

COMPREHENSIVE CORRECTIVE ACTION AND REMEDIAL CONSENT ORDER
FOR TRENTON AND GIBRALTAR FACILITIES
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STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE MANAGEMENT DIVISION
And
ENVIRONMENTAL RESPONSE DIVISION

In the matter of:

DSC LTD., a corporation organized
under the laws of the State of Michigan
and doing business at 1491 West Jefferson Avenue,
City of Trenton, County of Wayne, State of Michigan
and 28000 West Jefferson, City of Gibraltar, County of
Wayne, State of Michigan

WMD Order No. 111-15-99

COMPREHENSIVE CORRECTIVE ACTION AND REMEDIAL CONSENT ORDER
FOR TRENTON AND GIBRALTAR FACILITIES

I. INTRODUCTION

DSC Ltd. ("DSC") owns and operates two industrial properties located at 1491 West Jefferson Avenue in Trenton, Michigan (the "Trenton Facility"), and 28000 West Jefferson, Gibraltar, Michigan (the "Gibraltar Facility") and both legally described in Attachment A. The Trenton Facility and the Gibraltar Facility may be referred to herein collectively as the "Facilities." The Trenton Facility has interim status pursuant to the Resource Conservation and Recovery Act of 1976 ("RCRA"), 42 U.S.C. 6901 et seq., and is subject to certain of the regulations and environmental protection standards of Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended ("NREPA"), MCL 324.11101 et seq., the corrective action requirements of Section 3008(h) of the RCRA, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. Section 6928(h), and the provisions of Part 201, Environmental Response, of the NREPA, MCL 324.20101 et seq. The Gibraltar Facility is subject to Part 201 and, as to limited portions of the Gibraltar Facility, to Part 115, Solid Waste Management, of the NREPA, MCL 324.11501 et seq.

This Comprehensive Corrective Action And Remedial Consent Order ("Consent Order") is being entered into voluntarily between DSC, the Department of Environmental Quality ("DEQ"), and Jennifer M. Granholm, Attorney General for the State of Michigan, pursuant to the authority vested in the DEQ as an authorized state under the RCRA, and pursuant to the authority of Parts 111 and 201 of the NREPA with respect to the Trenton Facility and the Gibraltar Facility. Although the United States Environmental Protection Agency ("U.S. EPA") is not a party to this Consent Order, the DEQ has provided the U.S. EPA with a copy of this Consent Order prior to entry and has received technical input from the U.S. EPA into the terms and conditions set forth herein.

II. DEFINITIONS

- 2.1 "Area of Concern" or "AOC" shall mean any area, place, or property where a release or threat of release, within the meaning of Sections 20101(bb) and 20101(ii) of Part 201 of the NREPA, of a hazardous substance in excess of the concentrations which satisfy the requirements of Section 20101a(1)(a) or (17) or the cleanup criteria for unrestricted residential use under Part 213 of the NREPA has occurred at either of the Facilities or emanates from either of the Facilities and is subject to the requirements of Part 201. For purposes of this Consent Order, an AOC shall not include any area, place, or property at the Trenton Facility that is subject to corrective action under Part 111 of the NREPA.
- 2.2 "Contaminant" shall mean, without limitation, any contaminant as defined by Section 11102(2) of Part 111 of the NREPA; any waste or hazardous waste as defined by Part 2 of the Part 111 administrative rules, including any wastes otherwise excluded pursuant to R299.9204; any hazardous waste or hazardous constituent listed in Appendix VIII of 40 CFR Part 261 or Appendix IX of 40 CFR Part 264; any hazardous substance as defined by 40 CFR Part 302.4; any polluting material listed in the Critical Materials Register pursuant to MCL 323.6b; oil as defined by R323.1151(b); salt as defined by R323.1152(b); any water quality parameters identified in R323.2207(9)(a), (b), and (c); any liquid industrial waste as defined by MCL 323.271(b); and any chemical or other material which is or may become injurious to the public health, safety, welfare, or to the environment.
- 2.3 "Consent Order" shall mean this Consent Order and any attachment hereto, including any future modifications, and any reports, plans, specifications, and schedules required by this Consent Order which, upon approval of the DEQ, shall be incorporated into and become an enforceable part of this Consent Order.
- 2.4 "Day" shall mean a calendar day, unless otherwise noted.
- 2.5 "DEQ" shall mean the Department of Environmental Quality, its successor entities, and those authorized persons or entities acting on its behalf.
- 2.6 "DSC" shall mean DSC Ltd. and its successors and assigns.
- 2.7 "Effective Date" shall mean seven days from the date this Consent Order is signed by the DEQ.
- 2.8 "ERD" shall mean the Environmental Response Division of the DEQ, its successor entities, and authorized persons acting on its behalf.
- 2.9 "Facilities" shall mean the Trenton Facility and the Gibraltar Facility.
- 2.10 "Gibraltar Facility" shall mean DSC's property located at 28000 West Jefferson, Gibraltar, Michigan and legally described in Attachment A.
- 2.11 "Hazardous Substance" shall mean a hazardous substance as set forth in Section 20101(t) of Part 201 of the NREPA.
- 2.12 "Oversight Costs" shall mean costs incurred by the State in implementation, oversight, enforcement, and monitoring of this Consent Order and documentation of compliance with

this Consent Order. Oversight Costs may include costs incurred to monitor corrective action and/or response activities at the Facilities; observe and comment on field activities; review and comment on submissions and remedial action plans; collect and evaluate samples; purchase equipment and supplies to perform or monitor corrective actions and/or response activities relative to the Facilities; attend and participate in meetings; prepare cost reimbursement documentation; and enforce, monitor, and document compliance with this Consent Order.

- 2.13 "Part 111" shall mean Part 111, Hazardous Waste Management, of the NREPA, MCL 324.11101 et seq., MSA 13A.11101 et seq., and its administrative rules ("Part 111 Rules").
- 2.14 "Part 201" shall mean Part 201, Environmental Remediation, of the NREPA, MCL 324.20101 et seq., MSA 13A.20101 et seq., and its administrative rules ("Part 201 Rules").
- 2.15 "Parties" shall mean DSC and the State.
- 2.16 "Remedial Action Plan" or "RAP" shall mean a plan that satisfies the requirements of Part 201 of the NREPA.
- 2.17 "State" or "State of Michigan" shall mean the Department of Attorney General ("DAG") and the DEQ, and any authorized representative acting on their behalf.
- 2.18 "Submittals" shall mean all work plans, documents, schedules, submissions, and reports to be submitted to the DEQ pursuant to this Consent Order, excluding RAPs.
- 2.19 "Trenton Facility" shall mean DSC's property located at 1491 West Jefferson Avenue, Trenton, Michigan and legally described in Attachment A.
- 2.20 "WMD" shall mean the Waste Management Division of the DEQ, its successor entities, and authorized persons acting on its behalf.
- 2.21 "Waste Management Unit" or "WMU" shall mean any discernible unit at the Trenton Facility at which a Contaminant has been or may have been placed at any time irrespective of whether or not the unit was intended for managing waste, or any area at a facility subject to MCL 324.11115(a) at which a Contaminant has been routinely or systematically released, as exemplified by the WMUs identified in Attachment C.
- 2.22 Unless otherwise defined herein, all terms used in this Consent Order which are defined in Part 3 of the NREPA, MCL 324.301, Part 111, or Part 201 shall have the same meaning in this Consent Order as in Part 3, Part 111, and Part 201 of the NREPA, as provided herein:
 - A. With respect to WMUs: Part 3 and Part 111 of the NREPA.
 - B. With respect to AOCs: Part 3 and Part 201 of the NREPA.

III. PARTIES BOUND

- 3.1 The provisions of this Consent Order shall only apply to and be binding upon the Parties and, to the extent provided by law, upon (i) their officers, directors, agents, employees,

successors, and assigns, and (ii) all persons including, but not limited to, contractors and consultants acting on behalf of DSC.

- 3.2 Except as may be approved by the State, no change in ownership or corporate or partnership status of DSC including, but not limited to, any transfer of assets, or real or personal property relating to the Facilities or any conveyance of title, easement, or other ownership interest in either of the Facilities, or a portion of either of the Facilities, shall affect DSC's obligations under this Consent Order. DSC will be solely responsible for and liable for any failure to carry out all activities required of DSC by the terms and conditions of this Consent Order, regardless of DSC's use of employees, agents, contractors, or consultants to perform any such tasks.
- 3.3 DSC shall provide a copy of this Consent Order to all contractors and consultants retained to conduct or monitor any portion of the work performed pursuant to this Consent Order within one (1) week of the Effective Date of this Consent Order or the date of retention of such person(s), whichever occurs later, and shall condition all such contracts on compliance with the terms of this Consent Order. Notwithstanding the terms of any such contract, DSC is responsible for compliance with the terms of this Consent Order.
- 3.4 DSC shall provide a copy and give notice of this Consent Order to any successor in interest prior to transfer of ownership or lease interest of the Facilities or a portion thereof and shall notify the DEQ, in writing, no later than thirty (30) days prior to such transfer. DSC shall also comply with the requirements of Section 20116 of the NREPA.

IV. STATEMENT OF PURPOSE

By entering into this Consent Order, the mutual objectives of the Parties are to enable the development and implementation of a comprehensive risk-based remedial program for the Facilities that allows for some or all of the business operations to resume and provides for the performance of corrective actions and response activities set forth in Section VIII (Work to be Performed) of this Order pursuant to Parts 111 and 201 of the NREPA. These objectives shall be accomplished through DSC's implementation of the Scope of Work, attached hereto as Attachment B, in accordance with the terms and conditions provided in this Consent Order. The DEQ and DSC further recognize that there may be a requirement to transfer ownership of some or all of DSC's assets to third parties to allow for the development and redevelopment of the Facilities.

V. STIPULATIONS

DSC and the DEQ, solely for purposes of this Consent Order, hereby stipulate as follows:

- 5.1 Pursuant to its authority under Part 111 of the NREPA, the DEQ has promulgated administrative rules pertinent to the identification, generation, treatment, storage, disposal, and transportation of hazardous wastes in Michigan. These rules can be found in the Michigan Administrative Code, 1996 AACCS, R 299.9101 -11107.
- 5.2 On October 30, 1986, the State of Michigan was granted final authorization by the Administrator of the U.S. EPA, pursuant to Section 3006(b) of the RCRA, 42 U.S.C. 6926(b), to administer a hazardous waste program in Michigan in lieu of the federal program, 40 CFR Part 272, Subpart X, 51 Federal Register 36804 (October 16, 1986). This authorization is periodically updated to maintain authorization. Section 3008 of the

RCRA, 42 U.S.C. 6928, provides that the U.S. EPA may enforce state programs in authorized states.

5.3 Section 11126 of Part 111 of the NREPA states that:

The Department shall coordinate and integrate the provisions of this act for purposes of administration and enforcement with appropriate state and federal law including . . . the resource conservation and recovery act of 1976, 42 U.S.C. 6901 to 6987; . . . The coordination and integration shall be effected only to the extent that it can be done in a manner consistent with the goals and policies of this part.

- 5.4 The DEQ is authorized by Sections 11115a and 11151(1) of Part 111 of the NREPA to enter consent orders and to issue orders to an owner and/or operator to comply with Part 111, including the corrective action requirements under Part 111. Further, the DAG and the DEQ are authorized by Sections 20119 and 20134 of Part 201 of the NREPA to enter into consent orders concerning the performance of response activities under Part 201 with persons who are liable under Section 20126 of the NREPA. Accordingly, the DAG and the DEQ have authority to issue and enter into this Consent Order with DSC with respect to the Facilities.
- 5.5 DSC stipulates, without the admission of facts alleged herein or any liability, to the issuance and entry of this Consent Order to comply by consent and stipulates that the termination of this matter by a final order to be entered as a Consent Order is proper and acceptable. This Consent Order, thus, shall be considered a final order of the DEQ and shall become effective on the Effective Date, as defined in Paragraph 2.7 of this Consent Order.
- 5.6 DSC further stipulates that it consents to and agrees not to contest the State's jurisdiction and authority to execute this Consent Order and to enforce its terms.
- 5.7 DSC further stipulates that it will preserve its ability to fulfill its obligations to implement the corrective actions and response activities required under this Consent Order by reserving for DSC and the DEQ a right of access to implement the corrective actions and/or response activities required under this Consent Order in any lease, purchase contract, or other agreement entered into by DSC which transfers to another party a right of control over the Facilities or portion thereof.

VI. FINDINGS OF FACT BY THE DEQ

6.1 Trenton Facility

A. History

1. The Trenton Facility owned by DSC is located at 1491 West Jefferson Avenue, Trenton, Michigan. The Facility coordinates are 83 degrees, 10 minutes, west longitude, and 42 degrees, 9 minutes, north latitude.
2. The Trenton Facility is an industrial site occupying a 272.75 acre tract of land located along the western bank of the Trenton Channel of the Detroit River in Wayne County, Michigan. The Trenton Facility is bounded on the

south by industrial property, then park land atop an abandoned landfill. The Trenton Facility is bounded on the west by West Jefferson Avenue, then commercial properties, then a railroad right of way. The Trenton Facility is bounded on the north by Monguagon Creek, then Bridge Road, then other industrial properties.

3. The Trenton Facility was previously owned and operated as an integrated steel and iron production facility by McLouth Steel Products Corporation ("McLouth"). McLouth used both basic oxygen furnaces (BOF) and electric arc furnaces (EAF) to produce steel. During its operation of the Facility, McLouth established and operated a storage pile for EAF air pollution control dust, a listed hazardous waste pursuant to Part 111 of the NREPA and the RCRA. McLouth filed a notification of waste activity and a RCRA Part A permit application on November 17, 1980 for the EAF dust pile. The Trenton Facility's Identification Number is MID 017 422 304. On September 29, 1995, McLouth filed for Chapter 11 protection in the Bankruptcy Court for the Eastern District of Michigan, Southern Division. The Trenton Facility was idled in stages during late 1995 and early 1996, with production activities completely terminated by April 1996.
4. On July 11, 1996, the sale of McLouth's assets, including the Trenton Facility, to Hamlin Holdings, Inc., was approved by the Bankruptcy Court. The DEQ filed a claim against the McLouth Estate with respect to environmental conditions existing as of 1996 and was provided information concerning DSC's then-proposed purchase of assets from McLouth. On August 14, 1996, the closing on the sale of McLouth's assets, including the Trenton Facility, to Hamlin Holdings, Inc. took place, at which time title to the Trenton Facility, as well as other assets, were, by contemporaneous assignment, transferred to DSC. The Trenton Facility remained idle after the acquisition by DSC until July 15, 1998. At that time, DSC restarted one acid pickling line and the Facility's wastewater treatment system.
5. On November 4, 1996, DSC filed a Notification of Hazardous Waste Activity Form for the Trenton Facility with the U.S. EPA pursuant to Section 3010 of the RCRA. DSC's U.S. EPA Identification Number for the Trenton Facility is MID 017 422 304. In this notification, DSC identified itself as a generator of hazardous waste and an owner/operator of a treatment, storage, and disposal facility. DSC filed a Part A hazardous waste permit application for the Facility on September 18, 1997. The Facility obtained interim status pursuant to the RCRA and Part 111 of the NREPA.
6. In its Part A hazardous waste permit application, dated September 18, 1997, DSC identified itself as handling the following hazardous wastes at the Trenton Facility as defined in R 299.9217 and R 299.9220 by the waste codes:

Waste Code

Description

K061

Emission control dust/sludge from the primary production of steel in electric furnaces

7. WMUs have been determined to be present at the Trenton Facility. The WMUs identified as of the Effective Date of this Consent Order are provided and attached hereto as Attachment C.
8. AOCs have been determined to be present at the Trenton Facility. The AOCs that have been identified as of the Effective Date of this Consent Order are provided and attached hereto as Attachment D.

B. Trenton Facility Geological Conditions and Aquifers

1. Knowledge of site stratigraphy and hydrogeology of the Trenton Facility is based on preliminary site assessment activities performed by Techna Corporation ("Techna") on behalf of DSC and described in the "Summary of Initial Site Assessment Results DSC Ltd. - Trenton Plant" ("Initial Site Assessment") prepared by Techna, dated October 20, 1997, and the "RCRA Facility Assessment Report" prepared by Techna, dated September 22, 1998, and revised by Environmental Strategies Corporation on November 2, 1999.
2. The Trenton Facility generally consists of five feet to 25 feet of fill overlying a native, lacustrine clay stratum, which in turn overlies limestone bedrock. The underlying native clay layer typically varies in thickness from ten feet to 20 feet, except in the northeast quadrant of the Trenton Facility. The clay layer appears to thin toward the north and east, where a soil boring indicated the fill is over bedrock, probably representing historical reclamation of low lying river edges. The size of this area has not been defined.
3. The uppermost zone of saturation was observed in the upper fill stratum, generally bounded by the underlying clay layer. This groundwater lies in a shallow, perched zone. The receiving water body for groundwater in this zone is the Detroit River. Groundwater was not observed at the clay-bedrock interface, but is suspected to be present deeper in the limestone, possibly flowing west/northwest toward the Sibley Quarry.

C. Trenton Facility Groundwater Flow Conditions

1. Elevations of the shallow perched groundwater table and river surface at the Trenton Facility were measured by Techna on August 12-13, 1997. The potentiometric surface map indicates that groundwater flow is generally from west to east toward the Detroit River. The groundwater flow appears to have a southerly component in the southwest and south central portions of the Trenton Facility. A groundwater mound is indicated near the south central part of the site, near the Sedimentation Basin.

D. Previous Hydrogeological Investigation Findings for the Trenton Facility

1. Hydrogeological investigative activities at the Trenton Facility were conducted as part of the Initial Site Assessment by Techna during 1997. Groundwater monitoring wells were placed near key WMUs and along the site perimeter near the Detroit River. The Initial Site Assessment identified

one potential Contaminant plume in the groundwater at the Trenton Facility. This plume is characterized by elevated levels of metals and low pH, and appears to arise from sources associated with McLouth's historic acid pickling operations. This plume is in the vicinity of the Acid Neutralization Plant (WMU-6), and the Acid Pickling Line Secondary Containment (WMU-8).

2. Soil samples collected during the Initial Site Assessment identified concentrations of most metals above DEQ default background concentrations. Two samples, a surficial sample near the pickling line, and a surficial sample near the EAF Bag House (WMU-47) contained lead at concentrations above the industrial direct contact level.

- E. The above-referenced hydrogeological investigations and other information in the DEQ files document that Contaminants have been released to the environment from the Trenton Facility. All or substantially all of these are thought to have existed at the time of the acquisition of the Trenton Facility by DSC.

6.2 Gibraltar Facility

A. History

1. The Gibraltar Facility owned by DSC is located at 28000 West Jefferson Avenue, Gibraltar, Michigan. The Facility coordinates are 83 degrees, 12 minutes, 0 seconds, west longitude, and 42 degrees, 6 minutes, 300 seconds, north latitude.
2. The Gibraltar Facility is an industrial site which was previously owned and operated by McLouth as a cold roll steel mill. The Gibraltar facility occupies an approximate 200 acre tract of land and is bounded on the east by West Jefferson Avenue, to the South by Gibraltar Road, to the North by adjacent property, and to the west by a railroad right-of-way. McLouth operated a licensed Type III landfill on property adjacent to the Gibraltar Facility which is not a part of the Gibraltar Facility for the purposes of this Consent Order.
3. On July 11, 1996, the sale of McLouth's assets, including the Gibraltar Facility, to Hamlin Holdings, Inc., was approved by the Bankruptcy Court. On August 14, 1996, the closing on the sale of McLouth's assets, including the Gibraltar Facility, to Hamlin Holdings, Inc. took place, at which title to the Gibraltar Facility, as well as other assets, were, by contemporaneous assignment, transferred to DSC. The Gibraltar Facility has remained idle since its acquisition by DSC.
4. AOCs have been determined to be present at the Gibraltar Facility. The AOCs that have been identified as of the Effective Date of this Consent Order are provided and attached hereto as Attachment D.

B. Gibraltar Facility Geological Conditions and Aquifers

1. Knowledge of site stratigraphy and hydrogeology of the Gibraltar Facility is based on preliminary site assessment activities performed by Techna

Corporation ("Techna") on behalf of DSC and described in the "Summary of Initial Site Assessment Results DSC Ltd. - Gibraltar Plant" ("Initial Site Assessment") prepared by Techna, and dated October 20, 1997.

2. The Gibraltar Facility generally consists of fill overlying a lacustrine clay stratum, which overlies a limestone bedrock unit. The uppermost zone of saturation was observed in the fill material. The receiving water body for groundwater in this zone appears to be the Detroit River.

C. Gibraltar Facility Groundwater Flow Conditions

1. Elevations of the shallow perched groundwater table and river surface at the Gibraltar Facility were measured by Techna on August 8, 1997. The potentiometric surface map indicates that a groundwater mound exists near the Tandem Mill Pond and Area 1B. The groundwater generally flows in a radial manner to the east, north-northwest, and south.

D. Previous Hydrogeological Investigation Findings for the Gibraltar Facility

1. Hydrogeological investigative activities at the Gibraltar Facility were conducted as part of the Initial Site Assessment by Techna during 1997. No off-site migration of Hazardous Substances in the groundwater were identified by the Initial Site Assessment.

- E. The above-referenced hydrogeological investigations and other information in the DEQ files document that Hazardous Substances have been or are threatened to be released to the environment at the Gibraltar Facility. All or substantially all of these releases or threat of releases of Hazardous Substances are thought to have existed at the time of the acquisition of the Gibraltar Facility by DSC.

VII. DETERMINATIONS

- 7.1 Based on the Findings of Fact set out above, the DEQ makes the following determinations:

- A. DSC is a "person" within the meaning of Section 301(g) of the NREPA and R 299.9106(i).
- B. DSC owned and operated the Trenton Facility after November 19, 1980, the applicable date which renders facilities subject to interim status requirements or the requirement to have a permit under Sections 11118 and 11123 of Part 111 of the NREPA, R 299.9601, R 299.9502, and Sections 3004 and 3005 of the RCRA, 42 U.S.C. Sections 6924 and 6925.
- C. Certain wastes and waste constituents found at the Trenton Facility are Contaminants. These may also be hazardous wastes or hazardous constituents within the meaning of R 299.9201 – R 299.9214 and R 299.9217 – R 299.9226.
- D. There is, has been, or is a potential for, a release of Contaminants into the environment from DSC's Trenton Facility.

- E. DSC became the owner and/or operator, within the meaning of Part 201 of the NREPA, of the Trenton Facility and Gibraltar Facility after June 5, 1995, and did not complete an adequate baseline environmental assessment within forty-five (45) days of purchase. Therefore, DSC is legally liable, pursuant to Section 20126(1)(c) of Part 201 of the NREPA, for release(s) and threat of releases(s) of Hazardous Substances in excess of the concentrations which satisfy the requirements of Section 20120a(1)(a), or 20120a (17), or the cleanup criteria for unrestricted residential use under Part 213, Leaking Underground Storage Tanks, of the NREPA at the Facilities.
- F. The actions required by this Consent Order are necessary to protect human health and welfare and the environment.

VIII. WORK TO BE PERFORMED

- 8.1 The DEQ and DSC recognize that it is in the public interest to coordinate DSC's obligations to perform the requirements under this Consent Order in a manner which allows for the development and redevelopment of the Trenton Facility and the Gibraltar Facility by DSC or others. DSC shall implement the requirements of this Consent Order pursuant to the Prioritization Schedule (Attachment E) subject to Paragraph 8.5(D) or Section X (Extensions and Modifications).
- 8.2 DSC agrees to, and is hereby ordered to, perform the work specified in this Section VIII (Work to be Performed). All work undertaken pursuant to this Consent Order shall be performed, at a minimum, in accordance with the requirements specified below, and the Quality Assurance Project Plan and the Health and Safety Plan provided in Paragraphs 8.3 and 8.4, respectively.
 - A. As to the Trenton Facility WMUs identified in Attachment C and other WMUs identified after the Effective Date of this Consent Order pursuant to Paragraph 8.8 of this Consent Order:
Part 111 of the NREPA, the RCRA, and other applicable federal laws and their implementing rules and regulations. Relevant guidance as to the areas described in this Paragraph 8.2(A) may include, but is not limited to: the "RCRA Facility Investigation Guidance" (U.S. EPA 530/SW89-031); the "RCRA Groundwater Monitoring Technical Enforcement Guidance Document" (OSWER Directive 9950.1, September 1986); "Test Methods for Evaluating Solid Waste" (SW-846, Update III, December 1996); "Construction Quality Assurance for Hazardous Waste Land Disposal Facilities" (U.S. EPA 530/SW-85-031, July 1986); "Interim Guidelines and Specifications For Preparing Quality Assurance Project Plans" (U.S. EPA QAMS-005/80, December 1980); "Remedial Action at Waste Disposal Sites" (U.S. EPA/625/6-85/006); and "Data Quality Objectives for Remedial Response Activities" (U.S. EPA/540/G-87/003 and 004).
 - B. As to the Trenton Facility AOCs identified in Attachment D and other AOCs identified after the Effective Date of this Consent Order pursuant to Paragraph 8.8 of this Consent Order:

Part 201 of the NREPA and its implementing rules, and Operational Memoranda No. 6, Revision 5 (Analytical Method Detection Level Guidance for Environmental Contamination Response Activities Under Part 201, Environmental Remediation, of

the Natural Resources and Environmental Protection Act), No. 13 (Data Quality Objectives, Review of TDML Excursions and Evaluation of Laboratory Data), No. 16 (Sample Preservation, Sample Handling and Holding Time Guidelines for the Act 307 Program), and subsequent amendments thereto;

- C. As to the Gibraltar Facility AOCs identified in Attachment D and other AOCs identified after the Effective Date of this Consent Order pursuant to Paragraph 8.8:

Part 201 of the NREPA and its implementing rules, and Operational Memoranda No. 6, Revision 5 (Analytical Method Detection Level Guidance for Environmental Contamination Response Activities Under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act), No. 13 (Data Quality Objectives, Review of TDML Excursions and Evaluation of Laboratory Data), No. 16 (Sample Preservation, Sample Handling and Holding Time Guidelines for the Act 307 Program), and subsequent amendments thereto.

- 8.3 Within sixty (60) days of the Effective Date of this Consent Order, DSC shall submit to the DEQ a Quality Assurance Project Plan ("QAPP") for the Facilities, which describes the quality control, quality assurance, sampling protocol, and chain-of-custody procedures that shall be implemented in carrying out the tasks required by this Consent Order pursuant to the requirements of Section XI (Quality Assurance).

- 8.4 Within sixty (60) days of the Effective Date of this Consent Order, DSC shall submit to the DEQ separate Health and Safety Plans for each of the Facilities developed in accordance with the standards promulgated pursuant to the National Contingency Plan, 40 CFR 300.150, the Occupational Safety and Health Act of 1970, 20 CFR 1910.120, and the Michigan Occupational Safety and Health Act, 1974 PA 154, MCL 408.1001 et seq. The Health and Safety Plan is not subject to the DEQ's approval as required by Section IX (Submittals and Approvals) of this Consent Order.

8.5 Interim Measures ("IM")

- A. DSC shall conduct IM at the Facilities in accordance with this Paragraph 8.5 and the Prioritization Schedule, attached hereto as Attachment E.
- B. Within ninety (90) days of the Effective Date of this Consent Order, DSC shall submit to the DEQ, for review and approval, separate written IM work plans for each of the Facilities for implementation of the IMs identified in subparagraphs 8.5(B)(1) and 8.5(B)(2). The IM work plan shall be developed in accordance with the Prioritization Schedule, and shall comply with the requirements of this paragraph. The IM work plan shall ensure that the interim measures are designed to mitigate a threat to human health or the environment and are consistent with and integrated into any long-term corrective measures and/or RAPs for the Facilities. The IM work plan shall document the procedures to be used by DSC for the implementation of the interim measures and shall include, but not be limited to: the objectives of the IM; the design, construction, and required permits for any equipment or engineered control systems; an operation and maintenance plan; a monitoring plan; detailed implementation schedules; and data and activity reporting requirements.

1. The Trenton Facility IM:
 - a. Construction of a fence at the Sedimentation Basin (WMU 1);
 - b. Removal of accumulated grit and other solids adjacent to the Central Wastewater Treatment Plant ("CWWTP") grit chambers (WMU 12);
 - c. Measures to remediate levels of lead above direct contact limits in the immediate vicinity of the EAF Bag house (WMU-47); and
 - d. Measures to remediate levels of lead above direct contact limits in the KO61 Settling Basin (WMU 25).
 2. The Gibraltar Facility IM:
 - a. Continuation of measures required by the unilateral administrative order issued by the U.S. EPA on June 22, 1999, pursuant to Section 7003 of the RCRA to address the exposure of migratory birds to floating oil in the Tandem Mill Pond.
- C. Within thirty (30) days of receipt of the DEQ's written approval of an IM work plan, DSC shall commence work and implement that approved IM work plan. DSC shall continuously implement and maintain the IM as required by the approved IM work plan until the clean-up standard has been achieved and cessation of the IM has/have been approved by the DEQ, or the IM is/are replaced by a DEQ-approved final corrective measure and/or RAP.
- D. In the event DSC acquires knowledge of conditions at the Facilities, other than the conditions being addressed through the implementation of IMs in accordance with subparagraphs 8.5(B)(1) and 8.5(B)(2) of this Consent Order, which pose an imminent or substantial threat to human health or the environment including, but not limited to, imminent direct contact hazards and/or fire or explosion hazards, DSC shall:
1. Notify the DEQ Project Coordinator designated under Section XIX (Project Coordinators, Reporting, and Document Certification) orally within forty-eight (48) hours of discovery by DSC. In the event the DEQ's designated Project Coordinator is unavailable, DSC shall notify the alternate DEQ Project Coordinator.
 2. DSC shall, within fourteen (14) days, provide written notification to the DEQ summarizing the immediacy and magnitude of the threat to human health or the environment.
 3. Within thirty (30) days of orally notifying the DEQ, DSC shall submit to the DEQ for review and approval, a modified Prioritization Schedule and modified IM Work Plan consistent with the modified Prioritization Schedule to reflect the additional IM to be implemented by DSC to mitigate the identified threat.

