Multimedia Consent Decree

2008 Annual Report

Prepared for

U S Environmental Protection Agency
Maryland Department of the Environment

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Prepared by

Severstal Sparrows Point LLC

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TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 CONSENT DEGREE STATUS UPDATE 2
3.0 WASTE MINIMIZATION PLAN 3
4.0 CORRECTIVE MEASURES 6
5.0 COMPLIANCE REQUIREMENTS 10
6.0 DEGREE MANAGEMENT REPORTING 13

TABLE 1

TABLE 2

APPENDICES

APPENDIX A RESULTS OF SAMPLING/MONITORING
APPENDIX B RELEASE REPORTING RECORDS
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.

**Cadmium**—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.

**Zinc**—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.
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**Completed Work:**
- Final CHPS report
- Complete audit of required elements
- Submit CHPS report
- Address issues
- Submit additional data
- Conduct final inspection
- Final performance of CHPS
- Final CHPS report

**Pending Work:**
- Final CHPS report
- Complete audit of required elements
- Submit CHPS report
- Address issues
- Submit additional data
- Conduct final inspection
- Final performance of CHPS
- Final CHPS report
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<td>A1.6</td>
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<td>A1.8</td>
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<td>A1.9</td>
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**Table 1**
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<thead>
<tr>
<th>Date of Report</th>
<th>Project Duration</th>
<th>Project Initiation</th>
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<tbody>
<tr>
<td>10 August 2023</td>
<td>12 months</td>
<td>January 1, 2024</td>
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**Project Details**

- **Location**: [Location Details]
- **Clients**: [Client List]
- **Stakeholders**: [Stakeholder List]
- **Objectives**: [Project Objectives]

**Project Milestones**

- **Month 1 (January)**: Planning and Design
- **Month 2 (February)**: Site Preparation
- **Month 3 (March)**: Construction
- **Month 4 (April)**: Installation
- **Month 5 (May)**: Testing and Commissioning
- **Month 6 (June)**: Project Completion

**Project Timeline**

- **Pre-Construction Phase**
  - Site Investigation
  - Environmental Impact Assessment
- **Construction Phase**
  - Foundation Work
  - Structural Frames
- **Commissioning Phase**
  - System Testing
  - Final Acceptance Inspection

**Risk Management**

- **Risk Identification**: [List of Risks]
- **Risk Assessment**: [Risk Rating]
- **Risk Mitigation Strategies**: [Mitigation Plan]

**Project Budget**

- **Total Budget**: [Budget Amount]
- **Cost Breakdown**: [Cost Distribution]

**Project Team**

- **Project Manager**: [Manager Name]
- **Technical Lead**: [Lead Name]
- **Site Supervisors**: [Supervisor List]

**Contact Information**

- **Project Manager**: [Manager Contact]
- **Technical Lead**: [Lead Contact]
- **Primary Contractor**: [Contractor Contact]

**References and Acknowledgments**

- [List of References and Acknowledgments]

**Appendices**

- [List of Appendices]

---

**Table 1**

<table>
<thead>
<tr>
<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
<th>Status</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Activity A</td>
<td>2023-01-01</td>
<td>2023-02-28</td>
<td>Complete</td>
<td>Completed successfully</td>
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<tr>
<td>Activity B</td>
<td>2023-03-01</td>
<td>2023-04-15</td>
<td>In Progress</td>
<td>Ongoing issues</td>
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<td>Activity C</td>
<td>2023-05-01</td>
<td>2023-06-10</td>
<td>Pending</td>
<td>Requires more resources</td>
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**Notes**

- [Additional Notes]

---

**Figure 1**

- [Image Description]

