LLC for the Month of September 2008. The spill report was sent to you on September 18, 2008.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate Division Manager

Environmental Engineering and Affairs

CC: EPA OPA Book

ISO 14000 CFT Members

Plant Maintenance Supervisors

Severstal Sparrows Point

T: (410)388-6548

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F: (410) 388-6529

Sparrows Point, MD 21219 USA

E: Bob.Abate@severstalna.com



September 18, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter, and its attachment, will serve as the spill report for the oil spill that occurred on September 8, 2008 and Truck Dock 16 in the Hot Strip Mill area.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Tant Jan Kz

Division Manager

Environmental Engineering and Affairs

Attachment

CC:

EPA OPA Book

ISO14000 CFT Members

Plant Maintenance Supervisors

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Sparrows Point, MD 21219 USA

E: Bob.Abate@severstaina.com

Date and Time - September 8, 2008

Amount - Approximately 200 gallons

Spilled to - Ground

Material - Hydraulic/lubrication oil

Location - Hot Strip Mill TD 16

On September 8, 2008, at approximately 1000 hours, the plant Environmental Engineering and Affairs Department was notified of a spill of approximately 200 gallons of oil at TD 16 in the Hot Strip Mill area of the plant. No sewers or bodies of water were involved in this incident. Our investigation revealed that the oil originated from the Hot Strip Mill scale pit and escaped to the ground as scale was being removed from the pit.

Slabs rolled in the Hot Strip Mill are turned into hot bands which are further reduced in our finishing mills. During rolling, pressurized water is sprayed onto the slabs to remove any scale produced during the heating process. The water and scale are conveyed to the Hot Strip Mill scale pit to allow the scale to separate from the water. The water is then recycled back into the process. Hydraulic and lubricating oils that leak from mill machinery are also carried by the water into the scale pit.

The accumulated mill scale is bucketed out of the pit, by an overhead crane, and is placed into rail cars located next to the scale pit. The cars are then allowed to drain, back into the scale pit, before they are moved to another area and unloaded. The mill scale is then recycled back into the steelmaking process.

Our investigation revealed that several of the drain holes to the scale pit were blocked and did not allow the oil/water to drain back into the pit. It instead followed the railroad tracks out of the scale pit drain area and into the Truck Dock 16 area.

A2Z Environmental was called in to do the cleanup and responded with vacuum equipment, a bobcat, roll off boxes, and sufficient manpower to do the cleanup. A2Z vacuumed the standing liquid and applied sand to the remaining oil film on the ground and roadway. The plant road sweeper did a final cleaning on the roads. The sand and contaminated soil was subsequently removed, using the bobcat, vacuum equipment and road sweeper. It was then transferred to roll off boxes for transport to an off site disposal facility. The recovered liquids were treated at the Kroff Materials Processing Facility to remove oil.

The scale pit drains have been reopened and no additional spillage has occurred. During the next mill outage we will do further cleaning of the drains. We will also conduct more extensive inspections of the area to ensure that the drains do not become clogged again.



November 11, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter will serve as the spill report for Severstal Sparrows Point, LLC for the Month of October 2008. There were no spills during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate Division Manager

Environmental Engineering and Affairs

CC: EPA OPA Book

ISO 14000 CFT Members Plant Maintenance Supervisors

Severstal Sparrows Point

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Sparrows Point, MD 21219 USA

E: Bob.Abate@severstaina.com



December 9, 2008

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter, and its attachment, will serve as the spill report for Severstal Sparrows Point, LLC for the Month of November, 2008. There was one spill during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Abate

Division Manager

Environmental Engineering and Affairs

Attachment

CC: EPA OPA Book

ISO 14000 CFT Members

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E: Bob.Abate@severstaina.com

Mr. Greg Sonberg - December 9, 2008

Date and Time - November 24, 2008 at approximately 1250 hours

Amount Spilled - Approximately 10 gallons

Spilled To - Ground

Material Spilled - Compressor oil

Location - Truck Dock 53

MDE Contacted - Jeff Molner on 11/24/08 at 1306 hours

On November 24, 2008 at approximately 1250 hours a spill of about ten gallons of compressor oil occurred from Air Compressor No. 3115 stationed at Truck Dock 53 in the Coated Products mill area. All of the oil was contained on the ground and none entered the sewer or any body of water.

The oil was released from a malfunctioning air compressor that was stationed in the area. Preliminary inspection of the unit revealed that the oil was expelled from the air compressor as no source of external leakage was found. The compressor was taken out of service and transported to our plant garage where it is awaiting diagnosis and repair. The unit will not be placed back into service until the cause of the spill has been determined and repaired and the compressor has been tested.

Absorbent pads and sand were deployed to capture the oil until a payloader could be dispatched to the area to scoop up the contaminated soil. Cleanup was completed by 1430 hours and the contaminated soil was taken to Kroff Materials Processing for stabilization and disposal in our on site landfill.



January 13, 2009

CERTIFIED RETURN RECEIPT REQUESTED

Mr. Greg Sonberg Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard Suite 620 Baltimore, Maryland 21230-1708

Dear Mr. Sonberg:

This letter, and its attachment, will serve as the spill report for Severstal Sparrows Point, LLC for the Month of December, 2008. There was one spill during the month.

If there are questions please refer them to Joe Dolan, of my staff, at 410-388-5991.

Sincerely,

Robert J. Åbate Division Manager

Environmental Engineering and Affairs

Attachment

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E: Bob.Abate@severstaina.com

Mr. Greg Sonberg - January 13, 2009

Date and Time - December 10, 2008 at approximately 0940 hours

Amount Spilled - Approximately 30 gallons

Spilled To - Ground

Material Spilled - Hydraulic oil

Location - Truck Dock 461A Sinter Water Treatment Area

MDE Contacted - Bob Swan on 12/10/08 at 1016 hours

On December 10, 2008 at approximately 0940 hours a spill of about thirty gallons of hydraulic oil occurred from Mobile Crane 1489 working in the area of Truck Dock 461A in the Sinter Water Treatment area. All of the oil was contained on the ground and none entered the sewer or any body of water.

The oil was released from a ruptured hydraulic hose on the crane. As soon as the operator noticed the leak he shut down the crane and called for help. Absorbent pads were deployed to absorb the oil until earth moving equipment could be brought to the scene. The contaminated pads and soil were subsequently removed, on December 10, 2008, by the earth moving equipment and taken to Kroff Materials Processing for stabilization and then disposed at our onsite landfill.

The crane has been inspected, repaired, and tested and has been placed back into service.