4. Upon DEQ approval of the modified Prioritization Schedule pursuant to Section X (Extensions and Modifications) of this Consent Order, and IM Work Plan pursuant to Paragraph 9.1 of this Consent Order, DSC shall implement the modified IM work plan in accordance with the schedule contained therein.
5. All IMs shall be consistent with and integrated into any long-term remedial approach at the Facilities.

8.6 Trenton Facility: WMUs

A. Investigation and Corrective Measures

1. DSC shall investigate and evaluate remedial alternatives and, except as provided in subparagraph 8.6(B) of this paragraph, implement the Corrective Measures ("CM") at the Trenton Facility based on the Scope of Work defined in Attachment B and the Prioritization Schedule as approved by the DEQ. The CM shall be implemented in accordance with the Prioritization Schedule and the applicable parts of the Scopes of Work attached hereto as Attachments F, G, and H.
2. DSC shall, pursuant to Paragraph 8.12 of this Consent Order, submit the written CM work plan(s) to the DEQ for review and approval.
3. DSC shall commence implementation of the CM work plan(s) in accordance with the schedules contained therein, within thirty (30) days of receipt of the DEQ's written approval of the work plan(s).

B. Determination of No Further Action

1. After completion of, and based on the results of, part or all of the CM at an individual WMU and other relevant information, DSC shall submit a written request to the DEQ if DSC wishes to terminate corrective action for a specific WMU identified in Attachment C or as provided in Paragraph 8.8 of this Consent Order. DSC must conclusively demonstrate that there have been no releases of Contaminants from the WMU or that the WMU does not pose a threat to public health, safety, welfare, or the environment, or that a WMU has been remediated to applicable clean-up criteria established pursuant to Section 20120a of Part 201 of the NREPA and, therefore, poses no unacceptable threat to public health, safety, welfare, or the environment.
2. If, based upon a review of DSC's request pursuant to subparagraph 8.6(B)(1) of this paragraph, the results of the completed phases of the CM, and other relevant information, the DEQ determines that the demonstration required by subparagraph 8.6(B)(1) of this paragraph has been made, the DEQ will approve the request for a determination of no further action.
3. A determination of no further action shall not preclude the DEQ from requiring further corrective action at a later date prior to the termination of this Consent Order, pursuant to Section XXV (Termination) of this Consent

Order, if new information or subsequent analysis indicates that a release or potential release of a Contaminant(s) from a WMU at the Trenton Facility may pose a threat to public health, safety, welfare, or the environment.

C. Cost Estimate for Corrective Action

1. DSC has prepared a detailed written cost estimate for the CM at the Trenton Facility as set out in the Prioritization Schedule.
2. Until the DEQ notifies DSC, in writing, that DSC is no longer required by R 299.9713 to maintain financial assurance for the CM at the Trenton Facility which are subject to Part 111 of the NREPA, DSC shall adjust the CM cost estimate for inflation within sixty (60) days prior to the anniversary of the date of the establishment of the financial instrument[s] used to demonstrate financial assurance for the CM.
3. DSC shall recalculate the CM cost estimate within thirty (30) days after the DEQ has approved a modification of a CM work plan. Until the DEQ notifies DSC, in writing, that DSC is no longer required to maintain financial assurance for the CM at the Trenton Facility, DSC shall revise the CM cost estimate and the Prioritization Schedule whenever there is a change in the Trenton Facility's CM work plans, if the change in the CM work plans increases the cost of the CM.
4. DSC shall keep the latest CM cost estimate for the Trenton Facility at the Trenton Facility.

8.7 Trenton and Gibraltar Facilities: AOCs

A. Interim Response Activities ("IRA")

1. Based upon the Prioritization Schedule (Attachment E), DSC shall conduct an IRA to investigate, evaluate remedial alternatives, and, except as provided by subparagraph 8.7(B), conduct response activities for the AOCs at the Facilities identified in Attachment D and as provided in Paragraph 8.8 of this Consent Order.
2. DSC shall, pursuant to Paragraph 8.12 of this Consent Order, submit the IRA work plan(s) to the DEQ for review and approval.
3. DSC shall, within thirty (30) days of receipt of the DEQ's written approval of the work plan(s), implement the approved work plan(s).

B. Determination of No Further Response Action at the Facilities

1. After completion of, and based on the results of, part or all of the IRA and other relevant information, DSC shall submit a written request to the DEQ if DSC wishes to terminate response activities for a specific AOC identified in Attachment D and as provided in Paragraph 8.8 of this Consent Order. DSC must demonstrate that it has satisfied the closure criteria and other requirements of section 20120a of Part 201 of the NREPA applicable to the

AOC and, therefore, the AOC poses no unacceptable threat to the public health, safety, welfare, or the environment.

2. If, based upon a review of DSC's request pursuant to subparagraph 8.7(B)(1), the results of the completed phases of the IRA work plan(s), and other relevant information, the DEQ determines that the closure criteria and other applicable requirements of Section 20120a of Part 201 of the NREPA have been satisfied, the DEQ will approve, subject to the conditions and requirements of subparagraph 8.7(C)(2), the request for a determination of no further action.
3. A determination of no further action shall not preclude the DEQ from requiring further response activities for the AOC at a later date prior to the termination of this Consent Order pursuant to Section XXV (Termination) of this Consent Order, if new information or subsequent analysis indicates that a release or potential release of Hazardous Substances for the AOC may pose a threat to public health, safety, welfare, or the environment.

C. Remedial Action Plans

1. Within sixty (60) days of completion of all of the IRA work plan(s) for the Trenton Facility or Gibraltar Facility, DSC shall develop and submit to the DEQ for review and approval, separate RAPs for the Trenton Facility and the Gibraltar Facility, as appropriate. Each RAP shall be consistent with the requirements of Part 201 of the NREPA and shall address all known AOCs at the Trenton Facility or Gibraltar Facility, as appropriate. The Parties acknowledge that pursuant to Section 20126(4)(a) of the NREPA, certain portions of the Trenton Facility are being addressed under the corrective action requirements of Part 111 of the NREPA utilizing applicable clean-up criteria established pursuant to Section 20120(a) of Part 201 of the NREPA. Except as may be additionally required under subparagraph 8.7(C)(2), below, and subparagraph 8.7(B)(3), above, the Parties agree that the IM, CM, and IRA conducted in accordance with DEQ-approved work plans at each of the Facilities shall, collectively, constitute the RAP for the Facility.
2. DSC acknowledges that if it chooses to submit a RAP pursuant to Section 20120a(1)(b) – (j) and/or 20120a(2) of the NREPA, the RAP shall include all technical and administrative components required for the clean-up category proposed, pursuant to Sections 20118, 20120b(2) – (4), and 20120d of the NREPA. All technical and administrative requirements submitted to the DEQ, which in combination with the IM, CM and IRA constitute a DEQ-approved RAP, shall become attachments to this Consent Order and an enforceable part thereof.
3. DSC shall, within thirty (30) days of receipt of the DEQ's written approval of the RAP, implement the RAP.

8.8 Additional WMUs and AOCs.

The DEQ and DSC recognize that during the course of implementing this Consent Order, WMUs, and AOCs, in addition to those set out in Attachments C and D, may be identified at the Facilities. In the event that such areas are identified, DSC agrees that:

A. Written Notification

1. Within thirty (30) days of discovery by DSC of a new release of a Contaminant from a WMU at the Trenton Facility, or a release of a Hazardous Substance which constitutes an AOC at the Facilities, DSC shall provide written notification to the DEQ Project Coordinator specified in Section XIX (Project Coordinators, Reporting, and Document Certification).
2. The written notification shall include, to the extent known by DSC, the following information:
 - a. The location of the WMU or AOC on the Trenton Facility or Gibraltar Facility topographic map.
 - b. The designation of the type of WMU or AOC.
 - c. The general dimensions and structural description including any available drawings of the WMU or AOC.
 - d. The date the WMU was operated, if applicable.
 - e. Specification of all waste(s) that have been managed in the WMU.
 - f. All available information pertaining to any release of a Contaminant or Hazardous Substance from the WMU or within the AOC.
3. Based on a review of all of the information and subject to the provisions of Paragraph 10.3 of this Consent Order, the DEQ may require the implementation of IM, corrective action, or response activities for the newly identified WMU or AOC, subject to a modification of the Prioritization Schedule (Attachment E), to the extent necessary to comply with the applicable clean-up criteria established pursuant to section 20120(a) of Part 201 of the NREPA.
4. DSC shall submit a work plan to the DEQ consistent with the Prioritization Schedule, as modified, and written notification by the DEQ that the implementation of IM, corrective action, or response activities for the release is required to satisfy the applicable clean-up criteria established pursuant to Section 20120(a) of Part 201 of the NREPA. Such work plan shall be submitted to the DEQ for review and approval within forty-five (45) days after receipt of written notification by the DEQ that the implementation of IM, corrective action, or response activities for the release is required.
5. In the event the DEQ determines additional IM, corrective action, or response activities are required to be implemented, the Parties agree to

modify the Prioritization Schedule, as appropriate, in accordance with Section X (Extensions and Modifications) of this Consent Order.

8.9 Financial Assurance for Corrective Action and Response Activities at the Facilities

A. DSC shall establish a Trust Fund as specified in this paragraph.

1. Within fifteen (15) days following the Effective Date of this Consent Order, DSC shall submit three (3) originally-signed duplicate originals of the Trust Agreement in Attachment J of this Consent Order to the DEQ for signature. The Trust Agreement submitted to the DEQ shall be signed by both DSC and the trustee. Upon receipt of a Trust Agreement that satisfies this paragraph, the DEQ shall sign the Trust Agreement and then send one fully-executed Trust Agreement each to DSC and the trustee.
2. DSC shall establish the Trust Fund within fifteen (15) days after it receives a fully executed copy of the Trust Agreement from the DEQ with an initial payment of three hundred fifteen thousand two hundred twenty-six dollars (\$315,226.00). In addition, DSC shall make payments into the Trust Fund on or before the following dates:

<u>Due Date</u>	<u>Amount of Payment</u>
March 31, 2000	\$434,716.00
June 30, 2000	\$449,701.00
September 30, 2000	\$300,357.00
December 31, 2000	\$750,000.00
June 30, 2001	\$750,000.00

Commencing December 31, 2001, and each December 31 thereafter until the corrective action and response activities required by this Consent Order have been completed pursuant to the Prioritization Schedule and the DEQ has issued the Final Notice of Termination pursuant to Section XXV (Termination) of this Consent Order, DSC shall make or cause to be made annual payments to the Trust Fund in the amount of one million five hundred thousand dollars (\$1,500,000.00), adjusted for inflation in accordance with R 299:9702.

3. DSC may accelerate payments into the Trust Fund. The acceleration of payments into the Trust Fund shall be credited towards DSC's next obligation(s) to make the annual or other periodic payments required under this paragraph.
4. The DEQ shall agree to disbursements from the Trust Fund for the actual costs for corrective action and response activities that have been conducted as required under this Consent Order. Requests for disbursements from the Trust Fund by DSC shall include a completed Reimbursement Request Form (Attachment K). In addition, DSC shall directly pay any additional costs required to be incurred for activities required by this Consent Order to the extent that sufficient funds are not available in the Trust Fund to satisfy the costs thereof.

5. The DEQ shall agree to termination of the Trust Fund and to the distribution of all remaining Trust Assets, less final trust administrative expenses, to DSC when the DEQ determines that no further corrective action or response activities are necessary at the Facilities and has issued the Final Notice of Termination pursuant to Section XXV (Termination) of this Consent Order.

8.10 Quarterly Progress Reports

- A. DSC shall provide to the DEQ Project Coordinator designated in Section XIX (Project Coordinators, Reporting, and Document Certification) written quarterly progress reports regarding all corrective actions, response activities, and other matters at the Facilities related to the implementation of this Consent Order.
- B. These progress reports shall include: (a) a description of the activities that have been taken toward achieving compliance with this Consent Order during the previous quarter; (b) a description of data collection and other activities scheduled for the next quarter; (c) all results of sampling and tests and other data received by DSC, its employees, or authorized representatives during the previous quarter relating to the corrective action or response activities performed pursuant to this Consent Order; (d) a description of the nature and amount of remediation waste materials that were generated and the name of the facilities that were used for the off-site transfer, storage, treatment, or disposal of those waste materials; and (e) any other relevant information regarding other activities or matters at the Facilities that affect or may affect the implementation of the requirements of this Consent Order.
- C. The first quarterly report shall be submitted to the DEQ within one hundred fifty (150) days following the Effective Date of this Consent Order and forty-five (45) days after the end of each quarter thereafter until the issuance of the DEQ's Final Notice of Termination pursuant to Section XXV (Termination) of this Consent Order.
- D. The Parties to this Consent Order may request, based on the phase of work being conducted at the Facilities or other relevant circumstances, an adjustment to the schedule for submittal of progress reports, provided that such modification of the schedule is agreed to, in writing, by the Parties' Project Coordinators.

8.11 Modification of DEQ Approved Work Plans

- A. The DEQ or DSC may determine that certain tasks including, but not limited to, investigatory work or engineering evaluations are necessary in addition to the tasks and deliverables required in the CM or IRA work plans and RAPs.
- B. When new findings indicate that such additional work is necessary to meet the intent of the approved CM or IRA work plans or RAPs, the DEQ shall request, in writing, that DSC perform the additional work and shall specify the basis and reasons for the DEQ's determination that the additional work is necessary.
- C. Thereafter, the Prioritization Schedule shall be modified to reflect such additional work, and DSC shall perform the additional work the DEQ has requested.

- D. All additional work performed by DSC under this paragraph shall be performed in a manner consistent with this Consent Order and the Prioritization Schedule.

8.12 Submittal of CM and IRA Work Plan(s)

- A. Within ninety (90) days of the Effective Date of this Consent Order, DSC shall submit to the DEQ, for review and approval, the CM and/or IRA work plan(s) for implementation of the CM or IRA to be conducted during the year 2000. On or before each December 31st thereafter, beginning with December 31, 2000, DSC shall submit to the DEQ, for review and approval, the CM and/or IRA work plan(s) for implementation of the CM or IRA to be conducted pursuant to the Prioritization Schedule (Attachment E) during the following year.
- B. The work plan(s) shall document the procedures to be used by DSC for the implementation of the corrective actions or IRA and shall include, but not be limited to: the objectives of the corrective actions or IRA; the design, construction, and required permits for any equipment or engineered control systems; an operation and maintenance plan, a monitoring plan, detailed implementation and cost schedules; and data and activity reporting requirements.
- C. DSC shall, within thirty (30) days of receipt of the DEQ's written approval of the work plan(s), implement the plan in accordance with the approved time schedule therein.

- 8.13 Any CM or IRA work plan or RAP shall include a plan and implementation schedule for the proper plugging and abandonment of any monitor wells, which were installed as part of the corrective action or response activity at or related to the Facilities and which will not be utilized for long-term monitoring at the Facilities. The work plan shall be developed in accordance with the procedures described in the ASTM Standard Guide for Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities, ASTM Designation: D5299-92, or as subsequently amended.

8.14 Summary of IM, CM, and IRA Submittals

DSC shall submit required IM, CM, and IRA documents in accordance with the schedule below.

CORRECTIVE ACTION or REMEDIAL ACTION DOCUMENT	SUBMITTAL DEADLINE
Paragraph 8.3: Written QAPP	Within sixty (60) days of the Effective Date of this Consent Order
Paragraph 8.4: Written Health and Safety Plans	Within sixty (60) days of the Effective Date of this Consent Order
Paragraph 8.5(B): Written IM work plan	Within ninety (90) days of the Effective Date of this Consent Order
Paragraph 8.5(C): Implementation of IM work plan	Within thirty (30) days after receipt of DEQ's written approval of an IM work plan
Paragraph 8.5(D)(1): Oral notification to the DEQ of conditions which pose an imminent or substantial threat to human health or the environment	Within forty-eight (48) hours after discovery
Paragraph 8.5(D)(2): Written notification to the DEQ of conditions which pose a threat or potential threat to human health or the environment	Within fourteen (14) days after discovery
Paragraph 8.5(D)(3): Written modified IM work plan	Within thirty (30) days after providing the DEQ with oral notification of conditions which pose a threat or potential threat to human health or the environment
Paragraph 8.6(A)(2): Written CM work plan(s) for existing WMUs and Contaminant releases	Per Prioritization Schedule and Paragraph 8.12
Paragraph 8.6(A)(3): Implementation of CM work plan(s) for existing WMUs and Contaminant releases	Within thirty (30) days after receipt of the DEQ's written approval of CM work plan(s)
Paragraph 8.7(A)(2): Written IRA work plan(s) for existing AOCs	Per Prioritization Schedule and Paragraph 8.12
Paragraph 8.7(A)(3): Implementation of IRA work plan(s) for existing AOCs	Within thirty (30) days after receipt of the DEQ's written approval of IRA work plan(s)
Paragraph 8.7(C)(1): Written RAP	Within sixty (60) days after completion of IRA work plan(s) for the specific Facility

Paragraph 8.8(A)(1): Written notification of a new release of a Contaminant from a WMU, or a hazardous Substance from an AOC	Within thirty (30) days after discovery
Paragraph 8.8(A)(4): Written work plan to address a new release of a Contaminant from a WMU, or a Hazardous Substance from an AOC	Within forty-five (45) days after Prioritization Schedule is modified and written notification from the DEQ that implementation of corrective action or response activities is required
Paragraph 8.9(A)(1): Financial Assurance Mechanism	Within fifteen (15) days after the Effective Date of this Consent Order
Paragraph 8.10: Written quarterly progress reports	First quarterly progress report within one hundred fifty days (150) days of the Effective Date of this Consent Order, and subsequent progress reports forty-five (45) days after end of each quarter thereafter
Paragraph 8.13: Written work plan for proper plugging and abandonment of monitor wells	Included in a CM, IRA, or RAP

IX. SUBMITTALS AND APPROVALS

- 9.1 For any work plan, proposal, or other document (collectively, "Submittals") required to be submitted by this Consent Order, except as provided by Paragraph 9.2 of this Consent Order, the following process and terms of approval shall apply:
- A. To be approved by the DEQ, any Submittal required to be submitted by this Consent Order shall include all of the information required by the applicable statute and/or rule, and all of the information required by the applicable paragraph(s) of this Consent Order.
 - B. The DEQ may approve, disapprove, or approve with specified modifications any required Submittal. Upon DEQ approval or approval with modifications of a Submittal, such Submittal shall be incorporated by reference into this Consent Order and shall be enforceable in accordance with the provisions of this Consent Order.
 - C. In the event that the DEQ approves a Submittal with modifications, the DEQ shall state each specific modification and the basis for each modification, in writing. In the event that the DEQ disapproves a Submittal, the DEQ shall notify DSC of the specific reasons for the disapproval, in writing. The DEQ may require DSC to submit prior to implementation, and within forty-five (45) days of receipt of such approval with modifications, a revised Submittal which adequately addresses such modifications.

- D. In the event that the DEQ disapproves a Submittal, it shall notify DSC, in writing, of the specific reasons for such disapproval. DSC shall submit, within forty-five (45) days of receipt of such disapproval, a revised Submittal which adequately addresses the reasons for the DEQ's disapproval.
- E. Failure by DSC to submit a revised Submittal within the forty-five (45) days specified in subparagraphs 9.1(C) and (D), shall subject DSC to the stipulated penalty provisions of this Consent Order commencing on the date the revised Submittal was due and accumulating until a revised Submittal is submitted.
- F. Except as otherwise provided herein, any delays caused by DSC's failure to submit a revised Submittal shall in no way affect DSC's responsibility to comply with any deadlines specified in this Consent Order.

9.2 DEQ Approval of RAPs

- A. Within six (6) months of the DEQ's receipt of any RAP or request for approval of a RAP, the Chief of the WMD, or the Chief of the ERD, as applicable, shall, in writing:
 - 1. Approve the RAP, or
 - 2. Deny approval of the RAP and provide DSC notice of deficiencies. The DEQ may not add additional items to this statement after it has been issued.
 - 3. Failure of the DEQ to act within the specified time period shall result in the request described in this Paragraph 9.2 being considered approved.
 - 4. The time frame for the DEQ's decision regarding approval of a RAP may be extended by the mutual written consent of the Parties.
- B. Upon receipt of a notice of approval from the DEQ, DSC shall proceed to take any action required under the approved RAP according to the schedules required for such actions and shall submit a new cover page and the modification pages of the plans marked "Final."
- C. Upon receipt of a disapproval, DSC shall correct the deficiencies in the RAP and resubmit the RAP for DEQ review and approval pursuant to this paragraph within forty-five (45) days after receiving the DEQ disapproval, unless a DEQ notice of disapproval authorizes a longer period of time.
- D. If, upon resubmission, the RAP is not approved, the DEQ shall so advise DSC. Upon receipt of a disapproval of a resubmission, DSC may seek resolution of the resubmission's deficiencies pursuant to Section XVIII (Dispute Resolution) of this Consent Order.

- 9.3 No informal advice, guidance, suggestions, or comments by the DEQ regarding reports, plans, specifications, schedules, or any other writing submitted by DSC will be construed as relieving DSC of its obligation to obtain written approval, if and when required by this Consent Order.

X. EXTENSIONS AND MODIFICATIONS

- 10.1 DSC and the DEQ agree that the DEQ Project Coordinator specified in Paragraph 19.1 shall, at DSC's request, grant DSC an extension of any specified deadlines set forth in this Consent Order under the following circumstances:
- A. When the DEQ requires additional corrective action or response activities for a specific WMU or AOC which exceed the scope of any tasks and the assumptions utilized with respect to such scope set forth in the Prioritization Schedule as described in Attachment I.
 - B. When the DEQ requires additional corrective action or response activities for a specific WMU or AOC after issuance of a Determination of No Further Action pursuant to Paragraphs 8.6(B)(3) or 8.7(B)(3).
 - C. In the event that a new WMU or AOC is discovered.
 - D. When unknown environmental conditions are discovered during the course of an approved corrective action or response activity which requires additional corrective action or response activities to address the newly discovered environmental condition.
 - E. When the DEQ approves a CM or IRA work plan submitted by DSC pursuant to Paragraph 8.12 which exceeds the scope of tasks provided for in the Prioritization Schedule.

Any such extension shall take into consideration the uncommitted monies available in the Trust Fund at the time of the modification as well as DSC's payments into the Trust Fund pursuant to Paragraph 8.9 of this Consent Order.

- 10.2 The DEQ Project Coordinator may, at his or her discretion, grant DSC an extension of any specified deadlines set forth in this Consent Order under any other circumstance not specified in Paragraph 10.1.
- 10.3 Any extension shall be preceded by a timely written request, received by the DEQ no later than five (5) business days prior to the pertinent deadline, which shall include:
- A. An identification of the specific deadlines of this Consent Order that will not be met.
 - B. A detailed description of what will prevent DSC from meeting the deadlines.
 - C. A description of the measures DSC has taken and/or intends to take to meet the required deadline.
 - D. The length of the extension requested and the specific date on which the obligation will be met.
- 10.4 Any modification pursuant to Paragraphs 10.1, or 10.2, above, shall be set out in a modified and complete Prioritization Schedule which shall supersede all prior schedules and be incorporated by reference as made and enforceable part of this Consent Order.

The DEQ Project Coordinator shall respond promptly to such discretionary requests and shall not unreasonably withhold approval for such requests.

- 10.5 This Consent Order may be modified only by mutual agreement of the Parties. Such modifications shall be in writing, shall be signed by both parties, shall have as their effective date the date on which they are signed by the DEQ, and shall be incorporated into this Consent Order.

XI. QUALITY ASSURANCE

11.1 Supervision

- A. All work performed pursuant to this Consent Order shall be under the direction and supervision of a professional engineer or geologist with expertise in hazardous waste site cleanup.
- B. On or before the Effective Date of this Consent Order, DSC shall notify the DEQ, in writing, of the name, title, and qualifications of the engineer or geologist, and of any contractors or subcontractors, if any, engaged as of such date to carry out the terms of this Consent Order.

11.2 Sample Collection and Analysis

- A. Throughout all sample collection and analysis activities, DSC shall use the quality assurance, quality control, and chain-of-custody procedures as specified in the QAPP required under Paragraph 8.3 of this Consent Order and approved by the DEQ.
- B. DSC shall ensure that laboratories used by DSC for analyses:
 - 1. Perform such analysis according to the latest U.S. EPA-approved edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846, Third Edition, November 1986, and its updates I (July 1992), II (September 1994), IIA (August 1993), and IIB (January 1995), including alternate methodologies adopted by the U.S. EPA after January 1995, or other methods deemed satisfactory to the DEQ. If methods other than U.S. EPA-approved methods are to be used, DSC shall submit all protocols to be used for analysis to the DEQ for approval within thirty (30) days prior to the commencement of analysis.
 - 2. Allow the DEQ and its authorized representatives access for quality assurance monitoring.

XII. SAMPLING AND DATA/DOCUMENT AVAILABILITY

12.1 Results

DSC shall submit to the DEQ the results of all sampling and/or tests or other data generated by, or on behalf of, DSC in accordance with the requirements of this Consent Order.

12.2 Notification of Activities

- A. Except in the case of emergency or the existence of an imminent threat, DSC shall notify the DEQ, in writing, at least seven (7) days before engaging in any field activities related to performance of the obligations set forth in this Consent Order, such as well drilling, installation of equipment, or sampling.
- B. At the request of the DEQ, DSC shall provide or allow the DEQ or its authorized representative to take split samples of all samples collected by DSC pursuant to this Consent Order. Similarly, at the request of DSC, the DEQ shall allow DSC or its authorized representatives to take split or duplicate samples, using company-supplied containers, of all samples collected by the DEQ under this Consent Order.
- C. The DEQ will notify DSC, in writing, at least fourteen (14) days before conducting any independent sampling under this Consent Order.

12.3 Confidentiality

- A. DSC may assert a business confidentiality claim covering all or part of any information submitted to the DEQ pursuant to this Consent Order. Such claims shall be made by DSC, in writing, at the time of submittal of the information. If no such confidentiality claim accompanies the information at the time of submittal to the DEQ, such information may be made available to the public by the DEQ without further notice to DSC.
- B. For any record which DSC asserts a confidentiality claim which was submitted wholly pursuant to Part 111 of the NREPA, the DEQ shall notify DSC of a request for such public record, and the following process shall apply:
 - 1. DSC shall have thirty (30) days after receipt of the notice to demonstrate to the DEQ that the documents are confidential pursuant to Section 11129 of Part 111 of the NREPA.
 - 2. The procedures specified in that section shall be followed in the granting or denial of any such request for disclosure of the documents.
- C. Except to the extent that it is proprietary, DSC agrees not to assert any confidentiality claim with regard to any information or data, physical or analytical, generated under this Consent Order and that such information or data shall not be subject to Part 148, Environmental Audit Privilege and Immunity, of the NREPA, MCL 324.14801 et. seq.

XIII. ON-SITE AND OFF-SITE ACCESS

13.1 DEQ On-Site Access

- A. Upon prior written notice to DSC and subject to health and safety requirements, the DEQ and its agents, employees, and representatives will be permitted to enter and move about the Trenton Facility and the Gibraltar Facility for purposes allowed by law, during normal business hours for the purposes of, but not limited to:

1. Interviewing Facility personnel and contractors;
 2. Inspecting records, operating logs, and contracts related to the Facility;
 3. Reviewing the progress of DSC in carrying out the terms of this Consent Order;
 4. Conducting such tests, sampling, or monitoring as the DEQ or its Project Coordinator deems necessary;
 5. Using a camera, sound recording, or other documentary-type equipment and verifying the reports and data submitted to the DEQ by DSC.
- B. DSC shall permit such persons to inspect all records, files, photographs, documents, and other writings, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Consent Order and provide copies thereof if requested by the DEQ.

13.2 DSC Off-Site Access

- A. To the extent that work required by this Consent Order, or by any approved work plans prepared pursuant hereto, must be done on property that is owned or controlled by persons other than DSC, DSC shall, within thirty (30) days of DEQ approval of any work plan, use its best efforts to secure written access agreements from such persons that grant access for the Parties and their authorized employees, agents, representatives, contractors, and consultants.
- B. Best efforts as used in this paragraph shall include, at a minimum, a certified letter from DSC to the present owners of the property requesting access agreements to permit DSC and the DEQ and its authorized representatives to access the property and, if such access is denied after reasonable efforts, taking judicial action as may be provided under applicable State law to secure such access.
- C. A copy of any written agreement for access shall be provided to the DEQ within thirty (30) days of entry.
- D. In the event that written agreements for access are not obtained within thirty (30) days of the DEQ's approval of the work plan, DSC shall notify the DEQ, in writing, within thirty (30) days thereafter regarding both the efforts undertaken to obtain access and its failure to obtain the agreements.