---

**Figure 2**

- [Image Description]
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<tr>
<th>CONSENT DEGREE REQUIREMENT</th>
<th>ADDITIONAL TASKS FOR COMPLETION AND COMMENTS</th>
<th>ESTIMATE OF TIMEFRAME FOR COMPLETION</th>
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<tr>
<td><strong>Interim Measures</strong></td>
<td>• Implement final corrective action;</td>
<td>Final corrective action to be</td>
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<tr>
<td>Operate and Monitor the</td>
<td>• Corrective action to be risk based and will</td>
<td>implemented subsequent to</td>
</tr>
<tr>
<td>Remediation System,</td>
<td>require completion of human</td>
<td>completion of corrective</td>
</tr>
<tr>
<td>Former Sludge Bin Storage</td>
<td>health and ecological risk assessments;</td>
<td>measures study for facility</td>
</tr>
<tr>
<td>Area, R&amp;W Mill</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Site Wide Investigation</strong></td>
<td>• Ongoing on a phased approach with approvals</td>
<td>48 months dependent upon agency</td>
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<tr>
<td>Site-wide investigation</td>
<td>granted for specific work plans, additional</td>
<td>review cycle</td>
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<tr>
<td>study of environmental</td>
<td>work plans anticipated to be completed:</td>
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<tr>
<td>conditions at facility,</td>
<td>• Balance of Facility Nature &amp; Extent</td>
<td></td>
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<tr>
<td>including associated phased</td>
<td>Investigations</td>
<td></td>
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<tr>
<td>Work Plans to address</td>
<td>• Groundwater/Surface Water Discharge Areas</td>
<td></td>
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<tr>
<td>investigation of areas of</td>
<td>Investigation</td>
<td></td>
</tr>
<tr>
<td>concern outlined in Current</td>
<td>• Balance of On-Site Ecological Risk</td>
<td></td>
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<tr>
<td>Conditions Report</td>
<td>Assessment</td>
<td></td>
</tr>
<tr>
<td><strong>Corrective Measures Study</strong></td>
<td>• Define and select appropriate corrective</td>
<td>12 months subsequent to completion</td>
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<tr>
<td>Draft CMS Report and Final</td>
<td>measure</td>
<td>of site wide investigation for facility,</td>
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<tr>
<td>CMS Report</td>
<td>• Submit Draft CMS Report</td>
<td>dependent upon agency review cycle.</td>
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<tr>
<td></td>
<td>• Negotiate record of decision for corrective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>measure requirements for facility</td>
<td></td>
</tr>
<tr>
<td><strong>Waste Minimization/Recycling</strong></td>
<td>• Project engineering substantially complete,</td>
<td>End 2011 (tentative)Capital</td>
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<tr>
<td>Projects</td>
<td>anticipated installation 2010, project</td>
<td>investment will be allocated</td>
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<tr>
<td>Work Plan – Blast Furnace</td>
<td>identified on Environmental Capital Plan</td>
<td>based on economic performance of</td>
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<tr>
<td>Gas Cleaning Solids Recycle</td>
<td></td>
<td>facility.</td>
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<tr>
<td>Project</td>
<td></td>
<td>To be determined</td>
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<tr>
<td><strong>Waste Minimization/Recycling</strong></td>
<td>• Technology evaluation</td>
<td>To be determined</td>
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<tr>
<td>Projects</td>
<td>• Feasibility study</td>
<td></td>
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<tr>
<td>Work Plan – BOF Sludge Recycle</td>
<td>• Design engineering</td>
<td></td>
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<tr>
<td>Program</td>
<td>• Full scale development</td>
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<tr>
<td><strong>Waste Minimization/Recycling</strong></td>
<td>• Technology evaluation</td>
<td>To be determined</td>
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<tr>
<td>Projects</td>
<td>• Feasibility study</td>
<td></td>
</tr>
<tr>
<td>Work Plan – HCWWTP Solids</td>
<td>• Design engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Full scale development</td>
<td></td>
</tr>
<tr>
<td><strong>Compliance Requirements for Coke</strong></td>
<td>• Develop final landfill engineering design</td>
<td>To be determined</td>
</tr>
<tr>
<td>Point and Greys Landfill Operation</td>
<td>• Obtain approval of detailed design of a sediment and erosion control and stormwater management plan for the landfill submitted to the BCSCD in 2008;</td>
<td></td>
</tr>
<tr>
<td>Landfill Compliance Plan for Coke</td>
<td>• Submit plans to MDE for approval</td>
<td></td>
</tr>
<tr>
<td>Point Landfill Operations</td>
<td>• Implement compliance improvements</td>
<td></td>
</tr>
<tr>
<td><strong>Compliance Requirements for Coke</strong></td>
<td>• Compliance requirements are in place for continued operation – groundwater monitoring requirements to be determined</td>
<td>End 2009</td>
</tr>
<tr>
<td>Point and Greys Landfill Operation</td>
<td>Landfill Compliance Plan for Greys Landfill Operations</td>
<td></td>
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</table>
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.
Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

COVER LETTER

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

RE: NON-NPDES

December 09, 2008
Report No.: 08K0485

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

Final report reviewed by: Peter B. Kelly For Michael D. Arbaugh/Customer Services Manager

12/5/2008
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 tboyce@microbac.com or Robert Morgan, Chief Operation Officer, at rmorgan@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