13.3 Nothing in this section limits or otherwise affects the DEQ's right of access and entry pursuant to applicable law including, without limitation, Parts 111 and 201 of the NREPA.

13.4 Notwithstanding the lack of access, nothing in this section shall be construed to limit or otherwise affect DSC's liability and obligation to perform corrective action or response activities including corrective action or response activities beyond the Facilities' boundaries. Any material delays in obtaining necessary access shall be sufficient cause for DSC to request a modification to the Prioritization Schedule pursuant to provisions of Paragraph 10.2 of this Consent Order.

XIV. RECORD PRESERVATION

- 14.1 DSC agrees that it shall preserve during the pendency of this Consent Order all data, records, and documents in its possession or in the possession of its divisions, officers, employees, agents, contractors, successors, and assigns which relate in any way to this Consent Order; the release or threatened release of Hazardous Substances; the storage, generation, disposal, treatment, and handling of Hazardous Substances at the Facilities; and waste management and/or disposal at the Facilities until the later of:
- A. The date the Trenton Facility is released from financial assurance requirements for corrective action by the DEQ;
 - B. Five (5) years after the DEQ's issuance of the Final Notice of Termination pursuant to Section XXV (Termination).
- 14.2 Upon the later of the dates specified in Paragraph 14.1(A) or (B), DSC shall make such records available to the DEQ for inspection or shall provide copies of any such records to the DEQ. DSC shall notify the DEQ, in writing, thirty (30) days prior to DSC's intended destruction of any such records, and shall provide the DEQ with the opportunity to take possession of any such records. DSC shall obtain the DEQ's written permission prior to the destruction of any data, records, or documents.

XV. REIMBURSEMENT OF COSTS

- 15.1 Past Costs
- A. Within thirty (30) days of the Effective Date of this Consent Order, DSC shall pay the DEQ reimbursement and compensation for the State's past costs incurred for surveillance and enforcement, response activities at the Facilities, and the development and execution of this Consent Order.
 - B. For the purposes of this Consent Order, past costs shall include:
 - 1. For past costs incurred pursuant to Part 111 of the NREPA: all costs (excluding any costs incurred prior to August 20, 1998) incurred by the State pursuant to Part 111 prior to the Effective Date of this Consent Order; and
 - 2. For past costs incurred pursuant to Part 201 of the NREPA: all costs incurred by the State pursuant to Part 201 as of prior to the dates set forth in the attached Summary Report (Attachment L).
 - C. Payments shall be made in the amounts of \$9,400 for costs incurred by the DEQ under Part 111 of the NREPA and \$35,358 for costs incurred by the DEQ under Part 201 of the NREPA.
 - D. The payments shall be made in the manner provided in Paragraph 15.3 of this Consent Order.

15.2 Oversight Costs

- A. DSC shall reimburse the State for all Oversight Costs incurred by the State in implementation of this Consent Order including, but not limited to, oversight of DSC's performance of the corrective actions and response activities required pursuant to this Consent Order.
- B. As soon as possible after each anniversary of the Effective Date of this Consent Order, the DEQ will provide DSC with a written demand for payment of Oversight Costs that have been lawfully incurred by the State.
- C. Any such demand will set forth with reasonable specificity the nature of the costs incurred, and shall include separate accountings of costs incurred for corrective actions under Part 111 of the NREPA and response activities under Part 201 of the NREPA.
- D. The DEQ reserves the right to extend the billing period.
- E. The Parties agree that DSC's reimbursement required under Paragraph 15.2 shall not exceed \$20,000 per year in total, and that all outstanding State costs will be carried forward to the next billing period until all costs are paid by DSC and the DEQ has issued the Final Notice of Termination pursuant to Section XXV (Termination) of this Consent Order. Interest shall accrue on any unpaid balance at the rate provided for in Section 6013(5) of the Revised Judicature Act of 1961, 1961 PA 236, MCL 600.6013. The Parties agree that DSC may, at its discretion, accelerate payments on the outstanding balance.
- F. DSC shall have the right to request a full and complete accounting of all demands made hereunder including time sheets, travel vouchers, contracts, invoices, and payment vouchers as may be available to the DEQ. Provision of these documents to DSC by the DEQ may result in the DEQ incurring additional oversight costs that will be included in the annual demand for payment of oversight costs as provided under this Section.
- G. Except as provided by Section XVIII (Dispute Resolution), DSC shall reimburse the DEQ for such costs within sixty (60) days of receipt of a written demand from the DEQ. Interest shall accrue on the unpaid balance at the end of the sixty (60) day period at the rate provided for in Section 6013(5) of the Revised Judicature Act of 1961, 1961 PA 236, MCL 600.6013.
- H. In any challenge by DSC to a demand for recovery of costs by the DEQ, DSC shall have the burden of establishing that the costs were incurred by the DEQ in a manner inconsistent with Section 20126a(1) of the NREPA.

15.3 Payment

- A. Payments made for Oversight Costs incurred by the DEQ under Part 111 of the NREPA shall be by certified check payable to the "State of Michigan," and shall include the WMD Order Number 111-15-99 and the Payment Identification Number WMD 3053 on each check.

- B. Payments made for Oversight Costs incurred by the DEQ under Part 201 of the NREPA shall be by certified check payable to the "State of Michigan - Environmental Response Fund," and shall include the facility name, the WMD Order Number 111-15-99, and the Payment Identification Number ERD 2052 on each check.
- C. All payments shall be sent by certified mail to the address listed in Section XIX (Project Coordinators, Reporting, and Document Certification). A copy of the transmittal letter and the check shall be provided simultaneously to the DEQ Project Coordinator and the Assistant Attorney General in Charge, Department of Attorney General, Natural Resources Division, Suite 315, 300 South Washington Square, Lansing, Michigan 48913.
- D. Costs recovered pursuant to Part 111 of the NREPA shall be deposited in the general fund of the State.
- E. Costs recovered pursuant to Part 201 of the NREPA shall be deposited in the Environmental Response Fund in accordance with the provisions of Section 20108(3) of the NREPA.

XVI. STIPULATED PENALTIES

- 16.1 Except as provided under Sections XVII (Force Majeure), XVIII (Dispute Resolution), or X (Extensions and Modifications) of this Consent Order, in the event DSC fails to meet any requirement set forth in Sections VIII (Work to Be Performed), IX (Submittals and Approvals), XI (Quality Assurance), XII (Sampling and Data/Document Availability), XIII (On-Site and Off-Site Access), XIV (Record Preservation), and XV (Reimbursement of Costs) of this Consent Order, the DEQ may demand and DSC shall pay stipulated penalties as set forth below. Compliance by DSC shall include completion of an activity under this Consent Order, a plan approved under this Consent Order, or any matter under this Consent Order in an acceptable manner and within the specified time schedules approved under this Consent Order.
 - A. For failure to perform work as prescribed in this Consent Order or for any other failure to comply with any provision(s) of this Consent Order: \$500 per day for the first one (1) to fourteen (14) days of delay; \$750 per day for the fifteenth (15) through the thirtieth (30) days of delay; and \$1,000 for each day of delay thereafter.
 - B. For failure to submit any document by the date such document is required under this Consent Order: \$250 per day for each day of delay. Such penalties shall only regard the timely submittal of the document and not the content or approval of the document.
- 16.2 All penalties shall begin to accrue on the date that complete performance is due or a violation occurs, and shall continue to accrue through the final day of correction of the noncompliance. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Order.

16.3 Due Date

- A. All penalties owed to the DEQ under this Section XVI (Stipulated Penalties) shall be due within sixty (60) days after receipt of a written notification from the DEQ of noncompliance. Such notification shall describe the noncompliance and shall indicate the amount of penalties due.
- B. Interest shall accrue on the unpaid balance at the end of the sixty (60) day period at the rate provided for in Section 6013(5) of the Revised Judicature Act of 1961, 1961 PA 236, MCL 600.6013.

16.4 All payments of penalties shall be made by certified or cashier's check payable to the State of Michigan, and shall be sent by certified mail to the address listed in Section XIX (Project Coordinators, Reporting, and Document Certification).

- A. To ensure proper credit, all payments of stipulated penalties made pursuant to this Section XVI (Stipulated Penalties) shall include the WMD Order Number 111-15-99 and the Payment Identification Number WMD 3053.
- B. Copies of the transmittal of payment shall be sent simultaneously to the DEQ Project Coordinator.

16.5 The payment of stipulated penalties shall not alter in any way DSC's obligation to complete the performance required under this Consent Order.

16.6 DSC agrees not to contest the legality of any stipulated penalties assessed pursuant to Paragraph 16.1, above, or the DEQ's legal authority to impose such penalties, but reserves the right to dispute the factual basis upon which a demand by the DEQ for stipulated penalties is made.

16.7 The stipulated penalties set forth in this Section do not preclude the DEQ from pursuing any other remedies or sanctions which may be available to the DEQ by reason of DSC's failure to comply with any of the requirements of this Consent Order. Notwithstanding the foregoing, the DEQ and DSC agree that any monetary penalties, including stipulated penalties which the DEQ seeks for any single and discrete violation of this Consent Order, shall not exceed the statutory maximum penalty for such violation as provided in applicable law. Nothing herein shall prevent the DEQ from seeking separate penalties for separate violations. DSC reserves the right to contest and defend against the DEQ's pursuit of any such remedies.

XVII. FORCE MAJEURE

17.1 DSC shall perform the requirements of this Consent Order within the time limits established herein unless performance is prevented or delayed by events which constitute a "Force Majeure." Any delay in the performance attributable to a "Force Majeure" shall not be deemed a violation of DSC's obligations under this Consent Order in accordance with this section.

17.2 For the purpose of this Consent Order, "Force Majeure" means an occurrence or non-occurrence arising from causes not foreseeable, beyond the control of, and without the fault of DSC including, but not limited to: an Act of God, untimely review of permit

applications or submissions by the DEQ or other applicable authority, the inability of DSC to obtain off-site access despite its best efforts pursuant to Paragraph 13.2 of this Consent Order, and acts or omissions of third parties that could not have been avoided or overcome by DSC's reasonable diligence and that delay the performance of an obligation under this Consent Order. "Force Majeure" does not include, among other things, unanticipated or increased costs, changed financial circumstances, or failure to obtain a permit or license as a result of DSC's actions or omissions.

- 17.3 DSC shall notify the DEQ, by telephone, within five (5) days of discovering any event which causes a delay in its compliance with any provision of this Consent Order. Verbal notice shall be followed by written notice within ten (10) days and shall describe, in detail, the anticipated length of delay, the cause or causes of delay, the measures taken by DSC to prevent or minimize the delay, and the timetable by which those measures shall be implemented. DSC shall adopt all reasonable measures to avoid or minimize any such delay.
- 17.4 Failure of DSC to comply with the notice requirements of Paragraph 17.3, above, shall render this Section XVII (Force Majeure) void and of no force and effect as to the particular incident involved. The DEQ may, at its sole discretion and in appropriate circumstances, waive the notice requirements of Paragraph 17.3.
- 17.5 If the Parties agree that the delay or anticipated delay was beyond the control of DSC, this may be so stipulated and the parties to this Consent Order may agree upon an appropriate modification of this Consent Order. If the Parties are unable to reach such agreement, the dispute shall be resolved in accordance with Section XVIII (Dispute Resolution) of this Consent Order. The burden of proving that any delay was beyond the reasonable control of DSC, and that all the requirements of this section have been met by DSC, is on DSC.
- 17.6 An extension of one compliance date based upon a particular incident does not necessarily mean that DSC qualifies for an extension of a subsequent compliance date without providing proof regarding each incremental step or other requirement for which an extension is sought.

XVIII. DISPUTE RESOLUTION

- 18.1 The dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under this Consent Order and shall apply to all provisions of this Consent Order, except for Paragraph 8.5(D) of this Consent Order, which shall not be subject to dispute resolution. Any dispute that arises under this Consent Order shall, in the first instance, be the subject of informal negotiations between the parties. The period of negotiations shall not exceed ten (10) days from the date of written notice by any party that a dispute has arisen, but it may be extended by an agreement of the Parties. The period for informal negotiations shall end when the DEQ provides a written statement setting forth its proposed resolution of the dispute to DSC.
- 18.2 Except as provided by Paragraph 18.4 of this Consent Order, if the Parties fail to resolve a dispute by informal negotiations, then the dispute shall be resolved in accordance with the resolution proposed by the DEQ unless, within thirty (30) days after receipt of the DEQ's proposed resolution, DSC files a petition with the Wayne County Circuit Court or another court of competent jurisdiction setting forth the matter in dispute, the efforts made by the Parties to resolve it, the relief requested, and the schedule, if any, within which the dispute

must be resolved to ensure orderly implementation of this Consent Order. In proceedings on any dispute, the Parties shall bear the burden of persuasion on factual issues in the manner prescribed by the Court.

- 18.3 The filing of a petition for resolution of a dispute with this Court shall not, of itself, extend or postpone any obligation of DSC under this Consent Order which is not the subject of the petition. Notwithstanding the invocation of the dispute resolution, stipulated penalties, with any applicable interest, shall accrue from the first day of any failure or refusal to comply with any term or condition of this Consent Order. In the event, and to the extent that DSC does not prevail on the disputed issue, stipulated penalties and any applicable interest shall be paid within ten (10) calendar days in the manner provided for in Paragraph 16.4 of this Consent Order. DSC shall not be assessed stipulated penalties for disputes resolved in its favor.
- 18.4 If DSC seeks to formally challenge a response activity required under Part 201 of the NREPA and selected or approved by the DEQ under this Consent Order including, but not limited to, a decision pursuant to Sections VIII (Work to be Performed), IX (Submittals and Approvals), X (Extensions and Modifications), and XII (Sampling and Data/Document Availability) pertaining to an AOC identified under Paragraphs 8.7 and 8.8, the formal dispute resolution process shall be as follows:
- A. DSC shall file, in writing, a request for review of the disputed issues by the Chief of the WMD regarding the Trenton Facility, or the Chief of the ERD regarding the Gibraltar Facility, within ten (10) days of receipt by DSC of the DEQ statement of decision issued in accordance with Paragraph 18.1 of this Consent Order. The request for review must be filed with the WMD Chief, or the ERD Chief, as appropriate, and the appropriate DEQ Project Coordinator, and shall state the issues in dispute; the relevant facts upon which the dispute is based; any factual data, analysis, or opinion supporting its position; and all supporting documentation on which DSC relies.
 - B. The appropriate DEQ Project Coordinator shall, within ten (10) days after receiving the written request for review, provide a written reply to DSC and the WMD Chief or the ERD Chief, as appropriate, stating his/her understanding of the issues in dispute; the relevant facts upon which the dispute is based; any factual data, analysis, or opinion supporting its position; and all supporting documentation on which the DEQ relies.
 - C. The WMD Chief or the ERD Chief, as appropriate, shall, within twenty (20) days after receipt of the DEQ Project Coordinator's response, review each party's statement of position and issue a written decision on the disputed issues. The decision of the WMD Chief or the ERD Chief, as appropriate, shall be binding on the parties and such decision is not subject to further appeal, either administratively or judicially.
- 18.5 DSC shall pay that portion of a demand for reimbursement of costs or payment of stipulated penalties that is not subject to good faith resolution in accordance with and in the manner provided in Sections XV (Reimbursement of Costs) or XVI (Stipulated Penalties), as appropriate.

XIX. PROJECT COORDINATORS, REPORTING, AND DOCUMENT CERTIFICATION

- 19.1 DSC and the DEQ have designated Project Coordinator(s) as provided herein. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Order. The DEQ Project Coordinators will be the DEQ's designated representatives at the Facilities. Unless otherwise specified, all communications between DSC and the DEQ, and all documents, reports, approvals, and other correspondence concerning the work and other requirements performed pursuant to this Consent Order, shall be directed through the Project Coordinators.

A. As to DSC:

Dennis Zurakowski, P.E.
Director of Environmental Affairs
DSC Ltd.
1491 W. Jefferson Avenue
Trenton, Michigan 48183
Telephone: 734-246-4135
Fax: 734-246-4022

Richard A. Barr
Dean & Fulkerson, P.C.
5th Floor, 801 W. Big Beaver Road
Troy, Michigan 48064-4767
Telephone: 248-362-1300
Fax: 248-362-1358

B. As to DEQ for matters concerning the Trenton Facility:

Steven Sliver
Environmental Engineer
Department of Environmental Quality
Waste Management Division
P.O. Box 30241
Lansing, Michigan 48909
Tel: 517-373-4797

Fax: 517-373-4797

(Via Courier)
Waste Management Division
608 West Allegan
Lansing, Michigan 48933

- C. As to the DEQ for matters concerning the Gibraltar Facility:

Edward A. Novak
Environmental Quality Analyst
Environmental Response Division
Southeast Michigan District - Detroit Office
300 River Place, Suite 3600
Detroit, Michigan 48207
Telephone: 313-392-6527
Fax: 313-392-6488

(Via Courier)
Same address as above

- D. As to the DEQ for all payments (including stipulated penalties) required under this Consent Order:

Revenue Control Unit
Department of Environmental Quality
P.O. Box 30657
Lansing, Michigan 48909-8157

(Via Courier)
300 South Washington Square, Suite 457
Lansing, Michigan 48933

19.2 Submissions to the DEQ

Unless otherwise specified, reports, correspondence, approval, disapproval, notices, or other Submissions relating to or required under this Consent Order to be submitted to the DEQ shall be in writing and provided in triplicate form to the DEQ Project Coordinator designated in Paragraph 19.1 of this Consent Order.

19.3 DSC Signature

- A. A Responsible Official shall sign each of DSC's final documents, certifications of compliance, and documents evidencing that compliance has been achieved pursuant to Section 324.11151(2) of Part 111 of the NREPA or Section 20139 of Part 201 of the NREPA, as applicable.
- B. DSC shall include an unsigned certification statement that meets the requirements specified below in all draft documents submitted to the DEQ.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for

submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Title: _____

Date: _____

- C. The term "Responsible Official" means as follows: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy or decision-making functions for the corporation; or (b) the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$35 million (in 1987 dollars when the Consumers Price Index was 345.3), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 19.4 The Parties agree to provide written notice in the event of a change in Project Coordinators.
- 19.5 If the DEQ Project Coordinator determines that activities in compliance or noncompliance with this Consent Order have caused or may cause a release of Contaminant(s) or Hazardous Substances, or a threat to the public health or safety or to the environment, the DEQ may require DSC to stop further implementation of this Consent Order for such a period of time as may be needed to abate any such release or threat and/or undertake any action which the DEQ determines is necessary to abate such release or threat.
- 19.6 The DEQ may designate other authorized representatives, employees, contractors, and consultants to observe and monitor the progress of any activity undertaken pursuant to this Consent Order. The absence of the DEQ Project Coordinator from the Facilities shall not be cause for stoppage of work.

XX. RESERVATION OF RIGHTS

- 20.1 This Consent Order is not intended to be nor shall it be construed to be a permit. This Consent Order does not relieve DSC of any obligation to obtain and comply with any local, state, or federal permits.
- 20.2 The DEQ expressly reserves those rights and defenses that it may have including the right both to disapprove of work performed by DSC pursuant to this Consent Order, and to request that DSC perform tasks in addition to those stated in the Consent Order.
- 20.3 In the event DSC fails to comply with the provisions of Section 20120b(3) (a)-(e) of the NREPA with respect to implementation of the RAPs required under Paragraph 8.7(C) of this Consent Order or allows those provisions to lapse, the DEQ's approval of the RAP shall be void from the time of the lapse or violation until such lapse or violation is corrected to the satisfaction of the DEQ.
- 20.4 The DEQ hereby reserves all of its statutory and regulatory powers, authorities, rights, remedies, both legal and equitable, which may pertain to DSC's failure to comply with any of the requirements of this Consent Order including, without limitation, the assessment of penalties under Section 11151 of Part 111 of the NREPA, MCL 324.11151, or

Sections 20119(4), 20137(1), or 20139 of Part 201 of the NREPA, MCL 324.20119(4), 324.20137(1), and 324.20139. The Consent Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers and/or authorities, civil or criminal, which the DEQ has under Parts 111 or 201 or any other statutory, regulatory, or common law enforcement authority of the State of Michigan. However, the DEQ agrees to first attempt to address any failure of DSC to comply with any of the requirements of this Consent Order by initially resorting to the dispute resolution procedures, stipulated penalty provisions, and other enforcement mechanisms established by this Consent Order and will not resort to the DEQ's other statutory and regulatory powers and remedies in the event the attempt using the Consent Order mechanisms is successful. Further, the Parties agree that pursuant to Paragraph 18.1 of this Consent Order, the dispute resolution procedures of Section XVIII (Dispute Resolution) shall not apply to DSC obligations under Paragraph 8.5(D) of this Consent Order; consequently, the DEQ reserves its ability to exercise all its statutory and regulatory powers, authorities, rights, and remedies, without limitation, to: (a) require DSC to undertake any actions that the DEQ determines are necessary to prevent or abate any imminent or substantial threat or potential threat to human health or the environment, or (b) undertake any actions the DEQ determines are necessary to prevent or abate such imminent or substantial threat or potential threat to human health or the environment.

- 20.5 The DEQ reserves the right to perform any portion of the work consented to herein or any additional site characterization, feasibility study, and response activity or corrective actions as it deems necessary to protect human health and the environment if DSC does not promptly perform such work in accordance with the Prioritization Schedule and approved work plans. The DEQ may exercise its authority under any applicable state or federal law to undertake any response activity at any time. The DEQ reserves its right to seek reimbursement from DSC for such additional costs incurred by the State for which DSC has liability under Part 111 or Part 201 of the NREPA.
- 20.6 The DEQ reserves the right to pursue any other remedies to which they are entitled for any failure on the part of DSC to comply with this Consent Order, the requirements of Parts 111 or 201 of the NREPA, the RCRA, and the rules promulgated under these statutes.
- 20.7 Notwithstanding any other provision of this Consent Order, an enforcement action may be brought by the DEQ pursuant to Parts 111 or 201 of the NREPA; the Comprehensive Environmental Response, Compensation, and Liability Act of 1980; the RCRA; or other statutory authority where the generation, storage, transportation, treatment, or disposal of hazardous waste at the Trenton Facility or Gibraltar Facility may present an imminent and substantial hazard to the health of persons or to the natural resources, or is endangering or causing damage to the public health or the environment.
- 20.8 The DEQ and DSC consent to enforcement of this Consent Order in the same manner and by the same procedures for all consent orders entered pursuant to Parts 111 and/or 201 of the NREPA.
- 20.9 This Consent Order in no way affects DSC's responsibility to comply with any other applicable state, federal, or local laws or regulations.

XXI. OTHER CLAIMS AND PARTIES

- 21.1 Nothing in this Consent Order shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, or corporation not a party hereto for any liability it may have arising out of, or relating in any way to, the generation, storage, treatment, handling, transportation, release, or disposal of any Contaminant or Hazardous Substance found at, taken to, or taken from the Facilities.
- 21.2 The State confirms that the entry of this Consent Order does not in itself bar the use of state brownfield loans to fund the performance of DEQ-approved response activities, whether or not such response activities are required herein, at the Facilities. Further, the State confirms that the entry of this Consent Order does not in itself bar the use of state brownfield grants to fund response activities to the extent provided by applicable statutes and rules promulgated thereunder. However, neither of these statements should be construed as a statement that the State has determined that it can or will approve any such funding.

XXII. OTHER APPLICABLE LAWS

- 22.1 All action required to be taken by DSC pursuant to this Consent Order shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and regulations. DSC shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.

XXIII. INDEMNIFICATION AND INSURANCE

- 23.1 DSC shall indemnify and save and hold harmless the State of Michigan and its departments, agencies, officials, agents, employees, contractors, and representatives for any and all claims or causes of action arising from or on account of acts or omissions of DSC, its officers, employees, agents, and any persons acting on its behalf or under its control in carrying out work pursuant to this Consent Order. The State of Michigan shall not be held out as a party to any contract entered into, by, or on behalf of DSC in carrying out actions pursuant to this Consent Order. Neither DSC nor any contractor shall be considered an agent of the State.
- 23.2 DSC waives any and all claims or causes of action against the State of Michigan and its departments, agencies, officials, agents, employees, contractors, and representatives for damages, reimbursement, or set-off of any payments made or to be made to the State that arise from or on account of any contract, agreement, or arrangement between DSC and any person for performance of work at the Facilities, pursuant to a Consent Order, including claims on account of construction delays.
- 23.3 DSC shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, agents, employees, contractors, and representatives for any and all claims or causes of action for damages or reimbursement from the State arising from or on account of any contract, agreement, or arrangement between DSC and any person for performance of work at the Facilities, pursuant to this Consent Order, including claims on account of construction delays.
- 23.4 Prior to commencing any corrective action or response activities pursuant to this Consent Order, DSC shall secure and maintain for the duration of this Order, comprehensive

general liability insurance with limits of one million (\$1,000,000), combined single limit, naming the DEQ, the DAG, and the State of Michigan as additional insured parties. If DSC demonstrates, by evidence satisfactory to the DEQ, that any contractor or subcontractor maintains insurance equivalent to that described above, then with respect to that contractor or subcontractor, DSC needs to provide only that portion, if any, of the insurance described above that is not maintained by the contractor or subcontractor. Regardless of the method used to insure, and prior to commencement of corrective action or response activities pursuant to this Consent Order, DSC shall provide the DEQ Project Coordinator and the DAG with certificates evidencing said insurance and the DEQ's, the DAG's, and the State of Michigan's status as additional insured parties. In addition, for the duration of this Consent Order, DSC shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of Workers' Disability Compensation Insurance for all persons performing corrective action or response activities on behalf of DSC in furtherance of this Consent Order.

XXIV. SEVERABILITY

- 24.1 If any provision or authority of this Consent Order or the application of this Consent Order to any party or circumstances is held by any judicial or administrative authority to be invalid, the application of such provisions to other parties or circumstances and the remainder of the Consent Order shall remain in force and shall not be affected thereby.

XXV. TERMINATION

- 25.1 This Consent Order shall remain in full force and effect until expressly terminated by a written Notice of Termination issued as provided herein.
- 25.2 Upon achieving compliance with this Consent Order with respect to the Trenton Facility or Gibraltar Facility, or the activities specified for a specific WMU or AOC at the Facilities, DSC may request, in writing, that the WMD Chief or the ERD Chief, as appropriate, issue a written Interim Notice of Termination. Such requests shall be submitted to the DEQ on an annual basis and shall include:
- A. The legal description of the Facility or specified WMU or AOC and all property or areas subject to corrective actions or response activity associated with the specified Facility, WMU, or AOC; and
 - B. Written certification that DSC has fully complied with all of the requirements specified in this Consent Order applicable to the Trenton Facility or Gibraltar Facility or specified WMU or AOC.

The Parties agree that issuance of an Interim Notice of Termination does not release DSC from its obligation to pay all unpaid fines, penalties or oversight costs incurred in association with the specific Facility or specified WMU or AOC, and that all such unpaid fines, penalties and oversight costs shall be paid by DSC prior to issuance of the Final Notice of Termination pursuant to Paragraph 25.3 of this Consent Order.

- 25.3 Upon completion of all DEQ-approved IM, IRA, corrective actions, and response activities required under this Consent Order including the recording of appropriate deed restrictions, payment of any fines and stipulated penalties incurred under this Consent Order, and

reimbursement of all State costs addressed in this Consent Order, DSC may also request, in writing, that the DEQ issue a written Final Notice of Termination.

A. Such a request shall consist of a written certification that DSC has fully complied with all of the requirements specified in this Consent Order and has paid all fines and stipulated penalties incurred under this Consent Order and reimbursement of all State costs addressed in this Consent Order. Specifically, this certification shall include:

1. The date of compliance with each provision of the compliance program in Section VIII (Work to be Performed); a true copy of the deed restrictions, including liber and page, of the deed restrictions recorded by the County Registrar of Deeds; if applicable, the date any fines and stipulated penalties were paid; and the date all outstanding State costs were completely reimbursed;
2. A statement that all required information has been reported to the appropriate DEQ Project Coordinator;
3. Confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the Trenton Facility or other specified location.
4. Additional relevant information which may be requested by the WMD Chief and/or ERD Chief.

25.4 Upon receipt of DSC's written request for issuance of the Final Notice of Termination, the DEQ will review DSC's certification submitted pursuant to Paragraph 25.3 of this Consent Order; the IM, IRA, corrective actions, and response activities undertaken pursuant to this Consent Order; and all supporting documentation. The DEQ will determine whether DSC has satisfactorily completed all requirements of this Consent Order including, but not limited to, completion of all corrective actions and response activities required under this Consent Order; proper plugging and abandonment of monitor wells; payment of all cost reimbursement, fines and stipulate penalties owed to the DEQ; and complying with all other terms and conditions of this Consent Order. If the DEQ determines that all requirements have been satisfactorily completed, the WMD Chief and the ERD Chief will jointly issue the written Final Notice of Termination.

25.5 Upon completion of all DEQ-approved IM, IRA, corrective actions, and response activities required under this Consent Order and the DEQ's issuance of the written Final Notice of Termination in accordance with Paragraph 25.4 of this Consent Order, DSC's obligations as set forth in this Consent Order shall automatically terminate, except for the requirements of Paragraph 8.7(C)(3) to the extent DSC has a continuing obligation to comply with the requirements of Section 20120b(3) of the NREPA pursuant to a DEQ approved RAP, and Sections XIV (Record Preservation) and XXIII (Indemnification and Insurance), excluding Paragraph 23.4, of this Consent Order.

XXVI. SIGNATORIES

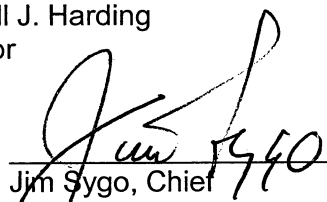
The undersigned certify that they are fully authorized by the party they represent to enter into this Consent Order to comply by consent and to execute and legally bind that party to it.


DSC LTD.

By: _____
Title: _____
Date: _____, 1999

DEPARTMENT OF ENVIRONMENTAL
QUALITY

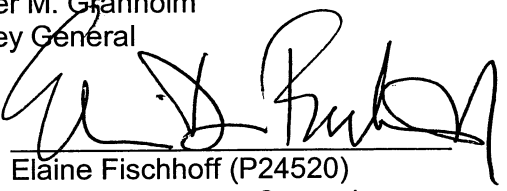
Russell J. Harding
Director

By:  _____
Jim Sygo, Chief
Waste Management Division
Date: 12/17/99, 1999

By:  _____
Alan J. Howard, Chief
Environmental Response Division
Date: 12/17/99, 1999

Department of Attorney General

Jennifer M. Granholm
Attorney General

By:  _____
Elaine Fischhoff (P24520)
Assistant Attorney General
Natural Resources Division
Date: 12/17/99, 1999

XXVI. SIGNATORIES

The undersigned certify that they are fully authorized by the party they represent to enter into this Consent Order to comply by consent and to execute and legally bind that party to it.

DSC LTD.

DEPARTMENT OF ENVIRONMENTAL
QUALITYRussell J. Harding
DirectorBy: 

Michael Wilkinson

Title: CEODate: December 17, 1999

By: _____

Jim Sygo, Chief
Waste Management Division

Date: _____, 1999

By: _____

Alan J. Howard, Chief
Environmental Response Division

Date: _____, 1999

Department of Attorney General

Jennifer M. Granholm
Attorney General

By: _____

Elaine Fischhoff (P24520)
Assistant Attorney General
Natural Resources Division

Date: _____, 1999

ATTACHMENT A

LEGAL DESCRIPTIONS ARE SET FORTH ON THE FOLLOWING 5 PAGES

ATTACHMENT A (continued)

Trenton Facility:

A parcel of land being part of Fractional Section 5 and Section 6, Town 4 South, Range 11 East, City of Riverview, Wayne County, Michigan and part of Fractional Section 8, Section 7, Fractional Section 17 and Section 18, Town 4 South, Range 11 East, City of Trenton, Wayne County, Michigan and including Riverview Manor Subdivision of part of the Southeast one-quarter of Section 6 and part of the Northeast one-quarter of Section 7 and part of Fractional Sections 5 and 8, Town 4 South, Range 11 East, Village of Sibley and Village of Riverview, Wayne County, Michigan as recorded in Liber 49, Page 92 of Plats, Wayne County Records and including Kirby-Sorge-Felske Co. West-Jefferson Subdivision No. 1 of part of the East one-half of Fractional Section 7, Town 4 South, Range 11 East, Monguagon Township, Wayne County, Michigan as recorded in Liber 36, Page 41 of Plats, Wayne County Records and being more particularly described as follows: Commencing at the South one-quarter corner of Fractional Section 7, Town 4 South, Range 11 East, City of Trenton, Wayne County, Michigan and proceeding thence North 88 degrees 38 minutes 54 seconds East along the South line of said Section 7, a distance of 904.21 feet to the centerline of West Jefferson Avenue and the point of beginning of the parcel herein described: thence North 10 degrees 29 minutes 09 seconds East along said centerline of West Jefferson Avenue, a distance of 2336.38 feet to a point; thence North 17 degrees 11 minutes 49 seconds East and continuing along the centerline of West Jefferson Avenue, a distance of 1156.73 feet to a point; thence North 19 degrees 31 minutes 29 seconds East and continuing along the centerline of West Jefferson Avenue, a distance of 1694.07 feet to a point; thence North 88 degrees 29 minutes 44 seconds East a distance of 53.03 feet to a point on the Easterly line of West Jefferson Avenue; thence North 21 degrees 13 minutes 29 seconds East a distance of 54.21 feet to a point on the Easterly line of West Jefferson Avenue; thence North 19 degrees 29 minutes 19 seconds East and continuing along the Easterly line of West Jefferson Avenue, a distance of 286.00 feet to a point of curvature to the left; thence on a curve to the left along the Easterly line of said West Jefferson Avenue, a distance of 214.79 feet to a point of tangency (said curve having a radius of 1485.69 feet, a central angle of 8 degrees 17 minutes 0 seconds, a chord bearing of North 15 degrees 20 minutes 49 seconds East and a chord length of 214.60 feet); thence North 11 degrees 12 minutes 19 seconds East and continuing along the Easterly line of West Jefferson Avenue, a distance of 1700.14 feet to a point of curvature to the right; thence on a curve to the right and continuing along the Easterly line of West Jefferson Avenue, a distance of 173.80 feet to a point of tangency (said curve having a radius of 150 feet, a central angle of 66 degrees 23 minutes 20 seconds, a chord bearing of North 44 degrees 23 minutes 59 seconds East and a chord length of 164.24 feet); thence North 77 degrees 35 minutes 39 seconds East along the Southerly line

of West Jefferson Avenue, a distance of 301.60 feet to a point on the Westerly line of Riverview Avenue (86 feet wide); thence South 2 degrees 1 minute 51 seconds East along said Westerly line of Riverview Avenue (86 feet wide) a distance of 733.94 feet; thence South 73 degrees 07 minutes 57 seconds East a distance of 804.57 feet to a point on the U.S. Harbor line; thence South 30 degrees 18 minutes 22 seconds West along said U.S. Harbor line, a distance of 861.66 feet to Harbor Line Point No. 38; thence South 1 degree 23 minutes 7 seconds West and continuing along said U.S. Harbor line, a distance of 3307.91 feet to Harbor Line Point No. 39; thence South 12 degrees 28 minutes 27 seconds West and continuing along said U.S. Harbor line, a distance of 2104.70 feet to Harbor Line Point No. 40; thence South 27 degrees 45 minutes 17 seconds West and continuing along said U.S. Harbor line, a distance of 758.61 feet to a point; thence North 84 degrees 16 minutes 06 seconds West a distance of 1234.92 feet to a point; thence North 5 degrees 43 minutes 54 seconds East a distance of 258.10 feet to a point on the Northerly line of said Section 18, Town 4 South, Range 11 East; thence South 88 degrees 38 minutes 54 seconds West along said Northerly line of said Section 18, a distance of 568.55 feet to the point of beginning of the parcel herein described;

LESS AND EXCEPT a parcel of land containing a part of Monguagon Creek located in Section 5, Township 4 South, Range 11 East, City of Riverview, Wayne County, Michigan, being more particularly described as follows:

Commencing at the South quarter corner of Fractional Section 7, Township 4 South, Range 11 East, City of Trenton, Wayne County, Michigan:

Thence South 88 degrees 38 minutes 54 seconds West 904.21 feet to the centerline of West Jefferson Ave. 99 feet wide;

Thence North 10 degrees 29 minutes 09 seconds East 2336.38 feet along the centerline of West Jefferson Ave.;

Thence North 17 degrees 11 minutes 49 seconds East 1156.73 feet along the centerline of West Jefferson Ave.;

Thence North 19 degrees 31 minutes 29 seconds East 1694.07 feet along the centerline of West Jefferson Ave.;

Thence North 88 degrees 29 minutes 44 seconds East 53.03 feet to a point on the east line of West Jefferson Ave.;

Thence North 21 degrees 13 minutes 29 seconds East 54.21 feet along thence east line of West Jefferson Ave.;

Thence North 19 degrees 29 minutes 19 seconds East 286.00 feet along the east line of West Jefferson Ave. to a point on a curve to the left;

Thence along said curve to the left 214.79 feet, said curve having a radius of 1485.69 feet, a chord bearing of North 15 degrees 20 minutes 49 seconds East, and a chord length of 214.60 feet, said curve also being the East line of West Jefferson Ave.;

Thence North 11 degrees 12 minutes 19 seconds East 1700.14 feet along the east line of West Jefferson Ave. to a point on a curve to the right;

Thence along said curve to the right 173.80 feet, said curve having a radius of 150.00 feet, a chord bearing of North 44 degrees 23 minutes 59 seconds East, and a chord length of 164.24 feet;

Thence North 77 degrees 35 minutes 39 seconds East 56.25 feet along the south line of West Jefferson Ave. to the Point of Beginning of said parcel;

Thence North 77 degrees 35 minutes 39 seconds East 245.35 feet along the south line of West Jefferson Ave.;

Thence South 02 degrees 01 minutes 51 seconds East 733.94 feet along the west line of Riverview Ave. 86 feet wide;

Thence South 73 degrees 07 minutes 57 seconds East 804.57 feet along the south line of Riverview Ave. to the United States Harbor Line;

Thence South 30 degrees 18 minutes 22 seconds West 154.67 feet along the United States Harbor line;

Thence North 72 degrees 53 minutes 13 seconds West 69.34 feet;

Thence North 21 degrees 26 minutes 41 seconds West 77.00 feet;

Thence North 72 degrees 53 minutes 13 seconds West 712.92 feet;

Thence North 02 degrees 17 minutes 27 seconds West 668.76 feet;

Thence North 81 degrees 42 minutes 01 seconds West 164.62 feet;

Thence North 08 degrees 17 minutes 59 seconds East 54.48 feet to the place of beginning. 54-001-0082-000; 54-001-01-0097-000; 54-001-01-0097-000; 54-001-99-0020-000; 54-001-99-009-000; 54-001-03-0051-001; 54-001-99-0006-000; 54-001-99-0002-000; 54-001-99-0007-000; and Pt of 51-009-03-0001-000.
Said parcel containing 3.640 acres more or less.

The basis of bearing for this description being the centerline of King Road which bears South 88 degrees 38 minutes 54 seconds West from the south quarter corner of Fractional Section 7, Township 4 South, Range 11 East.

ATTACHMENT A (continued)

Gibraltar Facility:

A parcel of land located in part of Private Claims 345 and 355, Fractional Section 35 and 36, Town 4 South, Range 10 East, part of Fractional Section 1, part of the Walker Tract, Private Claim 54, Town 5 South, Range 10 East and part of Lots 1, 16 and 17 of the Subdivision of the Cass Tract being Private Claims 54, 345, 354 and 355, also part of Section 36, Town 4 South, Range 10 East and Sections 1, 2, 11 and 12, Town 5 South, Range 10 East as recorded in Liber 14 of Deeds, Page 301, Wayne County Records all in the City of Gibraltar, Wayne County, Michigan and being more particularly described as follows: Commencing at the North one-quarter corner of said Fractional Section 36, Town 4 South, Range 10 East and proceeding thence North 88 degrees 28 minutes 26 seconds East along the Northerly line of said Fractional Section 36, which is also the centerline of Vreeland Road (66 feet wide) a distance of 705.97 feet to a point; thence South 23 degrees 10 minutes 50 seconds West along the extension of and the Westerly line of West Jefferson Avenue (120 feet wide), a distance of 1352.91 feet to the point of beginning of the parcel herein described: Thence continuing South 23 degrees 10 minutes 50 seconds West along said Westerly line of West Jefferson Avenue (120 feet wide) a distance of 1017.94 feet to a point; thence South 23 degrees 08 minutes 36 seconds West and continuing along said Westerly line of West Jefferson Avenue (120 feet wide) a distance of 2489.82 feet to a point; thence South 23 degrees 14 minutes 28 seconds West and continuing along said Westerly line of West Jefferson Avenue (120 feet wide) a distance of 1484.53 feet to a point; thence South 22 degrees 48 minutes 37 seconds West and continuing along said Westerly line of West Jefferson Avenue (120 feet wide) a distance of 416.49 feet to a point; thence South 26 degrees 30 minutes 49 seconds West and continuing along said Westerly line of West Jefferson Avenue (120 feet wide) a distance of 162.62 feet to a point on the Northerly line of Gibraltar Road (120 feet wide); thence North 83 degrees 59 minutes 45 seconds West along said Northerly line of Gibraltar Road (120 feet wide), a distance of 2255.05 feet to a point of curvature to the left; thence on a curve to the left and continuing along said Northerly line of Gibraltar Road (120 feet wide) a distance of 394.99 feet to a point of tangency (said curve having a Radius of 3939.72, a central angle of 5 degrees 44 minutes 40 seconds, a chord bearing of North 86 degrees 52 minutes 05 seconds West and a Chord Length of 394.83 feet); thence North 89 degrees 44 minutes 25 seconds West and continuing along said Northerly line of Gibraltar Road (120 feet wide) a distance of 632.45 feet to a point on the Easterly line of the Detroit & Toledo Shore Line Railroad right of way (100 feet wide); thence North 34 degrees 03 minutes 11 seconds East along said Easterly line of said Detroit & Toledo Shore Line Railroad Right of Way (100 feet wide) a distance of 5690.56 feet to a point; thence North 56 degrees 21 minutes 12 seconds East, a distance of 372.60 feet to a point on the Southerly line of the Michigan Central Railroad right of way (50 feet wide); thence North 89 degrees 57 minutes 20 seconds East along said Southerly line of the Michigan Central Railroad right of way (50 feet wide) a distance of 1917.77 feet to a point; thence South 23 degrees 10 minutes 50 seconds West a distance of 37.82 feet to a point; thence South 66 degrees 49 minutes 10 seconds East a distance of 75.00 feet to the point of beginning of the parcel herein described.

LESS AND EXCEPT that portion of the following described property lying to the East of the Detroit & Toledo Shoreline Railroad and the New York/Michigan/Penn Central Railroad rights of way (the portion of such property lying to the West of the aforementioned railroad rights of way is not now and never was included in the above description):

Land in the City of Gibraltar, Wayne County, Michigan, comprised of part of Fractional Sections 35 and 36, T. 4 S., R. 10 E., part of Fractional Section 1, T. 5 S., R. 10 E., part of Private Claims 54, 345 and 355, and part of lots 1, 16 and 17 of the Subdivision of the Cass Tract as recorded in Liber 14 of Deeds on Page 301, Wayne County Records.

Said land is described as beginning at the Northeast corner of said Fractional Section 35, proceeding thence North $88^{\circ}54'30''$ East 83.50 feet along the North line of said Fractional Section 36; thence South $3^{\circ}59'42''$ West 2088.54 feet; thence South $2^{\circ}32'59''$ West 1685.20 feet; thence South $10^{\circ}0'00''$ East 630.00 feet; thence South $4^{\circ}56'15''$ West 75.35 feet; thence North $89^{\circ}26'15''$ East 1195.72 feet; thence North $22^{\circ}35'35''$ East 1361.06 feet; thence North $38^{\circ}04'10''$ East 174.21 feet; thence South $65^{\circ}47'10''$ East 221.30 feet; thence along the centerline of West Jefferson Avenue (formerly River Road) as monumented, the following three courses: South $23^{\circ}36'00''$ West 1386.60 feet, South $23^{\circ}42'00''$ West 1484.67 feet and South $26^{\circ}58'25''$ West 569.23 feet; thence North $83^{\circ}31'50''$ West 2093.00 feet along the North line of (relocated) Gibraltar Road, 120 ft. wide; thence North $16^{\circ}25'50''$ West 2022.00 feet; thence North $25^{\circ}42'50''$ West 1804.88 feet; thence North $47^{\circ}18'35''$ West 100.00 feet; thence North $34^{\circ}41'25''$ East 2907.00 feet along the Southeasterly right of way line of the New York Central Railroad, 100 ft. wide; thence North $88^{\circ}54'45''$ East 1270.28 feet along the North line of Fractional Section 35 to the point of beginning. Excepting therefrom that part of West Jefferson Ave. (formerly River Road) deeded for road purposes, also excepting the rights-of-way of the Michigan Central Railroad Company and the Detroit and Toledo Shore Line Railroad Company, subject to the rights of the public in the existing rights of way of Vreeland Road and West Jefferson Avenue (formerly River Road).

ATTACHMENT B

Scope of Work

1. With respect to the waste management units at the Trenton Facility and identified in the Prioritization Schedule (Attachment E):
 - (a) To prepare individual work plans for the WMUs identified in the Prioritization Schedule based on established boilerplate language for the facility and on the outline for RFI Work Plan presented in Attachment F. The work plans will reference the standardized Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP) prepared for the Program. The individual work plans will identify the tasks to be implemented to prepare, investigate, and evaluate each WMU;
 - (b) To perform, as necessary, investigations and remedial evaluations to identify, screen, and evaluate potential corrective measures for releases of Contaminants from WMUs at the Trenton Facility. Preparation tasks for some WMUs may be implemented to an extent that the preparation tasks result in a No Further Action decision after the completion of the investigation activities;
 - (c) To implement, based upon the Prioritization Schedule, interim measures (IM), approved by the DEQ, for releases from WMUs at the Trenton Facility; and
 - (d) To implement, based upon the Prioritization Schedule, the Corrective Measures approved by the DEQ to remediate releases of Contaminants from WMUs at the Trenton Facility.
2. With respect to the areas of concerns present at the Facilities and identified in the Prioritization Schedule:
 - (a) To prepare individual work plans for the areas of concerns identified in the Prioritization Schedule based on the established boiler plate language. The work plans will reference the standardized Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP) prepared for the Program. The individual work plans will identify the tasks to be implemented to prepare, investigate, and evaluate each area of concern;
 - (b) To perform, as necessary, investigations and remedial evaluations, to identify, screen, and evaluate potential response activity alternatives to remediate releases or threat of releases of Hazardous Substances at the Facilities. Preparation tasks for some areas of concern may be

implemented to an extent that the tasks result in a No Further Action decision after the completion of the investigation activities;

- (b) To implement, based upon the Prioritization Schedule, interim response activities, approved by the DEQ, to address releases and threat of releases of Hazardous Substances at the Facilities; and
 - (c) To develop and implement remedial action plans for the Facilities, consistent with the requirements of Part 201 of the NREPA and subject to the approval of the DEQ.
3. In general, it is not intended that the QAPP and HASP be completely revised for each WMU or area of concern. DSC will submit a general QAPP and HASP to be approved prior to implementing the first work plan. Subsequent WMUs and areas of concern will only require minor adjustment to the QAPP and HASP for specific conditions.

ATTACHMENT C

Waste Management Units Trenton Facility

DETAILED MAP FOLLOWS

WMU 1 (Sedimentation Basin) is an earthen basin for settling and oil separation of storm water and process wastewater from rolling and pickling operations.

WMU 2 (Oil Processing Tank) is a tank for emulsion breaking and accumulation of mill oil skimmed from the Sedimentation Basin.

WMU 3 (West Process Sewer - North) is a process sewer from the Concast, Rehead and Rolling mills to the Sedimentation Basin.

WMU 4 (West Process Sewer - South) is a process sewer from the Sedimentation Basin and the coil storage area to the Central Wastewater Treatment Plant ("CWWTP").

WMU 5 (Spent Pickle Acid Sewer No. 1) is a process sewer from the pickling line to the Acid Neutralization Plant.

WMU 6 (Acid Neutralization Plant) consists of process tanks and pumps used to store and neutralize spent pickle acid.

WMU 7 (Spent Pickle Acid Sewer No. 2) is a process wastewater sewer from the Acid Neutralization Plant to the CWWTP.

WMU 8 (Acid Pickling Line - Secondary Containment) is for the capture of pickle liquor and rinsate releases from the pickle lines.

WMU 9 (Centrifuge Sludge Pit) is a former earthen basin for dewatered sludge from the sinter process.

WMU 10 (Standby Sludge Basin) is a concrete CWWTP emergency sludge holding tank.

WMU 11 (Former CWWTP Acid Dosing Tanks) are aboveground tanks for storage of spent pickle liquor prior to beneficial use in the CWWTP.

WMU 12 (CWWTP Grit Pile) consists of accumulated grit and other solids from the CWWTP grit chambers.

WMU 13 (Sludge Filter Press Loadout Area) is a waste sludge removal and accumulation area beneath the CWWTP sludge filter press.

WMU 14 (Former Sinter Building Holding Pits) are pits for holding steel mill by-products prior to recycling into usable materials (blast furnace charge). During one period, the pits received dewatered CWWTP sludges.

WMU 15 (Wastewater Treatment Plant) is for treatment of process wastewaters.

WMU-16 (East Process Sewer) is a process sewer for the Melt Shop, Air Separation, Power House, and Blast Furnaces to the CWWTP.

WMU-17 (Blast Furnace Recycle Water Clarifier Sludge Filter Press Loadout Area) is a waste sludge removal and accumulation area beneath the blast furnace recycle water sludge filter press.

WMU-23 (Former BOF Gas Cleaning Sludge Pit) was a receiving pit for sludge from the wet scrubber air pollution control ("APC") system for basic oxygen furnaces.

WMU-24 (Former EAF Gas Cleaning System) was a wet scrubber. This WMU will be addressed under WMU-25.

WMU-25 (K061 Settling Basin) was a concrete pit for collection of K061 sludge from the gas cleaning system.

WMU-26 (North Debris Piles) are piles of process debris.

WMU-27 (Equipment Storage Yard) is a small area with a fenced area for surplus equipment.

WMU-28 (Drum Storage Area No. 1) is an area of bare ground reportedly used for temporary storage of empty drums prior to crushing and off-site disposal.

WMU-29 (TSCA Storage Building) is a block building used to store PCB transformers and other PCB containing equipment and materials.

WMU-30 (Former Electric Arc Furnace Emission Control Sludge/Dust Storage Pile) was a RCRA interim status hazardous waste storage area.

WMU-31 (Electric Arc Furnace Emission Control Sludge/Dust Storage Tanks) are double walled underground tanks for greater than ninety (90) day accumulation of EAF APC sludge/dust (K061). WMU-31 has been closed.

WMU-32 (Kish Control Bag House Loadout Area) is a dust removal area for the APC bag house to control kish emissions during iron pouring.

WMU-38 (Noise Reduction Pile) is a pile of debris used to deflect noise from plant operations.

WMU-41 (Desulfurization Bag House Loadout Area) is an area under the APC bag house for removal of iron desulfurization process APC dusts.

WMU-42 (Concast Scale Pit) is a concrete process tank (basin) used to separate scale from the Concaster contact cooling water.

WMU-43 (Concast Grit Basin) is a concrete and steel sump system used to separate solids and oil from the Concaster cooling water.

WMU-44 (Fuel Oil Storage Tank) is a 1,000,000-gallon steel above-ground storage tank ("AST") and containment area for storage of fuel oil No. 6 and/or No. 4.

WMU-47 (EAF Bag House Loadout Area) is an area beneath the APC bag house for removal of APC dust from EAFs.

WMU-49 (Downcoiler Sump) is a basement containing oil circulating pumps and oily water sumps.

WMU-50 (South Motor Room Basement Sumps) are sumps for management of oily water in the South Motor Room Basement.

WMU-51 (Six Stand Oil Basement Sumps) are sumps for management of oily water in the Six Stand Basement.

WMU-52 (Finish Stand Scale Pit), WMU-53 (Roughing Mill Scale Pit), WMU-54 (Old Four High Scale Pit), and WMU-55 (Blooming Mill Scale Pits) are sumps for separation of solids and oil.

WMU-56 (Reheat Sump) is a sump for separation of solids and oil.

WMU-57 (Heater Area Drains Sump) is a sump for separation of solids and oil.

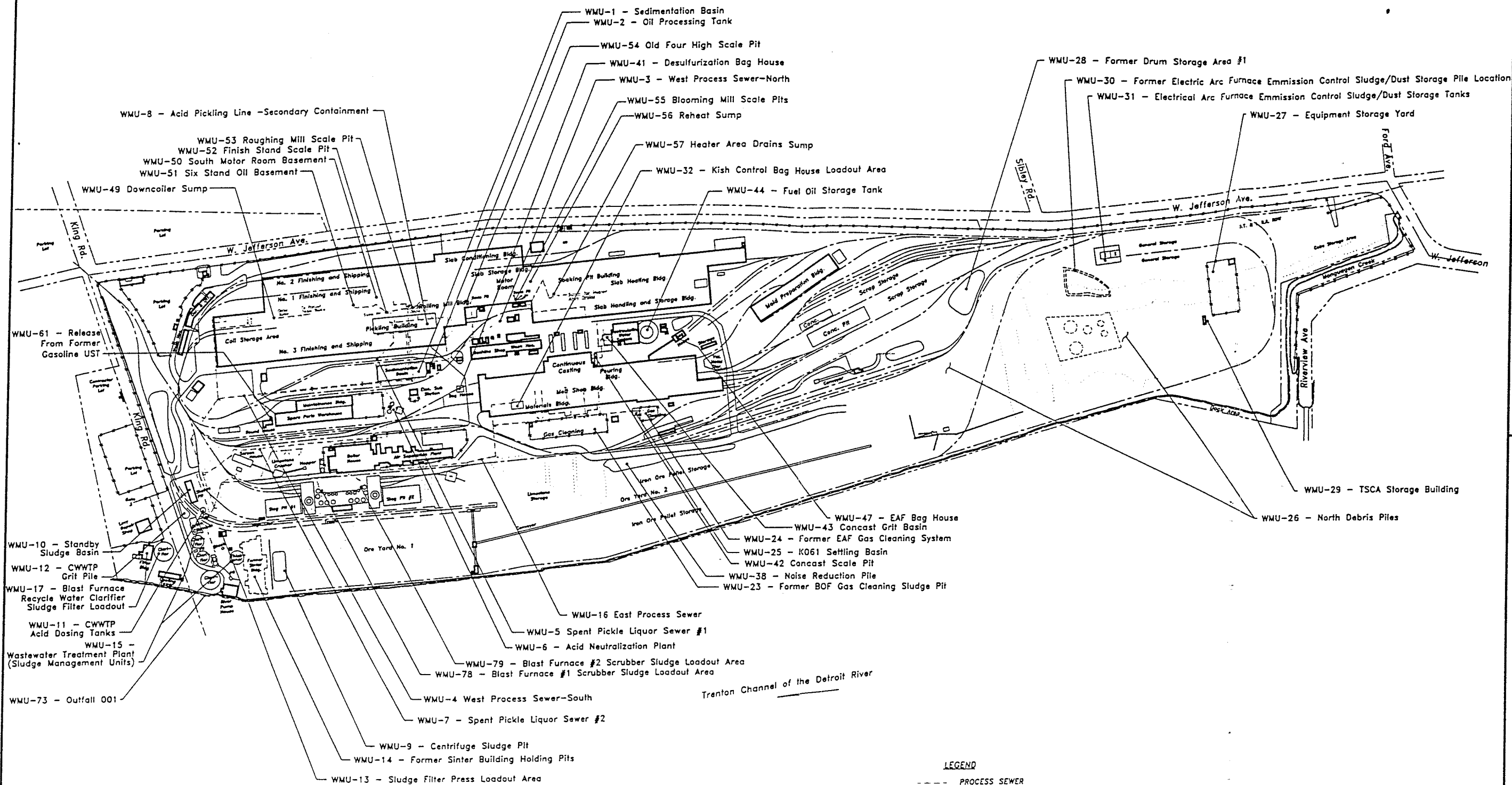
WMU-61 (Release from Former Gasoline underground storage tank ("UST")) is from a 6,000-Gallon steel UST removed in 1990.

WMU-73 (Outfall 001) is the CWWTP wastewater outfall.

WMU-78 (Blast Furnace No. 1 Scrubber Loadout Area) is an area beneath the APC scrubber.

WMU-79 (Blast Furnace No. 1 Scrubber Loadout Area) is an area beneath the APC scrubber.

AOC-1 (Groundwater Plume) consists of four monitoring well locations with lower pH.



REFERENCE: TECHNIA, 1998, WMU LOCATION DIAGRAM

Figure 1
WMU Location Diagram - Trenton Facility
DSC Ltd. - Trenton Site
Trenton, Michigan

ENVIRONMENTAL STRATEGIES CORPORATION
11911 Freedom Drive Suite 900
Reston, Virginia 20190
703-709-6500



ATTACHMENT D

Areas of Concern Trenton and Gibraltar Facilities

DETAILED MAPS FOLLOW

Trenton Facility

AOC-T33 (Suspected Releases from Drum and Oil Hopper Storage Areas) are from an area for storing full and empty oil totes and drums of virgin products.

AOC-T39 (Locomotive Repair Shop a.k.a. "Roundhouse") are suspected releases of waste oils, solvents and fuels from a building used for repair of plant locomotives and rolling stock.

AOC-T40 (Suspected Releases from Paint Shop) are suspected releases of paint and solvent wastes from a building used for plant maintenance and painting activities.

AOC-T45 (Former Drum Storage Area No. 2) is an area of bare ground reportedly used for temporary storage of empty drums prior to crushing and off-site disposal.

AOC-T46 (Former Drum Storage Area No. 3) is an area of bare ground used for temporary accumulation of approximately 200 drums abandoned by McLouth.

AOC-T48 (Transformer Release) is a reported release from outside a PCB transformer in 1978.

AOC-T60 (Suspected Historical Releases from PCB Containing Equipment) are from multiple PCB-containing transformers and capacitors.

AOC-T62 (Lime Storage Tanks) are surface releases at the CWWTP lime storage area.

AOC-T63 (Boiler House Fuel Oil Tanks) are two ASTs used to store No. 4 and No. 6 fuel oil for the boiler house.