## SAMPLE SUMMARY

<table>
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<tr>
<th>Sample ID</th>
<th>Laboratory ID</th>
<th>Matrix</th>
<th>Type</th>
<th>Date Sampled</th>
<th>Date Received</th>
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<td>East Pit</td>
<td>08K0485-01</td>
<td>Solid</td>
<td>Composite</td>
<td>11/19/2008 00:00</td>
<td>11/20/2008 15:27</td>
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<td>West Pit</td>
<td>08K0485-02</td>
<td>Solid</td>
<td>Composite</td>
<td>11/19/2008 00:00</td>
<td>11/20/2008 15:27</td>
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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  

Peter B. Kelly For Michael D. Arbaugh, Customer Services Manager
Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

CERTIFICATE OF ANALYSIS

Several 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

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<th>Analyte</th>
<th>Result</th>
<th>Reporting Limit</th>
<th>Units</th>
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<th>Analyzed</th>
<th>Analyst</th>
<th>Method</th>
<th>Notes</th>
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<tr>
<td>% Solids</td>
<td>82.47</td>
<td>0.05 % by Weight</td>
<td>120108 0406</td>
<td>120108 0415</td>
<td>LCR</td>
<td>SM 120 254D0</td>
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<tr>
<td>pH</td>
<td>7.5</td>
<td>0.10 pH Units</td>
<td>112608 1128</td>
<td>112608 1217</td>
<td>LCR</td>
<td>SM OH 4W4B</td>
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<tr>
<td>Reactive Cyanide</td>
<td>ND</td>
<td>1.0 mg HC/1kg</td>
<td>112608 1615</td>
<td>120208 1458</td>
<td>VAS</td>
<td>SW846 CH 7.3</td>
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<td></td>
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<tr>
<td>Reactive Sulfide</td>
<td>ND</td>
<td>10 mg HZ/1kg</td>
<td>112208 1615</td>
<td>120308 0424</td>
<td>LCR</td>
<td>SW846 CH 7.3</td>
<td>H1</td>
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Microbac Laboratories, Inc., Baltimore Division

General Chemistry

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<tr>
<th>Ignitability</th>
<th>&gt;200 °F</th>
<th>0 °F</th>
<th>112208 1500</th>
<th>112208 1500</th>
<th>BMC</th>
<th>EPA 1020A</th>
<th>Q1</th>
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</table>

TCLP Extraction by EPA 1311

| Initial 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 |

TCLP Metals by 6000/7000 Series Methods

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<th>Metal</th>
<th>Result</th>
<th>Units</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Analyst</th>
<th>Method</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Silver</td>
<td>ND</td>
<td>0.0050 mg/L</td>
<td>112308 1404</td>
<td>112608 1015</td>
<td>APS</td>
<td>EPA 6010B</td>
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<tr>
<td>Arsenic</td>
<td>ND</td>
<td>0.50 mg/L</td>
<td>112508 1404</td>
<td>112608 1015</td>
<td>APS</td>
<td>EPA 6010B</td>
<td>D</td>
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<tr>
<td>Barium</td>
<td>0.55</td>
<td>0.50 mg/L</td>
<td>112508 1404</td>
<td>112608 1015</td>
<td>APS</td>
<td>EPA 6010B</td>
<td>D</td>
</tr>
<tr>
<td>Cadmium</td>
<td>ND</td>
<td>0.50 mg/L</td>
<td>112508 1404</td>
<td>112608 1015</td>
<td>APS</td>
<td>EPA 6010B</td>
<td>D</td>
</tr>
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<td>Chromium</td>
<td>ND</td>
<td>0.010 mg/L</td>
<td>112508 1404</td>
<td>112608 1015</td>
<td>APS</td>
<td>EPA 6010B</td>
<td>D</td>
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<tr>
<td>Mercury</td>
<td>0.00020</td>
<td>0.00020 mg/L</td>
<td>112608 1230</td>
<td>112608 1333</td>
<td>HG</td>
<td>SW846 7471A</td>
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<td>Lead</td>
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<td>0.50 mg/L</td>
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<td>112608 1015</td>
<td>APS</td>
<td>EPA 6010B</td>
<td>D</td>
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<tr>
<td>Selenium</td>
<td>ND</td>
<td>0.50 mg/L</td>
<td>112508 1404</td>
<td>112608 1015</td>
<td>APS</td>
<td>EPA 6010B</td>
<td>D</td>
</tr>
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</table>

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.