AOC-T66 (Rolling Mill PCB Spill) is a reported PCB spill.

AOC-T69 (Locomotive Fuel Tanks) are two 10,000-gallon diesel fuel ASTs.

AOC-T70 (Kerosene Tank) is an AST used to store kerosene.

AOC-T74 (Outfall 002) is an outfall for discharge of storm water and non-contact cooling water.

AOC-T76 (Outfall 004) is an outfall for discharge of storm water and non-contact

cooling water.

AOC-T77 (Outfall 005) is an outfall designation for river water pump house screen backwash.

Gibraltar Facility

AOC-G1 (Landfill Area 1B)
AOC-G2a (Tandem Mill Pond)
AOC-G20 (Floating Oil on Tandem Mill Pond)
AOC-G2b (Acid Dosing Pond)
AOC-G2c (Sediment Drying Pond)
AOC-G3 (Northwest Fill Area)
AOC-G4a (Anneal Basement)
AOC-G4b (Skin Mill Basement)
AOC-G4c (Pickler Basement)
AOC-G4d (Tandem Mill Basement)
AOC-G5a (Water Retention Basin No. 1)
AOC-G5b (Water Retention Basin No. 2)
AOC-G5c (Water Retention Basin No. 3)
AOC-G5d (Water Retention Basin No. 4)
AOC-G6 (Southeast Fill Area)
AOC-G7 (Suspected Historical Releases from PCB Containing Equipment)

Areas of Interest That Require No Further Action
Trenton and Gibraltar Facilities

The areas listed below were identified as areas of interest in the RCRA Facility Assessment for the Trenton Facility and Site Assessment for the Gibraltar Facility. It was subsequently determined that these locations are not considered to be waste management units or areas of concern for one or more of the following three reasons:

- (1) There was no known waste management at the location
- (2) The location is used to store or process a byproduct that is subsequently sold, and was not used for waste management.
- (3) There was no known or identified spill or release of material or Hazardous Substances at the location

Therefore, based upon the information known at this time, no further investigation and corrective action or response activity is required at the locations listed below.

Trenton Facility

AOC-T18 (Blast Furnace No. 1) is the south blast furnace and supporting vessels and structures. No waste management at this location.

AOC-T19 (Blast Furnace No. 2) is the north blast furnace and supporting vessels and structures. No waste management at this location.

AOC-T20 (Slag Pit No. 1) is used to receive and temporarily store slag from the South Blast Furnace. No waste management at this location. Location stores by-product which is processed and sold - No waste management.

AOC-T21 (Slag Pit No. 2) is used to receive and temporarily store slag from the North Blast Furnace. No waste management at this location. Location stores by-product which is processed and sold - No waste management.

AOC-T22 (Melt Shop Building) is a process building containing steel making furnaces, concasters, and supporting operations. No waste management at this location.

AOC-T34 (Former Large Pond No. 3) is a basin previously visible in aerial photos which has been filled. No known waste management at this location.

AOC-T35 (De-kishing Pit) is a pit used to collect kish from cleaning bottle cars. No waste management at this location.

AOC-T36 (Former Pond Area No. 1) consists of three smaller basins filled between 1956 and 1961. No known waste management at this location.

AOC-T37 (Former Pond Area No. 2) consists of three larger basins filled between 1956 and 1961. No known waste management at this location.

AOC-T58 (North Slag Processing Plant) is a process area operated by E.C. Levy Company to reclaim and store slag. Process produces product for sale. No waste management at this location.

AOC-T59 (South Slag Processing Plant) is a process area operated by E.C. Levy Company to crush and screen iron slag for reclamation. Process produces

product for sale. No waste management at this location.

AOC-T64 (Possible Fill Area) is an area reportedly filled prior to McLouth's occupation. No known waste management at this location.

AOC-T65 (Barrel Area No. 4) is an area of concrete containing approximately 12 drums. No spill or release at this area.

AOC-T67 (Former Oil Terminal) was an oil terminal with five ASTs. No known waste management at this location.

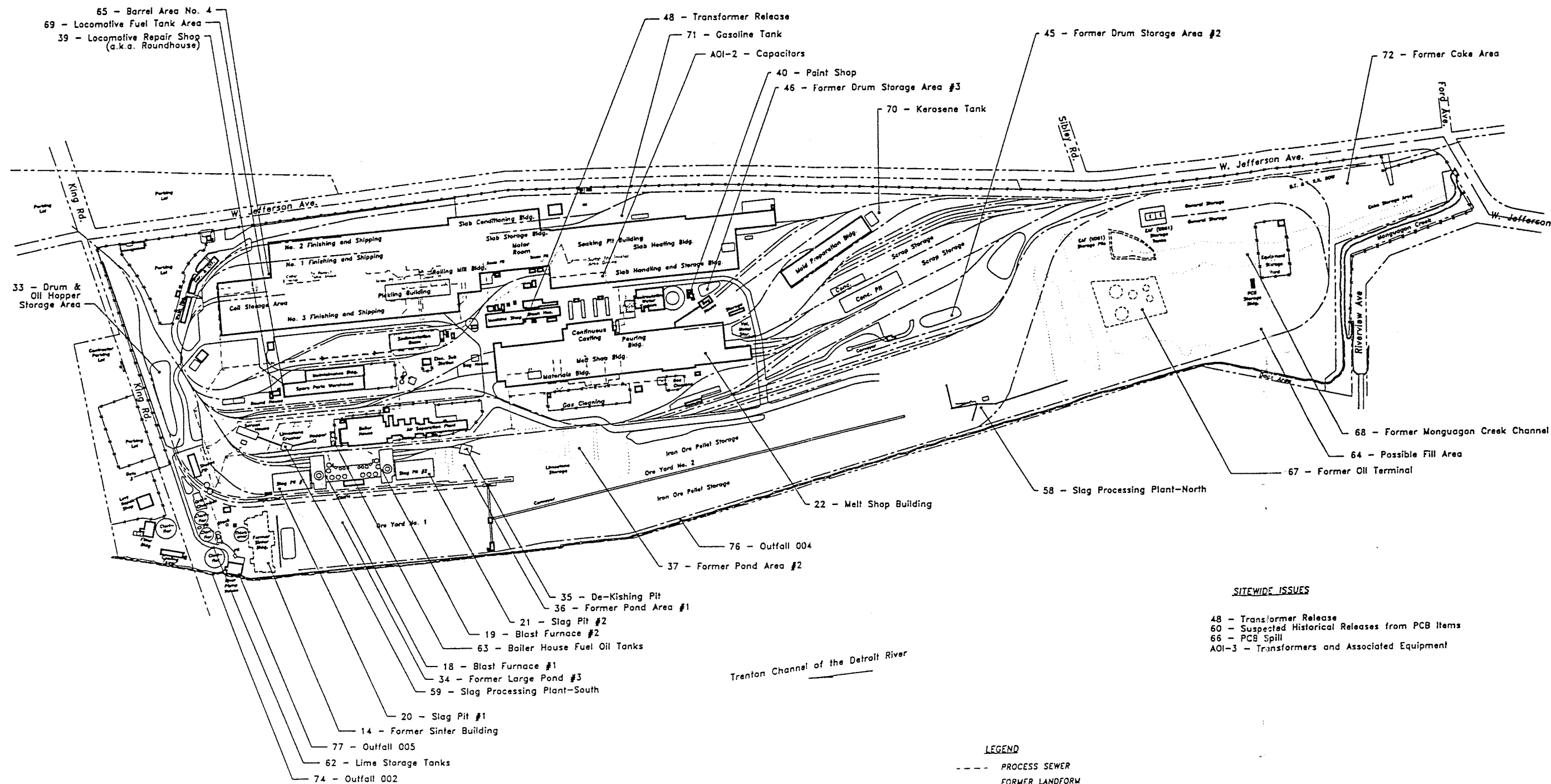
AOC-T68 (Former Monguagon Creek Channel) underlies the north end of the property. No known waste management at this location.

AOC-T71 (Gasoline Tank) is a self-contained 2000-gallon AST. No spill or release at this area.

AOC-T72 (Former Coke Storage Area) is a storage area for piles of coke used in the blast furnace. No waste management at this location. Coke is a raw material.

ATTACHMENT D
ADDENDUM

The term Area of Interest (AOI) as identified in the maps contained in this Attachment D refer to and have the same meaning as AOC established by paragraph 2.1 of this Consent Order.



REFERENCE: TECHN. 1998, WWU LOCATION DIAGRAM

Figure 2
Areas of Interest - Trenton Facility
DSC Ltd.
Trenton, Michigan

ENVIRONMENTAL STRATEGIES CORPORATION

11911 Freedom Drive Suite 900
Reston, Virginia 20190
703-709-6500



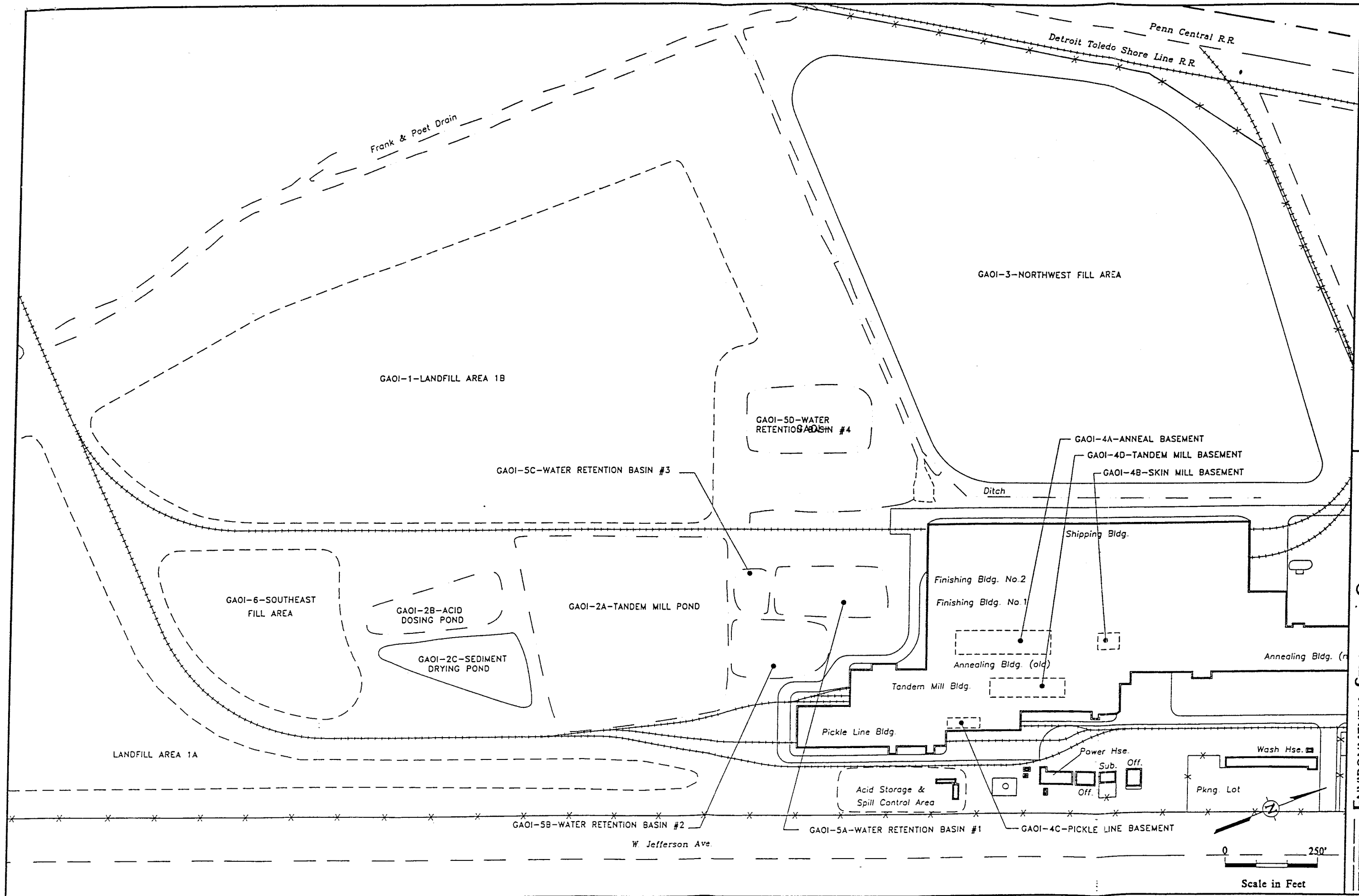


Figure 3
Areas of Interest - Gibraltar Facility
DSC Ltd.
Trenton, Michigan

ENVIRONMENTAL STRATEGIES CORPORATION
11911 Freedom Drive Suite 900
Reston, Virginia 20190
703-709-6500



ATTACHMENT E PRIORITIZATION SCHEDULE

This attachment provides a description of the screening criteria used to develop the prioritization schedule, the prioritization summary table for previously identified waste management units (WMU's) and areas of concern (AOC's), and the comprehensive prioritization schedule. The screening criteria in this attachment shall also be used to develop a prioritization ranking for any new WMU or AOC identified at the facilities in accordance with Paragraph 8.8 of the Consent Order. The modification of the Prioritization Schedule described in Paragraph 8.8(A)(3) shall be based on the relative ranking of any newly identified unit.

The screening criteria are based on meeting the requirements of the RCRA, MDEQ Part 111, and the MDEQ Part 201 programs. The numerical screening criteria are (listed in order of importance):

- Imminent Threat to Human Health
- Imminent Threat of Offsite Release
- Potential for Release to Groundwater
- Potential to Contain Regulated Materials
- Potential for Release to Soil
- Potential Cost

The use of each screening criteria is described in more detail below. The application of the screening criteria to known WMUs and AOCs is presented in Table E-1. The screening criteria are additive criteria. For example, a unit that has the potential to release constituents to soil and groundwater is assigned values under both categories and is therefore assigned a higher ranking in the prioritization schedule.

Active/Inactive/Out-of-Service

The operational status of a unit is an important factor to consider in determining the priority of the unit. Worker safety in and around active units may be addressed through OSHA and worker safety programs instead of the corrective action program. The priority of the associated environmental issues at an active unit may be reduced or deferred to a time when the equipment is idled.

Imminent Threat to Human Health (Potential Ratings: 6, 3 or 0)

This criteria can be used to bring any unit that poses an imminent, acute, threat to human health to the top of the priority list.

Part 201 Evaluation Criteria addressed by this category:

- 2. Drinking water usage
- 14. Acute toxic impacts & physical hazards

Imminent Threat of Offsite Release (Potential Ratings: 6, 3 or 0)

The potential for a release from the site through the groundwater, surface water, or airborne pathways is the second most critical category in the screening process. Materials that are controlled on the DSC facilities can be managed and potential risks can be controlled. There is less control if a material is crossing a site boundary. A unit is given the highest rating under this criteria if there is currently an off-site release, i.e. material is crossing a site boundary.

Part 201 Evaluation Criteria addressed by this category:

5. Hazards to surface waters
12. Polluted soil runoff to surface water
13. Aquatic flora/fauna/food chain hazards
15. Ecological & aesthetics

Potential for Release to Groundwater (Potential Ratings: 4, 2 or 0)

This has been assigned as an important criteria because the most probable offsite pathway operating at the facilities is groundwater migration. The potential to control sources to groundwater is one of the fundamental requirements necessary to allow cleanup or natural attenuation of a groundwater plume.

Part 201 Evaluation Criteria addressed by this category:

9. Injury to drinking water use of aquifer
10. Risk from contact (utility work) with GW
11. Causes GW to be hazardous to SW

Potential to Contain Regulated Materials (Potential Ratings: 3, 1 or 0)

This screening criteria is based on the potential for direct contact exposure by onsite workers. High concentrations of regulated materials could inadvertently pose chronic risks to onsite workers because they are outside of the normal working environment where they take occupational precautions.

Part 201 Evaluation Criteria addressed by this category:

3. Dermal exposures such as by utility workers
4. Indoor air hazards (chronic/systemic)
6. Hazards due to direct contact (ingestion, dermal)
7. Ambient air inhalation hazards
8. Indoor air inhalation hazards

Potential for Release to Soil (Potential Ratings: 2, 1 or 0)

The potential for a release to soil is a criteria established to prioritize on the physical or structural integrity of a unit. An intact structure that poses no potential risk to human health, and that poses no risk to the environment, will get a lower priority than a unit that could be leaking or emitting materials into the soils at the site.

Part 201 Evaluation Criteria addressed by this category:

1. Abandoned substances that are being dispersed or may be dispersed in the future.
 - A. Containerized hazardous substances present
Other sources (soils or groundwater "hot spots," etc) present
Sources related to post June 5, 1995 releases present
Free phase liquids present
Party proposing plan subject to Sec. 14
 - B. Containerized hazardous substances
Free phase liquids
Source from post June 5, 1995 releases
Analysis of source controls

Potential Cost (Potential Ratings: 1, 2, 4 or 0)

This screening criteria is established to raise the relative priority of lower cost activities. Units that have low costs are given a higher ranking under this criteria. This raises low priority and low cost units in the prioritization system so they can be fit into the schedule more readily, rather than languishing until the end. This criteria is not a determining factor for any unit in the final analysis.

The potential cost of activities at each unit is based on the modular cost approach and cost estimate developed with the DSC Ltd. environmental management program. The cost modules are generic for this project. Costs for activities at newly identified WMUs and AOCs will be developed using the cost module approach. The number of modules required will be estimated, and the comprehensive cost for each unit will be calculated using the unit costs for each module in the DSC Ltd. environmental management program.

Based on the application of the screening criteria to known WMUs and AOCs (Table E-1) and the estimated comprehensive costs for each unit, the prioritization schedule for the known units at the Trenton and Gibraltar facilities was developed (Table E-2). The corrective measure preparation, investigation, remedial action, operation and maintenance, and closure activities will take place at the known WMUs and AOCs during the years indicated in Table E-2. The prioritization schedule in Table E-2 may be modified in accordance with the Consent Order.

ATTACHMENT E
ADDENDUM

The term Area of Interest (AOI) as identified in the tables contained in this Attachment E refer to and have the same meaning as AOC established by paragraph 2.1 of this Consent Order.

Table E-1

Prioritization Screening Summary

DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

Screening/Prioritization Criteria									
Number	Name	Active/Inactive/ Out-of-Service	Imminent Threat to Human Health	Imminent Threat of Offsite Release	Potential for Release to Groundwater	Potential to Contain Regulated Materials	Potential for Release to Soil	Potential Cost	Sum
			6 3 0	6 3 0	4 2 0	3 1 0	2 1 0	1 2 4 0	
GAOI-2aO	Floating Oil on Tandem Mill Pond	A	6	0	2	3	2	4	17
AOC1	Groundwater Plume	N.A.	0	6	4	3	2	1	16
GAOI - 2a	Tandem Mill Pond	I	6	0	2	3	2	2	15
47	EAF Bag House Loadout Area; ICM	I	0	0	2	3	1	4	10
26	North Debris Piles (includes No. 30)	A	0	3	2	1	2	1	9
1	Sedimentation Basin; ICM #1 Fence	A	0	0	4	1	2	1	8
6	Acid Neutralization Plant	A	0	0	2	3	2	1	8
8	Acid Pickling Line - Secondary Containment	A	0	0	2	3	2	1	8
12	CWWTP Grit Pile; ICM #2	I	0	0	2	1	1	4	8
69	Locomotive Fuel Tank Area	A	0	0	2	0	2	4	8
70	Kerosene Tank	O	0	0	2	0	2	4	8
11	Former CWWTP Acid Dosing Tanks	O	0	0	2	3	1	2	8
GAOI - 1	Landfill Area 1B	O	0	0	2	3	1	2	8
25	K061 Settling Basin; ICM; Pb	O	0	0	2	3	1	2	8
5	Spent Pickle Liquor Sewer #1	A	0	0	2	3	2	1	8
AOI-2	Capacitors	A	0	0	0	3	2	2	7
AOI-3	Transformers and Associated Equipment	A	0	0	0	3	2	2	7
7	Spent Pickle Liquor Sewer #2	A	0	0	2	3	1	1	7
38	Noise Reduction Pile	I	0	0	2	1	2	2	7
42	Concast Scale Pit	I	0	0	2	0	1	4	7
43	Concast Grit Basin	I	0	0	2	0	1	4	7
49	Downcoiler Sump	A	0	0	2	0	1	4	7
50	South Motor Room Basement Sumps	A	0	0	2	0	1	4	7
51	Six Stand Oil Basement Sumps	A	0	0	2	0	1	4	7
52	Finish Stand Scale Pit	A	0	0	2	0	1	4	7
53	Roughing Mill Scale Pit	A	0	0	2	0	1	4	7
54	Old Four High Scale Pit	A	0	0	2	0	1	4	7

Table E-1

Prioritization Screening Summary

DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

Screening/Prioritization Criteria									
Number	Name	Active/Inactive/ Out-of-Service	Imminent Threat to Human Health	Imminent Threat of Offsite Release	Potential for Release to Groundwater	Potential to Contain Regulated Materials	Potential for Release to Soil	Potential Cost	Sum
			6 3 0	6 3 0	4 2 0	3 1 0	2 1 0	1 2 4 0	
55	Blooming Mill Scale Pits	A	0	0	2	0	1	4	7
56	Reheat Sump	A	0	0	2	0	1	4	7
57	Heater Area Drains Sump	A	0	0	2	0	1	4	7
2	Oil Processing Tank	A	0	0	0	1	2	4	7
13	Sludge Filter Press Loadout Area	I	0	0	0	1	1	4	6
41	Desulfurization Bag House Loadout Area	I	0	0	0	1	1	4	6
28	Former Drum Storage Area #1	O	0	0	0	1	1	4	6
45	Former Drum Storage Area #2	O	0	0	0	1	1	4	6
46	Former Drum Storage Area #3	O	0	0	0	1	1	4	6
62	Lime Storage Tanks	A	0	0	0	0	2	4	6
33	Suspected Releases in Drum and Oil Hopper Storage Areas	A	0	0	0	0	2	4	6
60	Suspected Historical Releases from PCB Items	A/I/O	0	0	0	3	2	1	6
GAOI-7	Suspected Historical Releases from PCB Items	A/I/O	0	0	0	3	2	1	6
10	Standby Sludge Basin	A	0	0	2	1	1	2	6
23	Former BOF Gas Cleaning Sludge Pit	O	0	0	2	1	1	2	6
61	Release from Former Gasoline UST	O	0	0	2	0	2	2	6
44	Fuel Oil Storage Tank	O	0	0	2	0	2	2	6
GAOI - 2b	Acid Dosing Pond	I	0	0	2	1	1	2	6
GAOI - 2c	Sediment Drying Pond	I	0	0	2	1	1	2	6
GAOI - 3	Northwest Fill Area	O	0	0	2	1	1	2	6
GAOI - 4a	Anneal Basement	I	0	0	2	0	0	4	6
GAOI - 4b	Skin Mill Basement	I	0	0	2	0	0	4	6
GAOI - 4c	Pickle Line Basement	I	0	0	2	0	0	4	6
GAOI - 4d	Tandem Mill Basement	I	0	0	2	0	0	4	6
GAOI - 5a	Water Retention Basin #1	I	0	0	2	1	1	2	6
GAOI - 5b	Water Retention Basin #2	I	0	0	2	1	1	2	6
GAOI - 5c	Water Retention Basin #3	I	0	0	2	1	1	2	6

Table E-1

Prioritization Screening Summary

DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

Screening/Prioritization Criteria									
Number	Name	Active/Inactive/ Out-of-Service	Imminent Threat to Human Health	Imminent Threat of Offsite Release	Potential for Release to Groundwater	Potential to Contain Regulated Materials	Potential for Release to Soil	Potential Cost	Sum
			6 3 0	6 3 0	4 2 0	3 1 0	2 1 0	1 2 4 0	
GAOI - 5d	Water Retention Basin #4	I	0	0	2	1	1	2	6
GAOI - 6	Southeast Fill Area	O	0	0	2	1	1	2	6
75	Outfall 004	A	0	3	0	0	0	2	5
14	Former Sinter Building Holding Pits	O	0	0	0	1	0	4	5
17	Blast Furnace Recycle Water Clarifier Sludge Filter Press Loadout Area	I	0	0	0	1	0	4	5
32	Kish Control Bag House Loadout Area	I	0	0	0	0	1	4	5
78	Blast Furnace #1 Scrubber Loadout Area	O	0	0	0	0	1	4	5
79	Blast Furnace #2 Scrubber Loadout Area	I	0	0	0	0	1	4	5
48	Transformer Release (Combine with #60)	O	0	0	0	0	1	4	5
3	West Process Sewer - North	A	0	0	2	1	1	1	5
4	West Process Sewer - South	A	0	0	2	1	1	1	5
15	Wastewater Treatment Plant	A	0	0	2	1	1	1	5
16	East Process Sewer	I	0	0	2	1	1	1	5
63	Boiler House Fuel Oil Tanks	I	0	0	2	0	1	2	5
29	TSCA Storage Building	A	0	0	0	0	0	4	4
27	Equipment Storage Yard	O	0	0	0	0?	0	4	4
39	Suspected Releases from Locomotive Repair Shop (a.k.a. Roundhouse)	A	0	0	0	1	1	2	4
40	Suspected Releases from Paint Shop	A	0	0	0	1	1	2	4
9	Centrifuge Sludge Pit	O	0	0	2	0	1	1	4
74	Outfall 002	A	0	3	0	0	0	0	3
76	Outfall 005	A	0	3	0	0	0	0	3
66	PCB Spill (Combine with #60)	I	0	0	0	0	2	0	2

Table E-2

Priority Summary and Schedule

DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

Number	Name	Active/Inactive/ Out-of-Service	Priority Score	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GAOI-2aO	Floating Oil on Tandem Mill Pond	A	17	Preparation and O&M	O&M																
AOC1	Groundwater Plume	N.A.	16		Preparation	Investigation, RA and Closure	Begin O&M	O&M	O&M	O&M	O&M										
GAOI - 2a	Tandem Mill Pond	I	15		Preparation, Investigation, and Begin RA	Complete RA	O&M	O&M	Closure												
47	EAF Bag House Loadout Area; ICM	I	10		Prepare and Implement ICM												Investigation, Remedial Action and Closure				
26	North Debris Piles (includes No. 30)	A	9			Preparation	Investigation and Begin RA	Continue Remedial Action	Continue Remedial Action	Continue Remedial Action	Complete Remedial Action	Closure and O&M	O&M	O&M	O&M	O&M					
1	Sedimentation Basin; ICM #1 Fence	A	8		ICM			Preparation	Investigation	Remedial Action	Closure										
6	Acid Neutralization Plant	A	8							Preparation	Investigation	Remedial Action	Closure	O&M							
8	Acid Pickling Line - Secondary Containment	A	8								Preparation	Investigation	Remedial Action and Closure								
12	CWWTP Grit Pile; ICM #2	I	8		Prepare, Investigate and Implement ICM	Closure															
69	Locomotive Fuel Tank Area	A	8				Preparation	Investigation, RA and Closure													
70	Kerosene Tank	O	8				Preparation	Investigation, RA and Closure													
11	Former CWWTP Acid Dosing Tanks	O	8				Preparation	Investigation	Remedial Action and Closure												
GAOI - 1	Landfill Area 1B	O	8				Preparation	Investigation	Remedial Action	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	O&M	Finish O&M	Closure	
25	K061 Settling Basin; ICM; Pb	O	8		Prepare, Investigate and Implement ICM	Closure															
5	Spent Pickle Liquor Sewer #1	A	8							Preparation	Remedial Action and Closure										
AOI-2	Capacitors (For cleanup, see #60)	O	7	Begin Remedial Action	Continue Remedial Action	Continue Remedial Action	Complete Remedial Action														
AOI-3	Transformers and Associated Equipment (For cleanup, see #60)	A/I/O	7	Preparation	Begin Remedial Action	Continue Remedial Action	Continue Remedial Action	Continue Remedial Action	Continue Remedial Action	Complete Remedial Action											
7	Spent Pickle Liquor Sewer #2	A	7							Preparation	Remedial Action and Closure										
38	Noise Reduction Pile	I	7						Preparation	Investigation	Remedial Action	Closure									
42	Concast Scale Pit	I	7								Preparation	Investigation and Remedial Action	Closure								
43	Concast Grit Basin	I	7								Preparation	Investigation and Remedial Action	Closure								

Table E-2
Priority Summary and Schedule

DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

Number	Name	Active/Inactive/ Out-of-Service	Priority Score	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
49	Downcoiler Sump	A	7									Preparation	Investigation, RA and Closure								
50	South Motor Room Basement Sumps	A	7									Preparation	Investigation, RA and Closure								
51	Six Stand Oil Basement Sumps	A	7										Preparation	Investigation, RA and Closure							
52	Finish Stand Scale Pit	A	7										Preparation	Investigation, RA and Closure							
53	Roughing Mill Scale Pit	A	7											Preparation	Investigation, RA and Closure						
54	Old Four High Scale Pit	A	7											Preparation	Investigation, RA and Closure						
55	Blooming Mill Scale Pits	A	7												Preparation	Investigation, RA and Closure					
56	Reheat Sump	A	7												Preparation	Investigation, RA and Closure					
57	Heater Area Drains Sump	A	7												Preparation	Investigation, RA and Closure					
2	Oil Processing Tank	A	7									Preparation	Investigation, RA and Closure								
13	Sludge Filter Press Loadout Area	I	6									Preparation	Investigation, RA and Closure								
41	Desulfurization Bag House Loadout Area	I	6									Preparation	Investigation, RA and Closure								
28	Former Drum Storage Area #1	O	6											Preparation	Investigation, RA and Closure						
45	Former Drum Storage Area #2	O	6											Preparation	Investigation, RA and Closure						
46	Former Drum Storage Area #3	O	6										Preparation	Investigation, RA and Closure							
62	Lime Storage Tanks	A	6														Preparation	Investigation, RA and Closure			
33	Suspected Releases in Drum and Oil Hopper Storage Areas	A	6											Preparation	Investigation, RA and Closure						
60 (Inside)	Suspected Historical Releases from PCB Items (Trenton)	A/I/O	6					Preparation	Begin Investigation and Remedial Action	Continue Investigation and Remedial Action	Continue Investigation and Remedial Action	Complete Investigation and Remedial Action	Closure								
60 (Outside)	Suspected Historical Releases from PCB Items (Trenton) (From AOIs 2 and 3)	A/I/O	6					Begin Preparation and Investigation	Complete Preparation and Investigation	Begin Remedial Action and Closure	Continue Remedial Action and Closure	Continue Remedial Action and Closure	Complete Remedial Action and Closure								
GAOI-7 (Inside)	Suspected Historical Releases from PCB Items (Gibraltar)	A/I/O	6							Preparation	Investigation and Remedial Action	Closure									
GAO-7 (Outside)	Suspected Historical Releases from PCB Items (Gibraltar)	A/I/O	6																		

Table E-2
Priority Summary and Schedule
DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

Number	Name	Active/Inactive/ Out-of-Service	Priority Score	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
10	Standby Sludge Basin	A	6									Preparation and Investigation	Remedial Action	Closure							
23	Former BOF Gas Cleaning Sludge Pit	O	6									Preparation	Investigation and Remedial Action	Closure							
61	Release from Former Gasoline UST	O	6									Preparation	Investigation and Remedial Action	Closure							
44	Fuel Oil Storage Tank	O	6											Preparation	Investigation	Remedial Action	Closure				
GAOI - 2b	Acid Dosing Pond	I	6										Preparation and Investigation	Remedial Action	O&M	O&M	O&M	Closure			
GAOI - 2c	Sediment Drying Pond	I	6										Preparation and Investigation	Begin Remedial Action	Complete Remedial Action	Closure					
GAOI - 3	Northwest Fill Area	O	6											Preparation	Investigation	Remedial Action	Closure and O&M				
GAOI - 4a	Anneal Basement	I	6														Preparation	Investigation, RA and Closure			
GAOI - 4b	Skin Mill Basement	I	6														Preparation	Investigation, RA and Closure			
GAOI - 4c	Pickle Line Basement	I	6														Preparation	Investigation, RA and Closure			
GAOI - 4d	Tandem Mill Basement	I	6														Preparation	Investigation, RA and Closure			
GAOI - 5a	Water Retention Basin #1	I	6													Preparation	Investigation	Begin Remedial Action	Complete Remedial Action and Closure	O&M	O&M
GAOI - 5b	Water Retention Basin #2	I	6													Preparation	Investigation	Remedial Action	Closure	O&M	O&M
GAOI - 5c	Water Retention Basin #3	I	6													Preparation	Investigation	Remedial Action	Closure	O&M	O&M
GAOI - 5d	Water Retention Basin #4	I	6													Preparation	Investigation	Remedial Action	Closure	O&M	O&M
GAOI - 6	Southeast Fill Area	O	6													Preparation	Investigation, RA and Closure				
75	Outfall 004	A	5														Preparation, Investigation, RA and Closure				
14	Former Sinter Building Holding Pits	O	5													Preparation	Investigation, RA and Closure				
17	Blast Furnace Recycle Water Clarifier Sludge Filter Press Loadout Area	I	5													Preparation	Investigation, RA and Closure				
32	Kish Control Bag House Loadout Area	I	5													Preparation	Investigation, RA and Closure				
78	Blast Furnace #1 Scrubber Loadout Area	O	5													Preparation	Investigation, RA and Closure				

Table E-2

Priority Summary and Schedule

DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

Number	Name	Active/Inactive/ Out-of-Service	Priority Score	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
79	Blast Furnace #2 Scrubber Loadout Area	I	5													Preparation	Investigation, RA and Closure				
48	Transformer Release	O	5																		
3	West Process Sewer - North	A	5															Preparation	Investigation and Remedial Action	Closure	
4	West Process Sewer - South	A	5															Preparation	Investigation and Remedial Action	Closure	
15	Wastewater Treatment Plant	A	5															Preparation	Investigation	Remedial Action	Closure
16	East Process Sewer	I	5															Preparation	Investigation and Remedial Action	Closure	
63	Boiler House Fuel Oil Tanks	I	5																	Preparation	Investigation, RA and Closure
29	TSCA Storage Building	A	4																	Preparation	Investigation, RA and Closure
27	Equipment Storage Yard	O	4																	Preparation	Investigation, RA and Closure
39	Suspected Releases from Locomotive Repair Shop (a.k.a. Roundhouse)	A	4																	Preparation	Investigation, RA and Closure
40	Suspected Releases from Paint Shop	A	4																	Preparation	Investigation, RA and Closure
9	Centrifuge Sludge Pit	O	4																	Preparation	Investigation, RA and Closure
74	Outfall 002	A	3																	Preparation	Investigation, RA and Closure
76	Outfall 005	A	3																	Preparation	Investigation, RA and Closure
66	PCB Spill	I	2																		

ATTACHMENT F

RCRA FACILITY INVESTIGATION/CORRECTIVE MEASURES STUDY WORK PLANS (RCRA Facility Investigation)

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TRENTON, COUNTY OF WAYNE, MICHIGAN
MID 017422304

PURPOSE

The purpose of the RCRA Facility Investigation (RFI)/Corrective Measures Study (CMS) is to determine the nature and extent of releases of contaminants from all waste management units (WMUs) at the facility, to gather all necessary data to support determinations regarding further corrective action requirements and to allow the required analyses in the Corrective Measures Study, if applicable. DSC, Ltd. is combining the RFI and CMS into a single work plan because the individual WMUs at the facility are being addressed in an expedited program. The intent of the combined work plan is to recognize, where applicable, that some actions are inevitable, and rather than allow these actions to influence the sampling and analysis required for the RFI to complete these actions and simply sample the resulting conditions. In this manner, It is more likely that the conditions at the site will improve over a shorter time period, the overall cost of the program will be reduced, and the CMS will result in a No Further Action recommendation. Refer to Attachment G for the contents of Section II – CMS)

SCOPE

The RFI consists of three tasks:

	Page
TASK I: RFI/CMS WORK PLAN (Section I – RFI)	
A. Description of Current Conditions	
B. Identification of Potential Corrective Measures Technologies	
C. Project Management Plan	
D. Facility Investigation Plan	
• Preparation Activities	
• Decision Analysis	
• Sampling and Analysis	
E. Quality Assurance/Quality Control Plan (Site-wide Comprehensive Plan included by reference)	
F. Data Management Plan (Site-wide Comprehensive Plan included by reference)	
G. Health and Safety Plan (Site-wide Comprehensive Plan included by reference)	
H. Public Involvement Plan (Site-wide Comprehensive Plan included by reference)	
TASK II: RFI/CMS IMPLEMENTATION	
TASK III: RFI REPORTING	

I. TASK I: RFI/CMS WORK PLAN

[Note: Information required under the Description of Current Conditions or Potential Corrective Measures Technologies may already be provided in the RCRA Facility Assessment Report for the facility.]

The licensee shall prepare an RFI/CMS Work Plan. The licensee may reference the RCRA Facility Assessment (RFA) Report for the facility or the hazardous waste management facility operating license application. To the extent that the required information is not provided in the RFA Report, the licensee shall provide it in the RFI Work Plan. During the RFI, it may be necessary to revise the RFI Work Plan to accommodate facility-specific needs. The RFI Work Plan shall include

the following:

A. Description of Current Conditions

The RFI/CMS Work Plan shall summarize existing information about the WMU that will aid in determining the nature and extent of contamination at the WMU and if there is any potential for migration beyond the facility boundary. The Description of Current Conditions shall include the following information:

1. An historical description of ownership and operation, and waste and hazardous waste generation, treatment, storage and disposal activities at the facility. The facility wide information will then be used to write a focused description of what operation, and waste and hazardous waste generation, treatment, storage and disposal activities took place at the WMU;
2. A summary of the facility's regional location, pertinent boundary features, topography, drainage basin, and general facility physiography;
3. A summary of the environmental setting at and adjacent to the facility, including geology, hydrogeology, hydrology, meteorology, wildlife, and vegetative community;
4. A summary of past permits or licenses requested and/or received, any enforcement actions related to releases of contaminants to the environment and the subsequent responses, and a list of documents and studies prepared for the facility along with a brief summary of their findings;
5. The RFI Work Plan shall include a summary of the following information concerning the WMU to be investigated:
 - a. Location of unit/area;
 - b. Current and historic quantities of waste and hazardous wastes;
 - c. Hazardous waste or constituents, to the extent known;
 - d. Approximate dates or periods of past releases, identification of the materials released, the amount released, the location, and a description of the response actions, including any inspection reports or technical reports generated as a result of the releases;
 - e. Available monitoring data and qualitative information on locations and levels of contamination at the WMU; and
 - f. Habitats and species, including threatened and endangered species, potentially exposed to contaminants, and any known or observed effects of facility contaminants on biota, such as fish kills or other obvious impacts. Habitat description should be based on available information and a field reconnaissance by a trained ecologist. Experts on local flora and fauna should also be consulted.
6. Maps, prepared consistent with the requirements of 40 Code of Federal Regulations (CFR) §270.14 and of sufficient detail and accuracy to allow the location of and the reporting of all current and future work performed at the WMU, depicting the following:
 - a. General geographic location;
 - b. Property lines, with the owners of all adjacent property clearly indicated;

- c. Topography and surface drainage depicting all soil profiles, waterways, wetlands, floodplains, water features, drainage patterns, and surface water areas;
 - d. All tanks, buildings, utilities, paved areas, easements, rights-of-way, and other features;
 - e. All waste or hazardous waste treatment, storage or disposal units active after November 19, 1980;
 - f. All known past waste or hazardous waste treatment, storage or disposal areas regardless of their dates of operation;
 - g. All known past and present product and waste underground tanks or piping;
 - h. Surrounding land uses;
 - i. The location of all domestic, municipal production, recovery, oil and gas, and groundwater monitoring wells on-site and within a one-mile radius of the facility boundary. The wells shall be clearly labeled and ground and top of casing elevations and construction details provided (may be included as supplement to the map);
 - j. Terrestrial habitat cover - types (i.e., vegetation communities) with emphasis on locating natural (undisturbed) areas; and
 - k. Wildlife nesting and foraging locations for locally "uncommon" mammals, birds, fish, benthos, etc. Threatened and endangered species possibly on or near the facility should be identified as early as possible.
7. A description of all interim measures which were or are being undertaken at the facility. This description shall include:
- a. Objectives of the interim measures: how the measure is mitigating a potential threat to human health, safety, and welfare, and the environment and/or is consistent with and integrated into any long-term solution at the facility;
 - b. Design, construction, operation, and maintenance requirements;
 - c. Schedules for design, construction, and monitoring; and
 - d. Schedule for progress reports.

B. Identification of Potential Corrective Measures Technologies

Based on the information contained in the Description of Current Conditions, the RFI/CMS Work Plan shall include:

- 1. A description of the potential corrective measure technologies that may be used at the facility or beyond the facility boundary to respond to releases of contaminants at or from the waste management unit; and
- 2. If applicable, any field, laboratory, bench-scale or pilot-scale data that needs to be collected during the RFI to facilitate the evaluation and selection of the final corrective measure(s), if any, for releases at or

from the WMU (e.g., compatibility of waste and construction materials, information to evaluate effectiveness, treatability of waste, etc.).

C. Project Management Plan

The RFI/CMS Work Plan shall include a Project Management Plan that documents the overall management approach to the RFI/CMS. The Project Management Plan shall include:

1. A discussion of the technical approach outlining how the waste management unit will be evaluated and investigatory and/or remedial measures will be prioritized based on actual or potential threats to human health, safety, and welfare, and the environment;
2. Schedules of activities;
3. A description of the qualifications of personnel directing the RFI, including contractor personnel;
4. Budget considerations (the budget for the preparation, investigation, and possible corrective actions will be compared to the program assumptions); and
5. Provisions for submittal of periodic progress reports which shall, at a minimum, include:
 - a. A description and estimate of the percentage of the RFI/CMS completed;
 - b. Summaries of all findings;
 - c. Summaries of all changes made during the reporting period;
 - d. Summaries of all contacts with the public or state government during the reporting period;
 - e. Summaries of all problems or potential problems encountered during the reporting period;
 - f. Actions being taken to rectify problems;
 - g. Changes in personnel during the reporting period;
 - h. Projected work for the next reporting period; and
 - i. Copies of daily reports, inspection reports, laboratory and monitoring data, etc.

[The need for this information should be evaluated based on the frequency upon which the progress reports are required.]

D. Facility Investigation Plan

The RFI Work Plan shall include a WMU Investigation Plan which discusses those investigations necessary to: characterize the environmental setting at the WMU; define the source of contamination; define the degree and extent of contamination; and identify actual or potential receptors. The investigations should result in data of adequate technical quality to support the development and evaluation of the corrective measures alternative(s). The licensee shall characterize the following:

1. Environmental Setting Investigation

The licensee shall collect information to supplement and verify the existing information described in Section I.A.3. of this attachment on the environmental setting at the facility.

a. Hydrogeology;

The licensee shall conduct a program as necessary to fully evaluate the hydrogeologic conditions at the WMU as they could impact the selection of corrective measures for the WMU. Groundwater will be primarily be addressed as an independent AOC, and may not be addressed on a WMU by WMU basis. This program shall provide the following information, as appropriate:

- (1) A description of the regional and facility-specific geologic and hydrogeologic characteristics affecting groundwater flow beneath the facility will be done in the RFI/CMS work plan for AOC-1, including:
 - (a) Regional and facility-specific stratigraphy;
 - (b) Structural geology: description of local and regional structural features;
 - (c) Depositional history;
 - (d) Identification and characterization of areas and amount of recharge and discharge;
 - (e) Regional and facility-specific groundwater flow patterns; and
 - (f) Temporal variations in the groundwater flow regime.
- (2) An analysis of any topographic features that might influence the groundwater flow system;
- (3) Based on field data, tests, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the facility, including:
 - (a) Hydraulic conductivity (horizontal and vertical), intrinsic permeability, and porosity (total and effective);
 - (b) Lithology, grain size, sorting, degree of cementation;
 - (c) An interpretation of hydraulic interconnection between saturated zones;
 - (d) The attenuation capacity and mechanisms of the natural earth materials;
 - (e) Location, depth, and construction details of all groundwater monitoring wells, piezometers, and production wells; and
 - (f) Boring logs for all groundwater monitoring wells, piezometers, and production wells.

- (4) Based on field studies and cores, cross-sections of structural geology and hydrogeologic units which may be part of the migration pathways, identifying:
 - (a) Sand and gravel deposits in unconsolidated deposits;
 - (b) Zones of fracturing or channeling in consolidated or unconsolidated deposits;
 - (c) Zones of higher or lower permeability that might direct or restrict the flow of contaminants;
 - (d) Aquifers; and
 - (e) Water-bearing zones above the first confining layer that may serve as a pathway for contaminant migration including perched zones of saturation.
- (5) Based on data obtained from groundwater monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source (WMU specific data), a representative description of water level or fluid pressure monitoring, including:
 - (a) Water level contour and/or potentiometric maps;
 - (b) Hydrologic cross-sections showing vertical gradients;
 - (c) The flow system, including the vertical and horizontal components of flow; and
 - (d) Any temporal changes in hydraulic gradients due to seasonal or other influences.
- (6) A description of man-made influences that may affect the hydrogeology of the facility, identifying:
 - (a) Active and inactive local water supply and production wells with an approximate schedule of pumping; and
 - (b) Man-made hydraulic structures (pipelines, french drains, ditches, unlined ponds, septic tanks, National Pollutant Discharge Elimination System (NPDES) outfalls, etc.).

b. Soils

The licensee shall conduct a program as necessary to fully characterize the soil and rock units potentially affected by contaminant release(s). Such characterization shall consider, but not be limited to, the following information, as appropriate:

- (1) Extent of contamination;
- (2) Depth to groundwater;
- (3) Depth to bedrock;
- (4) Soil Conservation Service (SCS) and Unified Soil Classification System (USCS) soil classifications, and boring logs;

- (5) Surface soil distribution;
- (6) Cross-sections showing stratifications or zones which may affect or direct subsurface flow;
- (7) Hydraulic conductivity (saturated and unsaturated);
- (8) Relative permeability;
- (9) Storage capacity;
- (10) Shrink-swell potential;
- (11) Potential for contaminant transport via erosion;
- (12) Soil sorptive capacity;
- (13) Cation exchange capacity;
- (14) Soil organic content;
- (15) Soil pH;
- (16) Bulk density;
- (17) Porosity;
- (18) Particle size distribution;
- (19) Mineral content;
- (20) Moisture content;
- (21) Effect of stratification on unsaturated flow;
- (22) Infiltration;
- (23) Evapotranspiration; and
- (24) Vertical flow rate.

c. Surface Water and Sediment

The licensee shall conduct a program as necessary to fully characterize the surface water bodies in the vicinity of those WMUs that may have been affected by releases from the WMU. Such characterization shall include, but not be limited to, the following activities and information, as appropriate:

- (1) Description of the temporal and permanent surface water bodies including:
 - (a) For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth,

temperature or chemical stratification and volume;

- (b) For streams, ditches, drains, swamps and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, and flooding tendencies;
 - (c) For impoundments: location, elevation, surface area, depth, volume, freeboard, and purpose of impoundment;
 - (d) For wetlands: available delineations;
 - (e) Any containment measures such as levees, concrete lining, etc.; and
 - (f) Drainage patterns.
- (2) Description of the chemistry of the natural surface water and sediments, including pH, total dissolved solids, total suspended solids, biological oxygen demand, alkalinity, conductivity, dissolved oxygen profiles, nutrients, chemical oxygen demand, total organic carbon, specific contaminant concentrations; and
 - (3) Description of sediment characteristics, including the deposition area, thickness profile, physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.).

d. Air

The licensee shall provide information characterizing the climate in the vicinity of the facility. This information shall include, but not be limited to, as appropriate:

- (1) Annual and monthly rainfall averages;
- (2) Monthly temperature averages and extremes;
- (3) Wind speed and direction;
- (4) Climate extremes that have been known to occur in the vicinity of the facility, and the frequency of occurrence; and
- (5) A description of topographic and man-made features which affect air flow and emission patterns, including:
 - (a) Ridges, hills, mountain areas, or valleys;
 - (b) Surface water bodies;
 - (c) Wind breaks and forests; and
 - (d) Buildings.

2. Source Characterization

The licensee shall collect analytical data as necessary to fully characterize any wastes placed in the WMU and areas where wastes have been placed, collected, or removed. This shall include, but not be limited to, qualification of the following specific characteristics at each source area and

documentation of the procedures used in making the determinations:

a. Unit/Disposal Area Characteristics:

- (1) Location of unit/disposal area;
- (2) Type of unit/disposal area;
- (3) Design features;
- (4) Operating practices (past and present);
- (5) Period of operation;
- (6) Age of unit/disposal area;
- (7) General physical conditions;
- (8) Method used to close the unit; and
- (9) History of releases.

b. Waste Characteristics:

- (1) Type of waste placed in the units;
 - (a) Hazardous classification;
 - (b) Quantity; and
 - (c) Chemical composition.
- (2) Physical and chemical characteristics; and
 - (a) Physical form (solid, liquid, gas);
 - (b) Physical description;
 - (c) pH;
 - (d) General chemical class (e.g., acid, solvent);
 - (e) Density;
 - (f) Boiling point;
 - (g) Viscosity;
 - (h) Solubility in water;
 - (i) Cohesiveness of the waste;

- (j) Vapor pressure; and
 - (k) Flash point.
- (3) Migration and dispersal characteristics of the waste.
- (a) Sorption;
 - (b) Biodegradability;
 - (c) Bioconcentration;
 - (d) Biotransformation;
 - (e) Photodegradation rates;
 - (f) Hydrolysis rates; and
 - (g) Chemical transformations.

3. Contamination Characterization

The licensee shall collect analytical data as necessary on groundwater (on the WMUs and AOC-1 identified in Attachment I), soils, subsurface gas and air contamination at the WMU and in the vicinity of the facility. These data shall be sufficient to define the extent, origin, direction, and rate of movement of plumes of contamination. Data shall include the time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individuals performing the sampling and analysis. In developing strategies for collecting this information under Sections I.D.1. and I.D.2. of this attachment, the licensee shall address the following types of contamination at the WMU, as appropriate:

a. Groundwater Contamination (AOC-1)

If a specific source is identified at a WMU, the licensee shall conduct a groundwater investigation as necessary to fully characterize any plumes of contamination at or originating from the WMU. It is not intended that this duplicate efforts conducted for AOC-1, if an independent, WMU specific plume is identified, it shall be handled in the same manner as AOC-1, as follows. This investigation shall, at a minimum, provide the following information:

- (1) A description of the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the WMU;
- (2) The horizontal and vertical direction of contaminant movement, unless it is a part of AOC-1 being addressed separately;
- (3) The velocity of contaminant movement;
- (4) The horizontal and vertical concentration profiles of 40 CFR Part 261, Appendix IX constituents in the plume(s);
- (5) An evaluation of factors influencing the plume movement; and

- (6) An extrapolation of future contaminant movement.

The licensee shall document the procedures used in making the above determinations.

b. Soil Contamination

The licensee shall conduct an investigation as necessary to fully characterize the contamination of the soil and rock units in vicinity of the contaminant release(s) at or from the WMU. The investigation shall, at a minimum, provide the following information:

- (1) A description of the vertical and horizontal extent of contamination;
- (2) A description of contaminant and soil chemical properties within the source area and contaminant plume that might affect contaminant migration and transformation;
- (3) Specific contaminant concentrations;
- (4) The velocity and direction of contaminant movement; and
- (5) An extrapolation of future contaminant movement.

The licensee shall document the procedures used in making the above determinations.

c. Surface Water and Sediment Contamination

The licensee shall conduct a surface water investigation as necessary to fully characterize contamination in surface water bodies resulting from contaminant releases at or from the facility. The investigation shall, at a minimum, provide, the following information:

- (1) A description of the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the facility and the extent of contamination in underlying sediments;
- (2) A description of the chemical, physical, and biological properties of the contaminated surface waters and sediments that might affect contaminant movement;
- (3) Specific contaminant concentrations;
- (4) The velocity and direction of contaminant movement; and
- (5) An extrapolation of future contaminant movement, taking into account times of flood.

The licensee shall document the procedures used to make the above determinations.

d. Air Contamination

The licensee shall conduct an investigation as necessary to fully characterize the particulate and gaseous contaminants released into the atmosphere at or from the facility. This investigation shall, at a minimum, provide the following information:

- (1) The chemical and physical composition of the contaminants released;

- (2) The rate and amount of release; and
- (3) A description of the contaminant dispersion.

e. Subsurface Gas Contamination

The licensee shall conduct an investigation as necessary to fully characterize subsurface gases emitted from contaminants. This investigation shall, at a minimum, provide the following information:

- (1) A description of the horizontal and vertical extent of subsurface gases;
- (2) The chemical composition of the gases being emitted;
- (3) The rate, amount, and density of the gases being emitted; and
- (4) Horizontal and vertical concentration profiles of the subsurface gases emitted.

The licensee shall document the procedures used in making the above determinations.

4. Potential Receptors Identification

The licensee shall collect data describing the human populations and environmental systems that are susceptible to contaminant exposure from the facility. Chemical analyses of biological samples may be needed. Data on observable effects in ecosystems or from bioassays may also be needed. The following characteristics shall be identified, as appropriate:

- a. Local uses and possible future uses of groundwater:
 - (1) Type of use (e.g., municipal or residential drinking water source, industrial, etc.); and
 - (2) Location of groundwater users, including wells and discharge areas.
- b. Local uses and possible future uses of surface waters draining the facility, including:
 - (1) Domestic and municipal;
 - (2) Recreational;
 - (3) Fish and wildlife propagation;
 - (4) Agricultural; and
 - (5) Industrial.
- c. Authorized or unauthorized human use of, or access to, the facility and adjacent lands, including, but not limited to:
 - (1) Recreation;
 - (2) Agriculture;

- (3) Residential;
 - (4) Commercial;
 - (5) Zoning; and
 - (6) Relationship between population locations and prevailing wind direction.
- d. A demographic profile of the people who use or have access to the facility and adjacent land; including, but not limited to: age, sex, and sensitive subgroups.
 - e. A description of the biota in surface water bodies, including benthic macroinvertebrates and fish communities on, adjacent to, or affected by the facility. The aquatic biota expected in these water bodies in the absence of facility-related contamination, based on physical habitat characteristics, should also be described.
 - f. A description of terrestrial habitats on or potentially affected by the facility and a description of potential terrestrial animal receptors seen or expected in those habitats, including, birds, mammals, amphibians, and reptiles.
 - g. A description of endangered or threatened species at or near the facility.

E. Quality Assurance/Quality Control Plan

The RFI/CMS Work Plan shall include reference to the site-wide Quality Assurance/Quality Control (QA/QC) Plan to document all monitoring, including sampling procedures, field measurements, and sample analysis, performed during the RFI. The site-wide QA/QC Plan shall provide reference to the standardized procedures prepared for the program. The site-wide QA/QC Plan shall include:

- 1. Pages with the facility name, section number, revision number, date, and section page number on each page.
- 2. A table of contents which includes:
 - a. A list of each section of the QA/QC Plan;
 - b. A list of appendices; and
 - c. A list of any tables and figures.

3. Project Description

A project description which defines the project objectives and how the specific workplans will be designed to obtain the information necessary to meet the project objectives. The project description shall include:

- a. An introduction which contains a succinct description of the project, including a brief statement regarding the phase(s) of the work and general objectives of the RFI/CMS
- b. A discussion of important facility contaminants or target compounds, including required detection limits for RFI and subsequent corrective action;

- c. The project objectives, including:
 - (1) Specific objectives;
 - (2) An outline of the usage of all data, including any data generated from field screening and/or field measurements. These data usages include, but are not limited to the following:
 - (a) Qualitative or semi-quantitative analyses for selection of sample and/or sampling locations;
 - (b) Definition of extent of environmental contamination;
 - (c) Data for remedial action alternatives;
 - (d) Determination of hazardous waste characteristics for remedial removals; and
 - (e) Protection of public health.
 - (3) Data quality objective (DQO) summaries from RCRA DQO preparation guidance.
 - d. A description of the sampling and monitoring network design and rationale. This will be referenced to the individual RFI/CMS work and sampling plans. The descriptions given in the individual RFI/CMS work plans shall include:
 - (1) Diagrams or WMU maps of sampling locations;
 - (2) Rationale for selected sampling locations; and
 - (3) Summary table listing matrices, parameters, both field and laboratory, and their frequency of collection. The field parameters may include field screening, field measurements, and hydrogeologic investigations, as applicable. The sample matrices and parameters should be listed in groups for a remedial activity site as follows:
 - (a) On-site contaminated materials. These types of sampling and analyses are often done to determine disposal methods.
 - (b) Ambient monitoring of air, groundwater, surface water, soils, drinking water, river sediments, and fish. Specifications of filtered or unfiltered sample aliquot for groundwater and surface water must be included as part of the definition of parameters. These types of analyses usually are intended to measure the extent of environmental contamination and to assess public health risks.
 - e. A description of dates anticipated for start, milestones, and completion of the project, and sampling and monitoring activities. A milestone table or a bar chart consisting of project tasks and time lines is appropriate.
4. Project Organization and Responsibility
- A description and table, chart, or figure of the overall project organization and lines of responsibility for quality assurance organization, showing how execution and direct management of the technical and administrative aspects of this project have been assigned as shown in the following table.

Tasks	Responsible Organization/Personnel
a. Final review and approval of QA/QC Plan	Department
b. QA review and approval of reports, standard operating procedures (SOPs), and field activities, and audits of reports, procedures, and activities for identifying, controlling nonconformance for corrective actions	Licensee
c. Evidence audits of field records	Licensee
d. Data assessment	Licensee
e. Performance and system audits of field activities and laboratories	Department
f. Analysis	Licensee
5. QA Objectives	
A description of the QA objectives of the project in terms of precision, accuracy, completeness, representativeness, and comparability for both field activities (sampling, measurements, and screening) and laboratory analyses, including the project acceptance limits and means to achieve these QA objectives.	
<p>Trip blanks are required at a frequency of one per cooler in which aqueous matrix volatile organic compound samples are shipped. Field blanks are required for all aqueous matrix parameters (e.g., at a frequency of one for every ten or fewer investigative samples). Field duplicates are also required for all parameters and matrices (e.g., at a frequency of one for every ten or fewer investigative samples). These field QC samples must be treated as regular investigative samples concerning sample volume, containers, and preservation. Field duplicates must not be composited prior to placing them in the sample containers.</p>	
6. Sampling Procedures	
[Note: If a separate sampling and analysis plan (SAP) will be written, the QA/QC Plan may reference the SAP.]	
A detailed description of the sampling procedures, including:	
a. Procedures, criteria, or guidelines used for sampling location and sampling frequency selection, including background sampling locations and frequency;	

- b. Procedures for static water level measurement for groundwater sampling. The procedures shall address the measurement point, measurement method, and level of accuracy;
- c. Procedures for well purging for groundwater sampling. The procedures shall address purge volume determination calculations, purge volume measurement, purge method, and fate of purge water;
- d. Procedures, criteria, or guidelines for sample collection of each sample matrix or parameters. The procedures shall address the sampling method(s), the method(s) of operation, and compatibility with the parameters analyzed;
- e. Sample containers, reagents, preservatives, and holding time requirements;
- f. Special conditions for the preparation of field measured parameters (e.g., pH and conductivity), including sampling containers, sampling methods, and time requirements;
- g. Decontamination procedures;
- h. Procedures for preparing and collecting trip blank samples, field blank samples, and field duplicate samples;
- i. Procedures for sample packaging, handling, and shipment, including time considerations and field filtration requirements;
- j. Documentation of sampling activities, including forms, notebooks, bound logbook(s), and procedures to record sample history, sampling conditions, etc., and analyses to be taken; and
- k. Chain-of-custody procedures for field activities, including sample labels and chain-of-custody forms.