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

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

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>Reporting Limit</th>
<th>Units</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Analyst</th>
<th>Method</th>
<th>Notes</th>
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<td></td>
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<td><strong>TCLP Volatile Organic Compounds by EPA Method 1311/8260B</strong></td>
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<td></td>
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<tr>
<td>Benzene</td>
<td>ND</td>
<td>0.011 mg/L</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
</tr>
<tr>
<td>Carbon Tetrachloride</td>
<td>ND</td>
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<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
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<tr>
<td>Chlorobenzene</td>
<td>ND</td>
<td>0.011 mg/L</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
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<tr>
<td>Chloroform</td>
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<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
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<tr>
<td>1,2-Dichloroethane</td>
<td>ND</td>
<td>0.011 mg/L</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
</tr>
<tr>
<td>1,1-Dichloroethane</td>
<td>ND</td>
<td>0.011 mg/L</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
</tr>
<tr>
<td>Methyl Ethyl Ketone (2-Butanone)</td>
<td>ND</td>
<td>0.057 mg/L</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
</tr>
<tr>
<td>Tetrachloroethene</td>
<td>ND</td>
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<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
</tr>
<tr>
<td>Trichloroethene</td>
<td>ND</td>
<td>0.011 mg/L</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
</tr>
<tr>
<td>Vinyl chloride</td>
<td>ND</td>
<td>0.011 mg/L</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 8306B</td>
<td>A12, A2, U, D</td>
<td></td>
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<tr>
<td><strong>Surrogate: Dibromoefluoromethane</strong></td>
<td>98.0%</td>
<td>80-120</td>
<td>112108 1130</td>
<td>113008 1133</td>
<td>EMG</td>
<td>EPA 1311/EPA 142600</td>
<td>A12, A2, U, D</td>
<td></td>
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<tr>
<td><strong>Surrogate: 1,2-Dichloroethane-d4</strong></td>
<td>100%</td>
<td>80-120</td>
<td>112108 1130</td>
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<td>ND</td>
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<td>Endrin</td>
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<td><strong>Surrogate: Decachlorophenol</strong></td>
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Microbac Laboratories, Inc., Baltimore Division

Signed: Peter B. Kelly For Michael D. Arbaugh, Customer Services Manager
Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

CERTIFICATE OF ANALYSIS

Severalal 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 08:00; Type: Composite

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<td>2,4,6-Trichlorophenol</td>
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Microbac Laboratories, Inc.-Chicagoland Division

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Microbac Laboratories, Inc., Baltimore Division

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

Page 5 of 11
CERTIFICATE OF ANALYSIS

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

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Microbac Laboratories, Inc., Baltimore Division

[Signature]
Peter B. Kelly For Michael D. Arbaugh, Customer Services Manager
CERTIFICATE OF ANALYSIS

Several 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

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<td>Surrogate: Dibromofluoromethane</td>
<td>93.0%</td>
<td>80-120</td>
<td>112108 1130</td>
<td>113008 1541</td>
<td>EMG</td>
<td>EPA 1311/8260B</td>
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<tr>
<td>Surrogate: 1,2-Dichloroethane-d4</td>
<td>94.4%</td>
<td>80-120</td>
<td>112108 1130</td>
<td>113008 1541</td>
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<tr>
<td>Surrogate: Toluene-d8</td>
<td>79.0%</td>
<td>75-120</td>
<td>112108 1130</td>
<td>113008 1541</td>
<td>EMG</td>
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<tr>
<td>Surrogate: 4-Bromochofluorobenzene</td>
<td>86.1%</td>
<td>60-149</td>
<td>112108 1130</td>
<td>113008 1541</td>
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</tr>
<tr>
<td>TCLP Pesticides by EPA Method 1311/8081A</td>
<td></td>
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<tr>
<td>gamma-BHC</td>
<td>ND</td>
<td>mg/L</td>
<td>112608 0945</td>
<td>120108 1757</td>
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<td>EPA 1311/8081A</td>
<td>U</td>
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<tr>
<td>Heptachlor</td>
<td>ND</td>
<td>mg/L</td>
<td>112608 0945</td>
<td>120108 1757</td>
<td>MST</td>
<td>EPA 1311/8081A</td>
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<tr>
<td>Heptachlor epoxide</td>
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<td>112608 0945</td>
<td>120108 1757</td>
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<td>EPA 1311/8081A</td>
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<tr>
<td>Endrin</td>
<td>ND</td>
<td>mg/L</td>
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<td>120108 1757</td>
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<tr>
<td>Methoxychlor</td>
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<td>mg/L</td>
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<td>120108 1757</td>
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<tr>
<td>Toxaphene</td>
<td>ND</td>
<td>mg/L</td>
<td>112608 0945</td>
<td>120208 1124</td>
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<tr>
<td>Technical Chlordane</td>
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<td>mg/L</td>
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<td>120208 1124</td>
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<td>Surrogate: Tetrachloro- o-xylene</td>
<td>33.5%</td>
<td>30-109</td>
<td>112608 0945</td>
<td>120208 1124</td>
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<td>Surrogate: Decachlorophenyl</td>
<td>61.5%</td>
<td>30-112</td>
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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