7. Calibration Procedures and Frequency

A description of the calibration procedures and their frequency for both field and laboratory instruments. The description shall include the following:

- a. Field instruments:
 - (1) Calibration standards and devices;
 - (2) Initial calibration, including multilevel calibration for determination of usable range;
 - (3) Continuing calibration check and acceptable control limits; and
 - (4) Conditions triggering recalibration.
- b. Laboratory instruments:
 - (1) Calibration standards and devices;
 - (2) Initial calibration for each instrument;

- (3) Initial calibration verification;
- (4) Continuing calibration check; and
- (5) Conditions to trigger the recalibration.

8. Analytical Procedures

Methods from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA Publication SW-846, Third Edition, and its Updates I (July 1992), II (September 1994), IIA (August 1993), and IIB (January 1995) are preferred. Other U.S. EPA methods from the Clean Water Act (CWA), Superfund Contract Laboratory Program (CLP), Clean Air Act Program, or Safe Drinking Water Act (SDWA) are acceptable when appropriate for the constituent of interest. The following shall be addressed in the QA/QC Plan:

- a. For SW-846 analytical methods, the method for analysis (by number).
- b. For parameters to be analyzed by methods other than those found in SW-846, the following shall be provided:
 - (1) For non-U.S. EPA approved methods, an SOP.
 - (2) For SW-846 or other U.S. EPA approved methods that are modified (i.e., Appendix IX or facility-specific contaminants), an SOP.
 - (3) A reference to the method manual and procedure number(s).
- c. Chain-of-custody procedure for field and laboratory activities, including sample receiving, log-in, storage, tracking of custody-transfer during sample preparation and analysis, and maintenance of chain-of-custody records.

9. Internal QC Checks

A description of the specific QC check methods to be followed for both laboratory and field activities. Items to be considered include the following:

- a. Field Measurements and Screening:
 - (1) Replicate analyses;
 - (2) Spike sample analyses;
 - (3) Blanks (trip blank, field blank, etc.); and
 - (4) QC samples.
- b. Laboratory Analyses:
 - (1) Method blanks;
 - (2) Reagent/preparation blanks;

- (3) Matrix spike and matrix spike duplicates;
- (4) Internal standards;
- (5) Surrogate standards; and
- (6) Laboratory duplicate/replicate analysis.

10. Data Reduction, Validation, and Reporting

A description of the data reduction, validation, and reporting, including:

- a. Methods to be used for reducing both field and laboratory data.
- b. The criteria, guidelines, and procedures to be used for data validation shall be described. This function must be performed independently of the laboratory.
- c. The data reporting format, including all forms and reporting units, shall be described. The description shall include the listing of data package contents (deliverables from the laboratory).

11. Performance and System Audits

A description of the procedures and mechanisms used to ensure that the sampling and analysis are performed per specifications of the QA/QC Plan and that measurement data meet project requirements. A description of the internal audit for the field activity, as well as laboratory analysis, shall be provided as follows:

- a. The responsible party for the audits;
- b. The frequency of these audits to be conducted; and
- c. Methods/procedures to be used for conducting the audits.

12. Preventive Maintenance

A description of the preventive maintenance procedures to be used for both field and laboratory instruments.

13. Procedures Used to Assess Data Precision, Accuracy, and Completeness

The procedures and equations to be used to aid in assessing the accuracy and precision of analytical data, and completeness of data collection shall be documented or referenced.

14. Correction of QA/QC Problems

The QA/QC plan shall address how QA/QC problems will be assessed and corrected.

15. Laboratory QA/QC Reports

QA/QC reports shall be done on a periodic basis to ensure that problems, if any, identified during sampling and/or analysis are investigated, and corrective actions are properly taken.

F. Data Management Plan

The RFI Work Plan shall include a Data Management Plan to document and track RFI/CMS data and results. The Data Management Plan shall identify and set up data documentation materials and procedures, project file requirements, and progress reporting procedures. Because of the duration of the Corrective Action Program (CAP) for DSC, Ltd. an electronic database will be established to maintain records of all sampling and analysis. The Data Management Plan shall also provide the format to be used to present the raw data and conclusions of the investigation. The Data Management Plan shall include the following information:

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis ID numbers;
- e. Property or component measured; and
- f. Result of analysis (e.g., concentration).

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium, or for each contaminant monitored;
- c. Data reduction for statistical analysis;
- d. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three-dimensional graphs, etc.):

- a. Display sampling location and sampling grid;
- b. Indicate boundaries of sampling area and areas where more data are required;
- c. Display levels of contamination at each sampling location;
- d. Display geographical extent of contamination;

- e. Display contamination levels, averages, and maxima;
- f. Illustrate changes in concentration in relation to distance from the source, time, depth or other parameters; and
- g. Indicate features affecting intramedia transport and show potential receptors.

G. Health and Safety Plan

The RFI Work Plan shall reference the site-wide Health and Safety Plan that covers activities to be conducted during the RFI/CMS. The site-wide Health and Safety Plan shall be submitted for informational purposes and not for specific approval by the Department. The Health and Safety Plan shall be consistent with all applicable U.S. EPA, Occupational Safety and Health Administration, National Institute for Occupational Safety and Health, state, and local requirements and regulations, and the conditions of this license. The Health and Safety Plan shall include:

- 1. A facility description including availability of resources such as roads, water supply, electricity, and telephone service;
- 2. A description of the known hazards and an evaluation of the risks associated with each activity to be conducted;
- 3. A list of key personnel and alternates responsible for site safety, response operations, and protection of public health;
- 4. A map delineating the work area;
- 5. A description of the protective clothing or other protective items to be worn or used by personnel in the work area;
- 6. Information regarding the procedures to be used to control site access;
- 7. A description of the decontamination procedures for personnel and equipment;
- 8. Site emergency procedures;
- 9. Information regarding emergency medical care needed for injuries and toxicological problems;
- 10. A description of requirements for an environmental surveillance program;
- 11. A description of the routine and special training required for response personnel; and
- 12. Information regarding the procedures for protecting workers from weather-related problems.

H. Public Involvement Plan

The RFI Work Plan shall include a Public Involvement Plan for dissemination of information to the public regarding RFI activities and results. The Public Involvement Plan shall address information regarding open houses, informal meetings, fact sheets, other methods of communication, and information repositories. The Public Involvement Plan shall include a schedule for all public involvement activities.

I. RFI Final Report Outline

The RFI/CMS Work Plan shall include an outline of the contents of the RFI Final Report. The RFI Final Report shall include the following:

1. A summary of all preparation activities associated with the RFI/CMS
2. A summary of all investigations conducted during the RFI;
3. An analysis of all data developed during the RFI;
4. A description of the nature and extent of contamination, both qualitative or quantitative, at or from the WMU, including:
 - a. The release source(s);
 - b. The release mechanism(s);
 - c. Specific contaminant concentrations and the distribution of contamination;
 - d. Pathways of contamination migration; and
 - e. Actual or potential receptors, including exposure routes.
5. Identification of all applicable standards, including background values, for the protection of human health, safety, and welfare, and the environment, and comparison of those standards to the extent of contamination found at the facility; and recommendations of whether the waste management unit requires a corrective measure study, and the identification of those corrective action alternatives that may be further investigated.
6. Evaluation of the potential Corrective Measures required for the WMU.

II. TASK II: RFI/CMS IMPLEMENTATION AND ANALYSIS

The RFI shall be implemented in accordance with the terms and schedules in the RFI/CMS Work Plan, as approved by the Department.

III. TASK III: RFI REPORTING

- A. The licensee shall prepare and submit progress reports in accordance with the requirements of the Comprehensive Consent Order.
- B. The licensee shall prepare and submit a RFI Final Report in accordance with Section I.I and the Comprehensive Consent Order.

ATTACHMENT G

RCRA FACILITY INVESTIGATION/CORRECTIVE MEASURES STUDY WORK PLANS (Corrective Measures Study)

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PURPOSE

The purpose of the Corrective Measures Study (CMS) is to identify, screen, and evaluate potential corrective measures alternatives for releases of contaminants from waste management units at the facility. DSC, Ltd. is combining the RFI and CMS into a single work plan because the individual WMUs at the facility are being addressed in an expedited program. The intent of the combined work plan is to recognize, where applicable, that some actions are inevitable, and rather than allow these actions to influence the sampling and analysis required for the RFI to complete these actions and simply sample the resulting conditions. In this manner, It is more likely that the conditions at the site will improve over a shorter time period, the overall cost of the program will be reduced, and the CMS will result in a No Further Action recommendation. Refer to Attachment F for the contents of Section I – RFI).

SCOPE

The CMS consists of three tasks:

	Page
TASK I: RFI/CMS(Section II – CMS)	
A. Introduction	
B. Results of the activities	
C. Media Cleanup Standards.....	
D. Identification of Corrective Measures Alternative(s)	
E. Screening of Corrective Measures Alternative(s)	
F. Evaluation of Corrective Measures Alternative(s)	
G. Recommendation of Corrective Measures Alternative(s)	
H. Reporting Requirements	
I. Schedule for Completion of the CMS	
TASK II: CMS IMPLEMENTATION	
TASK III: CMS REPORTING	

I. TASK I: RFI/CMS WORK PLAN

If required under the consent order, the licensee shall prepare a RFI/CMS Work Plan for an individual WMU. The licensee may elect either to identify and screen a number of potential corrective measures alternatives prior to evaluating a smaller number of potential alternatives or, based on justification and prior approval by the Department, delete the screening step and proceed with evaluation of the expected alternative(s). The Section II of the RFI/CMS Work Plan shall include the following:

A. Introduction

A description of the CMS and summary of the project, including corrective action objectives.

B. The Proposed Rationale for RCRA Facility Investigation (RFI) as they Relate to CMS Analyses

A brief summary of the findings of the /CMS, explaining any preparation activities that took place (cleaning, removal and proper disposal of soil, etc., and highlighting the description of the nature and extent of contamination. Any updates to WMU conditions , including implementation of interim measures, shall be provided in this section of the CMS Work Plan.

C. Media Cleanup Standards

An outline of the proposed facility-specific media cleanup levels. The media cleanup levels shall be based on information gathered during the CMS and the cleanup criteria specified in R 299.9629. The licensee shall recommend final media cleanup standards when the final corrective measure is selected.

D. Identification of Corrective Measures Alternative(s)

Identification of the potential corrective measures alternative(s) for each affected media based on the media cleanup levels and an analysis of available technologies. The licensee shall rely on sound engineering practice to determine which of the identified technologies appear most suitable for the WMU. Technologies can be combined to form the overall corrective action alternative(s). The corrective measures alternative(s) developed should represent a workable number of options that appear to adequately address all WMU problems and corrective action objectives. The reasons for excluding technologies that might be feasible up front shall be documented in the CMS.

E. Screening of Corrective Measures Alternative(s)

A description of the screening process, including a discussion of the corrective measures alternative(s) identified and screened and documentation of the reasons for eliminating any technology based on the waste characteristics, WMU characteristics, and technology limitations. The licensee may screen the corrective measures alternative(s) identified under Section I.D. of this attachment to eliminate those that may prove infeasible to implement, or that rely on technologies that are unlikely to, or do not, achieve the media cleanup standards within a reasonable period of time. The screening process shall include a review of WMU data to identify conditions that may limit or promote the use of certain technologies and focus on eliminating those technologies which have severe limitations for a given set of waste or WMU-specific conditions or have inherent technology limitations. During the screening process, the level of technological development, performance record, inherent construction, and operation and maintenance problems should be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process.

F. Evaluation of Corrective Measures Alternative(s)

A description of how each corrective measures alternative that passes through the initial identification and screening process shall be evaluated for compliance with the corrective action objectives. The evaluation shall consider technical, environmental, human health, safety, and welfare, and institutional concerns as outlined below. In addition, the evaluation shall consider the cost for each corrective measures alternative.

1. Evaluation Criteria

The evaluation criteria shall include the following:

a. Technical:

An evaluation of each corrective measures alternative based on performance, reliability, implementability, and safety.

- (1) Performance shall be based on the effectiveness and useful life of the measure:
 - (a) Effectiveness shall be evaluated in terms of the ability to perform intended functions, such as containment, separation, removal, destruction, or treatment. The effectiveness of each measure shall be determined either through design specifications or by performance evaluation. Any specific waste or facility characteristics which could impede effectiveness shall be considered; and
 - (b) Useful life is defined as the length of time the level of effectiveness can be maintained. Each measure shall be evaluated in terms of the projected service lives of its components.
- (2) Information on the reliability of each corrective measures alternative, including the operation and maintenance requirements and its demonstrated reliability:
 - (a) Operation and maintenance requirements include the frequency and complexity of the operation and maintenance. Technologies requiring frequent or complex operation and maintenance should be regarded as less reliable. The availability of labor and materials to meet these requirements shall also be considered; and
 - (b) Demonstrated reliability is a way of estimating the risk and effect of failure. The licensee should evaluate the technology's reliability under analogous facility conditions, its flexibility to deal with uncontrollable changes at the site, and the impact of a failure.
- (3) A description of the implementability of each corrective measures alternative, including the administrative actions necessary to implement each alternative, the ease of installation, and the time required to achieve a given level of response:
 - (a) Constructability is determined by both internal and external facility conditions (e.g., location, depth to water table, availability of utilities, need for special permits, etc.). The licensee shall evaluate what measures will facilitate construction under these conditions; and
 - (b) The time it takes to implement a corrective measure and the time it takes to see beneficial results.
- (4) Safety information for each corrective measures alternative, including threats to the safety of nearby communities and environments, as well as to workers during the implementation. Factors to consider are fire, explosion, and exposure to hazardous substances.

b. Environmental

An assessment of each corrective measures alternative to determine its short- and long-term beneficial and adverse effects on the environment. Each alternative will be evaluated for its impact on habitat types and plant and animal receptors located in, adjacent to, or affected by the facility. Receptor impacts should include those occurring at the individual level (e.g., mortality, growth and reproductive impairments) and those occurring at higher levels of biological organization (i.e., at population, community, and ecosystem levels). The assessment should include proposed measures for mitigating adverse impacts.

c. Human Health, Safety, and Welfare

An assessment of each corrective measures alternative in terms of the extent to which it mitigates short- and long-term potential or actual exposure to any residual contamination and protects human health, safety, and welfare both during and after implementation of the corrective measure. Each corrective measures alternative will be evaluated to determine the level of contaminants through various media, and the reduction over time. The residual levels from each corrective measures alternative must be compared with the media cleanup standards.

d. Institutional

An assessment of the institutional needs for each corrective measures alternative, including the ability of the alternative to control the source of the release(s) so as to substantially reduce or eliminate, to the extent practical, further releases or other risks. Additionally, the effects of federal, state and local environmental and public health standards, regulations, guidance, advisories, ordinances, or community relations on the design, operations, and timing of each corrective measures alternative shall be addressed.

2. Cost Estimate

A description of how a preliminary estimate of the cost of each corrective measures alternative, and for all phases of the action, shall be developed. The cost estimate shall include both capital, and operation and maintenance costs, as appropriate.

a. Capital costs consist of direct (construction) and indirect (non-construction and overhead) costs.

(1) Direct capital costs include, but are not limited to, the following:

- (a) Construction costs: Materials, labor, and equipment required to install the corrective measure;
- (b) Equipment costs: Treatment, containment, disposal and/or service equipment necessary to implement the action;
- (c) Site development costs: Expenses associated with the purchase of land and development of existing property; and
- (d) Buildings and service costs: Process and non-process buildings, utility connections, purchased services, and disposal costs.

(2) Indirect capital costs include, but are not limited to, the following:

- (a) Engineering expenses: Costs of administration, design, construction supervision, drafting, and testing of the corrective measure;
- (b) Legal fees and license or permit costs;
- (c) Startup and shakedown costs; and
- (d) Contingency allowances: Funds to cover costs resulting from unforeseen

circumstances, such as adverse weather conditions, strikes, and inadequate facility characterization.

- b. Operation and maintenance costs are post-construction costs necessary to ensure continued effectiveness of a corrective measure. Consideration shall be given to the following operation and maintenance cost components:
 - (1) Operating labor costs: Wages, salaries, training, overhead, and fringe benefits associated with the labor necessary for continued operation;
 - (2) Maintenance materials and labor costs: Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment;
 - (3) Auxiliary materials and energy: Costs of items such as chemicals, electricity, water and sewer service, and fuel;
 - (4) Purchased services: Sampling costs, laboratory fees, and professional fees;
 - (5) Disposal and treatment costs: Costs of transporting, treating and disposing of waste materials and residues;
 - (6) Administrative costs;
 - (7) Insurance, taxes and licensing costs; and
 - (8) Other costs: Items that do not fit into any of the above categories.

G. Recommendation of Corrective Measures Alternative(s)

A detailed description of how the final corrective measures alternative recommendation(s) for the waste management unit will be made. The recommendation(s) shall be based on the overall corrective action objectives using technical, environmental, human health, safety, and welfare, and institutional criteria. The recommendation(s) shall include summary tables and supporting rationale which allow the corrective measures alternative(s) to be understood easily. Tradeoffs among health risks, environmental effects, and other pertinent factors shall be highlighted. At a minimum, the following criteria will be used to justify the final corrective measures alternative(s):

1. Technical

- a. Performance - corrective measures alternative(s) which are most effective at performing their intended functions and maintaining the performance over extended periods of time shall be given preference;
- b. Reliability - corrective measures alternative(s) which do not require frequent or complex operation and maintenance activities and that have proven effective under waste and facility conditions similar to those anticipated shall be given preference;
- c. Implementability - corrective measures alternative(s) which can be constructed and operating to reduce levels of contamination to attain or exceed applicable cleanup standards in the shortest period of time shall be preferred; and
- d. Safety - corrective measures alternative(s) which pose the least threat to the health, safety, and

welfare of nearby residents and environments, as well as workers, during implementation shall be preferred.

2. Environmental

The corrective measures alternative(s) posing the least adverse impact (or greatest improvement) over the shortest period of time on the environment shall be favored.

3 Human Health, Safety, and Welfare

The corrective measures alternative(s) shall comply with existing federal and state standards for the protection of human health, safety, and welfare. Corrective measures alternative(s) which provide the minimum level of exposure to contaminants and the maximum reduction in exposure with time shall be preferred.

4. Institutional

The corrective measures alternatives shall comply with applicable institutional requirements.

H. Reporting Requirements (See Attachment F)

2. The CMS final report shall include the following:

- a. An updated description of the findings of the CMS, highlighting the nature and extent of the contamination as documented by the CMS final report;
- b. Recommended media cleanup standards for corrective measures for each waste management unit at the facility;
- c. A summary of the results of the screening of corrective measures alternative(s);
- d. A description of the evaluation of corrective measures alternative(s) using the criteria in Section I.F. of this attachment. The description shall include summary tables that allow the corrective measures alternative(s) to be understood easily. Comparisons of health risks, environmental effects, and other pertinent factors among the corrective measures alternative(s) evaluated shall be highlighted. Information on all evaluated potential corrective measures alternative(s) shall also be presented;
- e. A description and justification of the recommended corrective measures for each waste management unit at the facility, including recommended media cleanup standards that can be achieved by the corrective measures alternative(s), using the criteria in Section I.G. of this attachment;
- f. A description of design and implementation considerations for the recommended corrective measures, including:
 - (1) Special technical problems;
 - (2) Additional engineering data required;
 - (3) Permits and regulatory requirements;

- (4) Access, easements, rights-of-way;
 - (5) Health and safety requirements;
 - (6) Community relations activities; and
 - (7) Long-term monitoring requirements to assess attainment of media cleanup standards (including ecological integrity).
- g. The preliminary cost estimates and supporting documentation for the recommended corrective measures alternative(s), including:
 - (1) Capital cost estimates; and
 - (2) Operation and maintenance cost estimates.
- h. Projected schedule for implementation of the recommended corrective measures alternative(s).

I. Schedule for Completion of the RFI/CMS

The RFI/CMS Work Plan shall include a schedule for completion of all tasks described in Section I of this attachment.

II. **TASK II: CMS IMPLEMENTATION**

The CMS shall be implemented in accordance with the terms and schedules in the CMS Work Plan, as approved by the Department.

III. **TASK III: CMS REPORTING**

- A. The licensee shall prepare and submit progress reports in accordance with the requirements of the Comprehensive Consent Order.
- B. The licensee shall prepare and submit a CMS final report in accordance with the requirements of the Comprehensive Consent Order.

ATTACHMENT H

CORRECTIVE MEASURES IMPLEMENTATION

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PURPOSE

The purpose of Corrective Measures Implementation (CMI) is to design, construct, operate, refine, maintain, and monitor the performance of the corrective measures approved by the Department to protect human health, safety, and welfare, and the environment from releases of contaminants from any waste management units at the facility. The CMI shall include the development and implementation of several plans which require concurrent preparation. It may be necessary to revise the plans as the work is performed to accommodate WMU-specific needs.

SCOPE

The CMI consists of three tasks:

	Page
TASK I: CMI WORK PLAN	
A. Program Management Plan	
B. Design Plans and Specifications	
C. Construction Plan	
D. Operation and Maintenance Plan	
E. Waste Management	
F. Other Information	
G. Project Schedule	
H. Cost Estimate	
I. Health and Safety Plan	
J. Public Involvement Plan	
K. Report Outlines	
TASK II: CMI IMPLEMENTATION	
TASK III: CMI REPORTING	

I. TASK I: CMI WORK PLAN

DSC Ltd. shall prepare CMI Work Plans for all WMUs or AOC-1 determined to require Corrective Measures following completion of the RFI/CMS. The CMI Work Plans shall include the following:

A. Program Management Plan

The CMI Work Plan shall include a Program Management Plan which provides a summary of the project and its objectives, and documents the overall management strategy for performing the design, construction, operation, maintenance, and monitoring of corrective measures. The Program Management Plan shall document the responsibility and authority of all organizations and key personnel involved with the CMI. The Program Management Plan shall include:

1. A personnel organizational chart and description of the responsibilities and qualifications of key personnel directing the CMI, including contractor personnel;
2. Provisions for submittal of periodic progress reports during the construction phase and semi-annual progress reports for operation and maintenance (O&M) activities. The progress reports shall, at a minimum, include:
 - a. A description and estimate of the percentage of the CMI completed;

- b. Summaries of all findings;
- c. Summaries of all changes made in the CMI during the reporting period;
- d. Summaries of all contacts with representatives of the public or state government regarding the CMI during the reporting period;
- e. Summaries of all significant problems or potential problems encountered during the reporting period;
- f. Actions being taken to rectify problems;
- g. Changes in personnel during the reporting period;
- h. Projected work for the next reporting period; and
- i. Copies of daily reports, inspection reports, laboratory and monitoring data, etc.

B. Design Plans and Specifications

The CMI Work Plan shall include clear and comprehensive design plans and specifications to implement corrective measures at the facility, as defined in the Corrective Measure Study (CMS). The design plans and specifications shall include:

- 1. Discussion of the design criteria, including specific performance requirements for each major component of the corrective measures and the overall corrective measures;
- 2. Discussion of the design strategy and the design basis, including:
 - a. Compliance with all applicable and relevant environmental and public health standards; and
 - b. Minimization of negative environmental and public impacts.
- 3. Discussion of any additional technical factors of importance, including:
 - a. Use of currently acceptable environmental control measures and technology;
 - b. The constructability of the design; and
 - c. Use of currently acceptable construction practices and techniques.
- 4. Description of assumptions made and detailed justification of these assumptions;
- 5. Discussion of the possible sources of error and reference to possible operation and maintenance problems;
- 6. Detailed plans, diagrams, and drawings, including the following, as applicable:
 - a. General site plans;
 - b. Process flow diagrams, both qualitative and quantitative;

- c. Structural drawings, including plan views, elevations, sections, and supplementary views;
- d. Piping and instrumentation;
- e. Mechanical drawings;
- f. Electrical drawings;
- g. Site preparation and field work standards;
- h. Equipment lists; and
- i. Detailed specifications for equipment and materials.

General correlation between plans, diagrams, and drawings, and technical specifications is a basic requirement of any set of working construction plans and specifications. Before submitting the technical specifications, the licensee shall coordinate and cross-check the specifications and plans, diagrams and drawings.

- 7. Tables listing equipment and specifications;
- 8. Tables giving material and energy balances; and
- 9. Appendices, including:
 - a. Tabulations of significant design data used in design effort;
 - b. Sample calculations (present and explain one example for significant or unique design calculations);
 - c. Derivation of equations essential to understanding the report; and
 - d. Results of laboratory and field tests.

C. Construction Plan

The CMI Work Plan shall include a Construction Plan based on the final design plans. The Construction Plan shall include:

- 1. A Construction Quality Assurance (CQA) Program to ensure, with a reasonable degree of certainty, that completed corrective measures meet or exceed all design criteria, plans, and specifications;
- 2. A description of all inspection activities, including observations and tests, that will be used to monitor the construction and installation of the components of the corrective measures, and verify compliance with all environmental and health and safety requirements. The plan shall include the scope and frequency of each type of inspection. The inspections shall include, but not be limited to, pre-construction inspections, air quality and emissions monitoring records inspections, waste disposal records inspections, and final walk-through inspection of the project site;
- 3. A QA/QC plan for all of the sampling and monitoring activities needed for QA/QC control or other construction related purposes. The QA/QC plan shall include the sampling activities, sample size, sample locations, frequency of testing, acceptance and rejection criteria, and plans for correcting problems;

4. Reporting requirements for construction activities. This shall include such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, and final documentation. Provisions for the evaluation, documentation, and final storage of all records shall also be specified;
5. Procedures to address the need for changes to the design or specifications to address unforeseen problems encountered in the field, including provisions for notifying the Department;
6. Provisions for notification of the Department in the event of a construction emergency, including verbal notification within 24 hours of the event, followed by written notification within five days of the event. The written report shall specify the nature of the emergency, the response action, and potential impacts to human health, safety, and welfare, and the environment; and
7. Procedures to be implemented if unforeseen events prevent the corrective measures construction, including provisions for notifying the Department.

D. Operation and Maintenance Plan

The CMI Work Plan shall include an O&M Plan to cover both implementation and long-term maintenance and monitoring of the corrective measures. The O&M Plan shall include:

1. A description of the training process for O&M personnel. The description shall include the technical specifications for treatment systems, the contractor requirements for providing appropriate service visits to supervise the installation, adjustment, start-up, and operation of treatment systems, and training covering operational procedures once the start-up has been successfully accomplished;
2. A description of system start-up procedures, including any operational testing;
3. A description of normal O&M procedures, including tasks for operation, tasks for maintenance, prescribed treatment or operation conditions, and a schedule showing the frequency of each O&M task;
4. A description of routine sampling, monitoring, and laboratory testing to ensure effective operation and maintenance of the corrective measures and the required quality assurance/quality control (QA/QC);
5. A description of the equipment, including equipment specifications, monitoring components, maintenance requirements, and replacement schedule for equipment and installed components;
6. A description of the process and criteria for determining when corrective measures have achieved goals and when maintenance and monitoring may cease;
7. A description and analysis of potential operating problems and system breakdowns, including sources of information regarding problems, and common and/or anticipated remedies. In the event of a major breakdown and failure of the corrective measures, verbal notification to the Department is required within 24 hours of the event, followed by written notification within five days of the event. The written report shall specify the nature of the emergency, the response action, and potential impacts to human health, safety, and welfare, and the environment;
8. A description of alternate O&M procedures to be implemented in the event of failure of the corrective measures to prevent a release or threatened release of contaminants which may

endanger human health, safety, or welfare, or the environment, or which may exceed the applicable cleanup standards; and

9. The records and reporting mechanisms required, including:
 - a. Daily operating logs;
 - b. Monitoring and laboratory data;
 - c. Maintenance and inspection records;
 - d. Records for operating costs;
 - e. Personnel records;
 - f. Mechanism for reporting emergencies; and
 - g. Progress reports.

E. Waste Management

A description of the wastes generated by the construction, operation, and maintenance of the corrective measures and how the wastes will be managed shall be included in the CMI Work Plan. Site drainage and how the runoff will be managed shall also be addressed.

F. Other Information

1. A list and description of permits needed to construct and operate the corrective measures shall be included in the CMI Work Plan; and
2. A list of any elements or components of the corrective measures that require custom fabrication or for other reasons are considered long-term procurement items shall be included in the CMI Work Plan. The list shall include the reason that the items are considered long-term procurement items, the length of time for procurement, and the sources of procurement.