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

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Result</th>
<th>Reporting Limit</th>
<th>Units</th>
<th>Prepared</th>
<th>Analyzed</th>
<th>Analyst</th>
<th>Method</th>
<th>Notes</th>
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<td>mg/L</td>
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<td>Total Cresols</td>
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<td>2,4,6-Trichlorophenol</td>
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<td>Surrogates: 2,4,6-Trichlorophenol</td>
<td>106%</td>
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### TCLP Herbicides

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<th>Reporting Limit</th>
<th>Units</th>
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<th>Analyzed</th>
<th>Analyst</th>
<th>Method</th>
<th>Notes</th>
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<td>2,4,5-TP (Silvex)</td>
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<td>2,4-D</td>
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<td>120308 0000</td>
<td>JMW</td>
<td>EPA 8151A</td>
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</tbody>
</table>

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.

Peter B. Kelly For Michael D. Arbaugh, Customer Services Manager
Z8  
>200 °F

V1  
CCV recovery was above acceptance limits. The concentration was below the reporting limit.

U  
Sample concentration is less than the MDL.

R3  
Sample Duplicate RPD was out of acceptance limits. The result concentration was within 5 times the reporting limit and the difference was less than the reporting limit.

Q1  
Sample received with head space.

M5  
The matrix spike recovery was biased low, the reported result is estimated.

M1  
The matrix spike recovery was out of acceptance limits. The post digestion spike recovery was acceptable.

L3  
The LCS recovery was below the laboratory acceptance limits. The reported result is estimated.

L2  
The LCS recovery was above the laboratory acceptance limits. The target analyte concentration was below the reporting limit.

L1  
The LCS recovery was above the laboratory acceptance limits. The reported result is estimated.

H1  
Sample analyzed past maximum recommended holding time.

D  
Sample Diluted

A2  
Results expressed as mg/L. TCLP extract after performing total analysis of the sample and adjusting the result to reflect the 20 times dilution in the TCLP extraction procedure.

A12  
Sample analyzed with headspace.

DE  
Analyze DETECTED

ND  
Analyze NOT DETECTED at or above the reporting limit

NR  
Not Reported

dry  
Sample results reported on a dry weight basis

RPD  
Relative Percent Difference

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

Peter B. Kelly For Michael D. Arbaugh, Customer Services Manager
Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

CERTIFICATE OF ANALYSIS

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

Project: NON-NPDES
Report: 08K0485
Project Number: NON-NPDES
Reported: 12/05/2008 11:56
Project Manager: Russ Becker

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 analyses 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

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<tr>
<th>Cooler ID:</th>
<th>Default Cooler</th>
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<tr>
<td>Custody Seals Intact:</td>
<td>No</td>
<td>COC/Labels Agree: No</td>
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<tr>
<td>Containers Intact:</td>
<td>No</td>
<td>Correct Preservation: No</td>
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<tr>
<td>Received On Ice:</td>
<td>No</td>
<td>Correct Number of Containers Received: No</td>
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<tr>
<td>Radiation Scan Acceptable:</td>
<td>No</td>
<td>VOAs Without Headspace: No</td>
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<tr>
<td>COC Present:</td>
<td>No</td>
<td>Sufficient Sample Volume: No</td>
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<tr>
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<td>--------------</td>
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<tr>
<td>East Pot</td>
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</tr>
<tr>
<td>West Pot</td>
<td>11/19</td>
<td>X</td>
</tr>
</tbody>
</table>

Relinquished By (signature)  
Date & Time: 11/20/07

Relinquished By (signature)  
Date & Time: 11/20/07

Relinquished By (signature)  
Date & Time: 11/20/07
ISG Sparrows Point LLC
1430 Sparrows Point Boulevard
Baltimore, Maryland 21219

February 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 will serve as the spill report for ISG Sparrows Point LLC for January 2008. There were 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,

[Signature]

Robert J. Abate
Manager Safety, Health, and Environment

cc: EPA OPA Book
ISO14000 CFT Members
Plant Maintenance Supervisors
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,

[Signature]

Robert J. Abate
Manager Safety, Health, and Environment

cc:  EPA OPA Book
     ISO14000 CFT Members
     Plant Maintenance Supervisors
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
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.
**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

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<td>1</td>
<td>02/28/08</td>
<td>02/29/08</td>
<td>1029</td>
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<td>02/28/08</td>
<td>02/29/08</td>
<td>1029</td>
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Phase Separation Science, Inc
Sample Receipt Checklist

Wo Number 8022806
Client Name A2Z Environmental Group
Project Name Rectifier Spill
Project Number N/A

Received By Rachel Davis
Date Received 02/28/2008 11:08:00 AM
Delivered By Client
Tracking No Not Applicable
Logged In By Rachel Davis

Shipping Container(s)

<table>
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<tr>
<th>No. of Coolers</th>
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<td>Custody Seals</td>
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<tr>
<td>Seal Condition</td>
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Ice Present
Temp (deg C) 5.3
Temp Blank Present No

Documentation

COC agrees with sample labels? Yes or No
Chain of Custody (COC) Yes or No

Sample Container

Appropriate for Specified Analysis? Yes No
Intact? No
Labeled and Labels Legible Yes No
Total No of Samples Received 1

Preservation

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<td>TOX, TNM, NHS, Total Phos</td>
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<td>Do VOA vials have zero headspace?</td>
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Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling.

Samples Inspected/Checklist Completed By: [Signature] Date: 2/28/08
PM Review and Approval: [Signature] Date: 2/28/08
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,

[Signature]

Robert J. Abate
Manager Safety, Health, and Environment

cc: EPA OPA Book
    ISO14000 CFT Members
    Plant Maintenance Supervisors
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.
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,

[Signature]

Robert J. Abate
Manager Safety, Health, and Environment

cc: EPA OPA Book
    ISO14000 CFT Members
    Plant Maintenance Supervisors
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
Manager Safety, Health, and Environment

cc:   EPA OPA Book
      ISO14000 CFT Members
      Plant Maintenance Supervisors
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,

[Signature]

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,

[Signature]

Robert J. Abate  
Manager, Environmental Affairs

cc: EPA OPA Book  
ISO14000 CFT Members  
Plant Maintenance Supervisors
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,

[Signature]

Robert J. Abate
Division Manager
Environmental Engineering and Affairs

cc: EPA OPA Book
    ISO14000 CFT Members
    Plant Maintenance Supervisors
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,

[Signature]
Robert J. Abate
Division Manager
Environmental Engineering and Affairs

Attachment

CC: EPA OPA Book
    ISO 14000 CFT Members
    Plant Maintenance Supervisors
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 blacktop 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,

[Signature]

Robert J. Abate
Division Manager
Environmental Engineering and Affairs

CC:  EPA OPA Book
     ISO 14000 CFT Members
     Plant Maintenance Supervisors

Severstal Sparrows Point
1430 Sparrows Point Blvd.
Sparrows Point, MD 21219 USA
T: (410)388-8548
F: (410) 388-6629
E: Bob.Abate@severstains.com
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.
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,

[Signature]

Robert J. Abate  
Division Manager  
Environmental Engineering and Affairs

CC:  EPA OPA Book  
ISO 14000 CFT Members  
Plant Maintenance Supervisors
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,

[Signature]

Robert J. Abate
Division Manager
Environmental Engineering and Affairs

Attachment

cc:  EPA OPA Book
     ISO14000 CFT Members
     Plant Maintenance Supervisors
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,

[Signature]

Robert J. Abate
Division Manager
Environmental Engineering and Affairs

CC: EPA OPA Book
ISO 14000 CFT Members
Plant Maintenance Supervisors
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,

[Signature]

Robert J. Abate
Division Manager
Environmental Engineering and Affairs

Attachment
CC: EPA OPA Book
    ISO 14000 CFT Members
    Plant Maintenance Supervisors

Severstal Sparrows Point
1430 Sparrows Point Blvd.
Sparrows Point, MD 21219 USA

T: (410)388-6548
F: (410) 388-6628
E: Bob.Abate@severstalna.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,

[Signature]

Robert J. Abate  
Division Manager  
Environmental Engineering and Affairs

Attachment  
CC: EPA OPA Book  
ISO 14000 CFT Members  
Plant Maintenance Supervisors
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.