G. Project Schedule

A Project Schedule for construction and implementation of the corrective measures which identifies timing for initiation and completion of all project and interim milestones in the CMI process, including submission dates for all CMI deliverables, dates that all necessary permit applications will be submitted to the appropriate agencies and the estimated issuance dates, and the timing of key elements of bidding process, shall be included in the CMI Work Plan.

H. Cost Estimate

A detailed written estimate of the costs to construct and implement the corrective measures shall be included in the CMI Work Plan. The cost estimate developed in the CMS shall be refined to reflect the final design plans and specifications. The cost estimate shall include both capital and operation and maintenance costs.

I. Health and Safety Plans

The licensee shall modify the site-wide Health and Safety Plans, as necessary, to address activities to be performed at the facility to construct, operate, and maintain the corrective measures, and include it in the

CMI Work Plan. The updated Health and Safety Plan shall provide information regarding hazard assessment, including inhalation, dermal, ingestion, and physical hazards, personal protective and monitoring equipment, a map of the facility denoting the CMI work areas and associated levels of personal protection required, a list of the emergency contacts and phone numbers, and a map denoting the locations of the facilities providing emergency services. Health and safety issues in the event of a failure of the corrective measures shall also be addressed.

J. Public Involvement Plan

The licensee shall revise the Public Involvement Plan developed during the RFI to include any changes with respect to the public's informational needs during the design and construction activities, and include it in the CMI Work Plan. The Public Involvement Plan shall address specific public involvement activities that will be conducted, including a schedule for the activities.

1. Specific public involvement activities which shall be conducted during the design stage of the CMI include:
 - a. Revision of the Public Involvement Plan to reflect public concerns and involvement at this stage of the process; and
 - b. Preparation and distribution of a public notice and an updated fact sheet at the completion of the engineering design process.
2. Depending on public interest in a facility at this point in the process, specific public involvement activities which may be conducted during the construction stage of the CMI could include open houses, group meetings, fact sheets on the technical status of the CMI, and maintenance of a public information repository.

K. Report Outlines

The CMI Work Plan shall include an outline of the contents of the Construction Completion Report and the CMI Final Report.

1. The Construction Completion Report shall include the following:
 - a. Synopsis of the corrective measures and design criteria, and certification that the corrective measures were constructed in accordance with the approved design plans and specifications;
 - b. Listing of the performance criteria, established before the corrective measures were initiated, for judging the functioning of the corrective measures.
 - c. Explanation and description of any modifications to the plans, specifications, or performance criteria, and why these were necessary for the project;
 - d. Results of operational testing and monitoring, indicating how the initial operation of the corrective measures will meet or exceed the performance criteria;
 - e. Summary of significant activities that occurred during construction, including a discussion of problems encountered and how the problems were addressed;
 - f. Summary of any inspection findings, including copies of pertinent daily inspection documents, inspection summary reports, and the design engineer's acceptance reports (all of which may be placed in an appendix to Construction Completion Report);

- g. As-built drawings and photographs; and
 - h. Schedule indicating when any treatment systems will begin full-scale operation.
- 2. The CMI Final Report shall include the following:
 - a. Synopsis of the corrective measures;
 - b. Description of the process and criteria for determining when corrective measures, maintenance, and monitoring, may cease.
 - c. Demonstration that the corrective measures completion criteria have been met. The demonstration shall include the results of testing or monitoring indicating how the operation of the corrective measures compares to the corrective measures completion criteria;
 - d. Summary of work accomplishments, including performance levels achieved, total hours of treatment operation, total volume of material treated or excavated, nature and volume of waste generated;
 - e. Summary of significant activities that occurred during operation, including a discussion of problems encountered and how the problems were addressed;
 - f. Summary of inspection findings, including copies of pertinent inspection documents (may be placed in an appendix to the Final CMI Report); and
 - g. Summary of the total O&M costs.

II. TASK II: CMI IMPLEMENTATION

The licensee shall construct, implement, and operate the corrective measures in accordance with the terms and schedules in the CMI Work Plan, as approved by the Department.

III. TASK III: CMI REPORTING

- A. The licensee shall prepare and submit progress reports in accordance with the consent order.
- B. The licensee shall prepare and submit a Construction Completion Report in accordance with the consent order.
- C. The licensee shall prepare and submit a CMI Final Report in accordance with the consent order.

ATTACHMENT I PRIORITIZATION SCHEDULE COSTING ASSUMPTIONS

This attachment lists the quantitative assumptions used to develop Attachment E. The assumptions are based on the actions likely required to achieve "no further action" status at each WMU and AOC, based on the information available as of November 1999. These assumptions are solely intended to develop the prioritization schedule included in Attachment E. While the assumptions and quantities listed have been discussed with U.S. EPA, DEQ, and DSC Ltd., they are not intended to commit DEQ or DSC Ltd. to any particular course of action in closing each WMU and AOC. The term Area of Interest (AOI) as identified in the tables contained in this Attachment I refer to and have the same meaning as AOC established by paragraph 2.1 of this Consent Order.

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AOC 1 Groundwater Plume	<p>Prepare work plan, design documents, and final completion reports. Perform focused groundwater investigation program (10 additional monitoring wells). Install groundwater collection system well (15 recovery wells) Get permit modification for CCWTP. Discharge groundwater to existing treatment system. Perform construction oversight. Perform operation and maintenance activities associated with collection system.</p>
47 EAF Bag House Loadout Area	<p>Prepare work plan, design documents, and final completion reports. IRM – remove residual EAF dust (600 tons) as hazardous waste and verify with soil samples. CM - Excavate impacted soil (600 tons hazardous, 500 tons solid waste) and dispose at an appropriate offsite facility. Pressure wash the structure supporting the baghouse. Collect and dispose of wash water. Regrade area to drain (1,100 cubic yards). Perform construction oversight.</p>
26 North Debris Piles	<p>Prepare work plan, design documents, and final completion reports. Perform focused groundwater and soil investigation (40 soil borings and 20 test pits) program. Grade piles to form structural fill Construct soil cover over north debris piles and consolidated material. Perform construction oversight. Perform operation and maintenance activities associated with soil Obtain deed restriction for this portion of the property.</p>
1 Sedimentation Basin	<p>IRM – Construct fence around basin (1,200 lineal feet). Prepare work plan, design documents, and final completion reports. CM - Perform focused groundwater investigation program (5 wells). Remove oil as it accumulates. Excavate, stabilize, and dispose of sediment (3,000 tons) at an offsite facility as nonhazardous waste. Continue use as sedimentation basin. Perform construction oversight.</p>

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6 Acid Neutralization Plant	<p>Prepare work plan, design documents, and final completion reports. Perform focused soil (10 soil borings, 10 test pits) and groundwater (5 monitoring wells) investigation program. Excavate impacted soil (2,000 tons) and dispose at hazardous offsite facility. Construct soil cover over area. Perform operation and maintenance activities associated with soil Obtain deed restriction for this portion of the property. Pressure wash the entire structure. Collect and dispose of wash water. Perform construction oversight.</p>
8 Acid Pickling Line – Containment	<p>Prepare work plan, design documents, and final completion reports. Pressure wash the entire structure. Collect and dispose of wash water. Perform construction oversight.</p>
12 CWWTP Grit Pile	<p>Prepare work plan, design documents, and final completion reports. Excavate 1,200 cubic yards of material and reuse on site as fill. Perform soil confirmation program (6 samples). Perform construction oversight.</p>
69 Locomotive Fuel Tank Area	<p>Prepare work plan, design documents, and final completion reports. Perform focused soils (3 soil borings) investigation. Excavate and dispose of 25 cubic yards of soil as non-hazardous Perform construction oversight.</p>
70 Kerosene Tank	<p>Prepare work plan, design documents, and final completion reports. Perform focused soils (3 soil borings) investigation. Excavate and dispose of 25 cubic yards of soil as non-hazardous Perform construction oversight.</p>
11 CWWTP Acid Dosing Tanks	<p>Prepare work plan, design documents, and final completion reports. Perform focused groundwater and soil investigation (4 wells; 4 soil borings) program. Clean and remove tanks. Excavate impacted soil (1,000 tons) and dispose at an offsite facility as nonhazardous waste. Perform construction oversight, sample soils after removal.</p>
GAOI-1 Landfill Area 1B	<p>Prepare work plan, design documents, and final completion reports. Perform focused soil and groundwater investigation (6 monitoring wells) program. Regrade cover. Install leachate collection system. Install conveyance piping to existing water treatment plant. Perform construction oversight.</p>

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25 K061 Settling Basin	Prepare work plan, design documents, and final completion reports. Perform focused soil (4 soil borings) and groundwater (3 monitoring wells) investigation Excavate impacted soil (400 tons) and dispose offsite as hazardous Pressure wash the entire structure (4,000 square feet). Collect and dispose of wash water. Perform confirmation sampling program. Perform construction oversight.
5 Spent Pickle Liquor Sewer #1	Prepare work plan, design documents, and final completion reports. Clean the sewer via water jet equipment. Collect and dispose of wash water. Slip line the sewers with HDPE (700 linear feet of pipe assumed). Perform construction oversight.
AOI-2 Capacitors	Derack capacitors and inventory. Remove for offsite destruction.
AOI-3 Transformers and Associated Equipment	Drain and rinse transformers to be taken out of service. Remove carcasses for offsite disposal.
7 Spent Pickle Liquor Sewer #2	Prepare work plan, design documents, and final completion reports. Clean the sewer via water jet equipment. Collect and dispose of wash water. Slip line the sewers with HDPE (1500 linear feet of pipe assumed). Perform construction oversight.
38 Noise Reduction Pile	Prepare work plan, design documents, and final completion reports. Excavate and consolidate material (15,000 cubic yards) with north debris piles for ultimate placement beneath a soil cover. Perform confirmation sampling (50 samples) program. Perform construction oversight.
42 Concast Scale Pit	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water. Insert sump; sample areas of potential releases. Perform construction oversight.
43 Concast Grit Basin	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water. Insert sump; sample areas of potential releases. Perform construction oversight.

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49 Downcoiler Sump	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
50 South Motor Room Basement Sumps	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
51 Six Stand Oil Basement	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
52 Finish Stand Scale Pit	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
53 Roughing Mill Scale Pit	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
54 Old Four High Scale Pit	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
55 Blooming Mill Scale Pits	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.

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56 Reheat Sump	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
57 Heater Area Drains Sump	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and stabilize sediments on-site (200 tons). Pressure wash the entire structure. Collect and dispose of wash water and limited volume of soil. Insert sump; sample areas of potential releases. Perform construction oversight.
2 Oil Processing Tank	Prepare work plan, design documents, and final completion reports. Excavate impacted soil (1,000 tons) and dispose off-site as nonhazardous waste. Pressure wash the entire tank (5,000 square feet). Collect and dispose of wash water. Perform confirmation sampling program. Perform construction oversight.
13 Sludge Filter Press and Loadout Area	Prepare work plan, design documents, and final completion reports. Remove residuals and stabilize on-site (200 tons). Pressure wash the entire loadout area (20,000 square feet). Collect and dispose of wash water. Perform confirmation sampling program. Perform construction oversight.
41 Desulfurization Bag House Loadout Area	Prepare work plan, design documents, and final completion reports. Perform focused soil (5 soil borings) investigation. Pressure wash the entire structure. Collect and dispose of wash water. Inspect structure; sample areas of potential releases. Excavate impacted soil (100 tons) and dispose at an offsite facility as non-hazardous waste. Perform construction oversight.
28 Former Drum Storage Area # 1	Prepare work plan, design documents, and final completion reports. Excavate impacted soil (1,100 tons) and dispose at an offsite facility as non-hazardous waste. Perform confirmation sampling (20 samples) program. Regrade area to drain (2,200 cubic yards). Perform construction oversight.

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45 Former Drum Storage Area # 2	<p>Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (10 soil borings, 10 test pits, 30 soil samples). Excavate impacted soil (600 tons) and dispose at an appropriate offsite facility as non-hazardous waste. Perform confirmation sampling (20 samples) program. Regrade area to drain (1,200 cubic yards). Perform construction oversight.</p>
46 Former Drum Storage Area # 3	<p>Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (10 soil borings, 10 test pits, 30 soil samples). Excavate impacted soil (200 tons) and dispose at an appropriate offsite facility as non-hazardous waste. Perform confirmation sampling (20 samples) program. Regrade area to drain (400 cubic yards). Perform construction oversight.</p>
62 Lime Storage Tanks	<p>Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (3 soil borings). Excavate impacted soil (25 tons) and dispose at an appropriate offsite facility as non-hazardous waste. Clean tanks. Perform construction oversight.</p>
33 Suspected Releases from Drum and Oil Hopper Storage Areas	<p>Prepare work plan, design documents, and final completion reports. Excavate impacted soil (500 tons) and dispose at an appropriate offsite facility as non-hazardous waste. Perform soil confirmation sampling (20 samples) program. Regrade area to drain (2,200 cubic yards). Perform construction oversight.</p>
60 Suspected Historical Releases from PCB Items	<p>Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (30 soil borings, 30 test pits, 180 soil samples, 40 structure samples) program. Excavate impacted soil and dispose at appropriate offsite facilities as non-regulated waste (3,000 tons) and regulated waste (200 tons). Clean impacted structure surfaces (20,000 square feet). Perform confirmation sampling program. Perform construction oversight.</p>
GAOI-7 Suspected Historical Releases from PCB Items	<p>Prepare work plan, design documents, and final completion reports. Sample areas around former PCB item locations. Clean impacted structure surfaces (10,000 square feet).</p>

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10 Standby Sludge Basin	Prepare work plan, design documents, and final completion reports. Excavate sediments and stabilize on-site (400 tons). Pressure wash the entire structure. Collect and dispose of wash water. Inspect structure; sample areas of potential releases. Perform construction oversight.
23 Former BOF Gas Cleaning Sludge Pit	Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (1 soil boring) program. Excavate sediments and stabilize on-site (400 tons). Pressure wash the entire structure. Collect and dispose of wash water. Inspect structure; sample areas of potential releases. Perform construction oversight.
61 Release from Former Gasoline UST	Prepare work plan, design documents, and final completion reports. Perform focused soil and groundwater investigation (8 soil borings, 3 monitoring wells) program. Excavate impacted soil (100 tons) and dispose at an appropriate offsite facility as non-hazardous waste. Perform construction oversight.
44 Fuel Oil Storage Tanks	Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (3 soil borings). Excavate impacted soil (25 tons) and dispose at an appropriate offsite facility as non-hazardous waste. Clean tanks. Perform construction oversight.
GAOI-2a Tandem Mill Pond	Prepare work plan, design documents, and final completion reports. Perform focused water and sediment sampling program. Upgrade water treatment system. Remove and treat water. Consolidate sediments and soils (20,000 cubic yards) onto sediment drying bed. Construct a wetland area in pond cavity. Perform construction oversight.
GAOI-2b Acid Dosing Pond	Prepare work plan, design documents, and final completion reports. Perform focused water and sediment sampling program. Upgrade water treatment system. Remove and treat water. Consolidate sediments and soils (30,000 cubic yards) onto sediment drying bed. Construct a wetland area in pond cavity. Perform construction oversight.

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GAOI-2c Sediment Drying Pond	Prepare work plan, design documents, and final completion reports. Stabilize any soft sediments. Place and compact soil cover. Perform construction oversight. Maintain cover.
GAOI-3 Northwest Fill Area	Prepare work plan, design documents, and final completion reports. Regrade cover. Repair cover as needed. Perform construction oversight. Maintain cover.
GAOI-4a Anneal Basement	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and dispose of solids as hazardous waste. Pressure wash the entire structure. Collect and dispose of wash water. Insert sump; sample areas of potential releases. Perform construction oversight.
GAOI-4b Skin Mill Basement	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and dispose of solids as hazardous waste. Pressure wash the entire structure. Collect and dispose of wash water. Insert sump; sample areas of potential releases. Perform construction oversight.
GAOI-4c Pickle Line Basement	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and dispose of solids as hazardous waste. Pressure wash the entire structure. Collect and dispose of wash water. Insert sump; sample areas of potential releases. Perform construction oversight.
GAOI-4d Tandem Mill Basement	Prepare work plan, design documents, and final completion reports. Remove liquids and solids and dispose of solids as hazardous waste. Pressure wash the entire structure. Collect and dispose of wash water. Insert sump; sample areas of potential releases. Perform construction oversight.
GAOI-5a Water Retention Basin #1	Remove and treat water. Regrade basin. Place soil to form constructed wetlands and drainage. Perform construction oversight.
GAOI-5b Water Retention Basin #2	Remove and treat water. Regrade basin. Place soil to form constructed wetlands and drainage. Perform construction oversight.

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GAOI-5c Water Retention Basin #3	Remove and treat water. Regrade basin. Place soil to form constructed wetlands and drainage. Perform construction oversight.
GAOI-5d Water Retention Basin #4	Remove and treat water. Regrade basin. Place soil to form constructed wetlands and drainage. Perform construction oversight.
GAOI-6 Southeast Fill Area	Prepare work plan, design documents, and final completion reports. Regrade cover. Repair cover as needed. Perform construction oversight. Maintain cover.
75 Outfall 004	Prepare work plan, design documents, and final completion reports. Clean the sewer (600 feet) via water jet equipment. On-site stabilization of sediment removed from outfall (100 tons) Collect and dispose of wash water. Excavate and seal leaking joint. Perform construction oversight.
17 Blast Furnace Recycle Water Clarifier Sludge Filter Press Loadout Area	Prepare work plan, design documents, and final completion reports. Remove residuals and dispose offsite as non-hazardous waste (200 Pressure wash the entire loadout area (30,000 square feet). Collect and dispose of wash water. Perform confirmation sampling program. Perform construction oversight.
32 Kish Control Bag House Loadout Area	Prepare work plan, design documents, and final completion reports. Inspect structure; sample area of potential releases. Remove residuals and dispose offsite as non-hazardous waste (200 Perform construction oversight. Pressure wash the entire loadout area. Collect and dispose of wash water.
78 & 79 Blast Furnace #1 & #2 Scrubber Loadout Area	Prepare work plan, design documents, and final completion reports. Remove residuals (200 tons each), stabilize, and dispose offsite as non-hazardous waste Pressure wash the entire loadout area (each). Collect and dispose of wash water. Perform confirmation sampling program. Perform construction oversight.
48 Transformer Release	Combine with #60.

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3 West Process Sewer – North	Prepare work plan, design documents, and final completion reports. Clean the sewer via water jet equipment. Collect and dispose of wash water. Slip line the sewers with HDPE (4,000 linear feet of pipe assumed). Perform construction oversight.
4 West Process Sewer – South	Prepare work plan, design documents, and final completion reports. Clean the sewer via water jet equipment. Collect and dispose of wash water. Slip line the sewers with HDPE (2,000 linear feet of pipe assumed). Perform construction oversight.
15 Wastewater Treatment Plant	Prepare work plan, design documents, and final completion reports. Perform focused soil (5 soil borings, 15 test pits) and groundwater (5 monitoring wells) investigation program. Pressure wash the structures (100,000 square feet). Collect and dispose of wash water. Clean areas below waste discharge points. Stabilize 1,000 tons on-site, dispose of 500 tons material off-site as non-hazardous waste. Collect confirmation samples. Perform construction oversight.
16 East Process Sewer	Prepare work plan, design documents, and final completion reports. Clean the sewer via water jet equipment. Collect and dispose of wash water. Slip line the sewers with HDPE (2,500 linear feet of pipe assumed). Perform construction oversight.
63 Boiler House Fuel Tank	Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (3 soil borings). Excavate impacted soil (25 tons) and dispose at an appropriate offsite facility as non-hazardous waste. Clean tanks. Perform construction oversight.
29 TSCA Storage Building	Prepare work plan, design documents, and final completion reports. Pressure wash the building floor and dike. Collect and dispose of wash water. Perform construction oversight.
27 Equipment Storage Yard	Prepare work plan, design documents, and final completion reports. Perform focused surface soil investigation program. Excavate impacted surface soil and dispose at appropriate offsite facility as non-hazardous waste (100 tons). Perform confirmation sampling program. Perform construction oversight.

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39 Suspected Releases from Locomotive Repair Shop	Prepare work plan, design documents, and final completion reports. Perform focused soil investigation (5 soil borings) program. Pressure wash the entire structure. Collect and dispose of wash water. Perform construction oversight.
40 Suspected Releases from Paint Shop	Prepare work plan, design documents, and final completion reports. Perform focused soil investigation program. Pressure wash the entire structure. Collect and dispose of wash water. Perform construction oversight.
9 Centrifuge Sludge Pit	Prepare work plan, design documents, and final completion reports. Perform focused soil investigation program. Excavate impacted soil and sediment (200 tons) and stabilize on-site. Pressure wash the entire structure (5,000 square feet). Collect and dispose of wash water. Perform construction oversight.
74 Outfall 002	Prepare work plan, design documents, and final completion reports. Sample flow and structure. Remove sediment and clean line. Stabilize sediment (100 tons) on-site. Perform construction oversight.
76 Outfall 005	Prepare work plan, design documents, and final completion reports. Sample flow and structure. Remove sediment and clean line. Stabilize sediment (100 tons) on-site. Perform construction oversight.
66 PCB Spill	Combine with #60

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WMU/AOI Number	WMU/AOI Name	Investigation								Interim or Final Corrective Measures																	
		Soil Borings	Monitoring Wells	Test Pits	Soil Samples	Groundwater Samples	Structure Samples	Waste Profile Samples	Fencing (LF)	Surface Soil Removal (CY)	Confirmation Samples (soil)	Soil Cover (Acres)	Asphalt Cover (Acres)	Grading and Compaction (CY)	Excavation and Offsite Disposal as Solid Waste (Tons)	Excavation and Offsite Disposal as Hazardous Waste, no on-site treatment (Tons)	Excavation and Onsite Stabilization of Sediment (Tons)	Structure Cleaning (SF)	Tank Cleaning (SF)	Recovery Wells	Conveyance Piping (LF)	Water Treatment Plant	Water Samples	Sewer Cleaning (LF)	Slip Line Sewer (LF)	Capacitor Removal and Disposal	Transformer Removal and Disposal
7	Spent Pickle Liquor Sewer #2	0	0	0	0	0	0	0	0	200	0	0	0	0	200	0	0	0	0	0	0	0	0	1500	1500	0	0
38	Noise Reduction Pile	0	0	20	40	0	0	0	0	15,000	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Concast Scale Pit	2	1	0	4	2	10	1	0	0	0	0	0	0	0	0	200	10,000	0	0	0	0	3	0	0	0	0
43	Concast Grit Basin	2	1	0	4	2	10	1	0	0	0	0	0	0	0	0	200	10,000	0	0	0	0	3	0	0	0	0
49	Downcoiler Sump	3	1	0	6	2	10	1	0	0	0	0	0	0	0	0	200	5,000	0	0	0	0	3	0	0	0	0
50	South Motor Room Basement Sumps	3	1	0	6	2	10	1	0	0	0	0	0	0	0	0	200	10,000	0	0	0	0	3	0	0	0	0
51	Six Stand Oil Basement Sumps	3	1	0	6	2	10	1	0	0	0	0	0	0	0	0	200	10,000	0	0	0	0	3	0	0	0	0
52	Finish Stand Scale Pit	2	1	0	4	2	10	1	0	0	0	0	0	0	0	0	200	10,000	0	0	0	0	3	0	0	0	0
53	Roughing Mill Scale Pit	2	1	0	4	2	10	1	0	0	0	0	0	0	0	0	200	10,000	0	0	0	0	3	0	0	0	0
54	Old Four High Scale Pit	2	1	0	4	2	10	1	0	0	0	0	0	0	0	0	200	5,000	0	0	0	0	3	0	0	0	0
55	Blooming Mill Scale Pits	2	1	0	4	2	10	1	0	0	0	0	0	0	0	0	200	10,000	0	0	0	0	3	0	0	0	0
56	Reheat Sump	1	0	0	2	2	10	1	0	0	0	0	0	0	0	0	200	5,000	0	0	0	0	3	0	0	0	0
57	Heater Area Drains Sump	1	0	0	2	2	10	1	0	0	0	0	0	0	0	0	200	5,000	0	0	0	0	3	0	0	0	0
2	Oil Processing Tank	0	0	0	0	0	4	1	1,100	500	10	0	0	1,000	1,000	0	0	0	5,000	0	0	0	2	200	0	0	0
13	Sludge Filter Press Loadout Area	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	200	20,000	0	0	0	0	0	0	0	0	0
41	Desulfurization Bag House Loadout Area	5	0	0	10	0	4	1	0	0	0	0	0	0	100	0	0	30,000	0	0	0	0	0	0	0	0	0
28	Former Drum Storage Area #1	10	0	10	30	0	0	2	0	0	20	0	0	2,200	1,100	0	0	0	0	0	0	0	0	0	0	0	0

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		Investigation							Interim or Final Corrective Measures																		
		Soil Borings	Monitoring Wells	Test Pits	Soil Samples	Groundwater Samples	Structure Samples	Waste Profile Samples	Fencing (LF)	Surface Soil Removal (CY)	Confirmation Samples (soil)	Soil Cover (Acres)	Asphalt Cover (Acres)	Grading and Compaction (CY)	Excavation and Offsite Disposal as Solid Waste (Tons)	Excavation and Offsite Disposal as Hazardous Waste, no on-site treatment (Tons)	Excavation and Onsite Stabilization of Sediment (Tons)	Structure Cleaning (SF)	Tank Cleaning (SF)	Recovery Wells	Conveyance Piping (LF)	Water Treatment Plant	Water Samples	Sewer Cleaning (LF)	Slip Line Sewer (LF)	Capacitor Removal and Disposal	Transformer Removal and Disposal
WMU/AOI Number	WMU/AOI Name																										
45	Former Drum Storage Area #2	10	0	10	30	0	0	2	0	0	20	0	0	1,200	600	0	0	0	0	0	0	0	0	0	0	0	0
46	Former Drum Storage Area #3	10	0	10	30	0	0	2	0	0	20	0	0	400	200	0	0	0	0	0	0	0	0	0	0	0	0
62	Lime Storage Tanks	3	0	0	9	0	3	1	0	0	3	0	0	0	25	0	0	0	6,000	0	0	0	3	0	0	0	0
33	Suspected Releases from Drum and Oil Hopper Storage Areas	0	0	10	25	0	0	2	0	0	20	0	0	2,200	500	0	0	0	0	0	0	0	0	0	0	0	0
60 (Inside)	Suspected Historical Releases from PCB Items (Trenton)	30	0	30	180	0	40	4	0	0	100	0	0	1,000	2,000	0	0	20,000	0	0	0	0	10	0	0	0	0
60 (Outside)	Suspected Historical Releases from PCB Items (Trenton)	40	0	20	120	0	0	4	0	0	100	0	0	2,000	1,000	200	0	0	0	0	0	0	11	0	0	0	0
GAOI-7 (Inside)	Suspected Historical Releases from PCB Items (Gibraltar)	0	0	0	0	0	20	2	0	0	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	0
GAOI-7 (Outside)	Suspected Historical Releases from PCB Items (Gibraltar)																										
10	Standby Sludge Basin	2	0	0	2	2	10	1	0	0	0	0	0	0	0	0	400	10,000	0	0	0	0	3	0	0	0	0
23	Former BOF Gas Cleaning Sludge Pit	1	0	0	2	2	10	1	0	0	0	0	0	0	0	0	400	10,000	0	0	0	0	3	0	0	0	0
61	Release from Former Gasoline UST	8	3	0	16	6	0	1	0	0	5	0	0	20	100	0	0	0	0	0	0	0	0	0	0	0	0
44	Fuel Oil Storage Tanks	3	0	0	9	0	3	1	0	0	3	0	0	0	25	0	0	0	20,000	0	0	0	3	0	0	0	0
GAOI - 2b	Acid Dosing Pond	8	3	0	22	6	0	0	0	0	20	2	0	3,000	0	0	0	0	0	10	1,000	0	10	0	0	0	0
GAOI - 2c	Sediment Drying Pond	8	3	0	22	6	0	0	0	0	0	2	0	1,000	0	0	30,000	0	0	0	0	0	0	0	0	0	0
GAOI - 3	Northwest Fill Area	0	6	0	12	12	0	0	0	0	0	10	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0
GAOI - 4a	Anneal Basement	3	1	0	6	2	10	1	0	0	0	0	0	0	0	200	500	0	0	0	0	0	3	0	0	0	0
GAOI - 4b	Skin Mill Basement	3	1	0	6	2	10	1	0	0	0	0	0	0	0	200	500	0	0	0	0	0	3	0	0	0	0

Attachment I
 Prioritization Schedule Costing Assumptions
 DSC Ltd.
 Trenton and Gibraltar Plants
 Trenton and Gibraltar, Michigan

WMU/AOI Number	WMU/AOI Name	Investigation								Interim or Final Corrective Measures																	
		Soil Borings	Monitoring Wells	Test Pits	Soil Samples	Groundwater Samples	Structure Samples	Waste Profile Samples	Fencing (LF)	Surface Soil Removal (CY)	Confirmation Samples (soil)	Soil Cover (Acres)	Asphalt Cover (Acres)	Grading and Compaction (CY)	Excavation and Offsite Disposal as Solid Waste (Tons)	Excavation and Offsite Disposal as Hazardous Waste, no on-site treatment (Tons)	Excavation and Onsite Stabilization of Sediment (Tons)	Structure Cleaning (SF)	Tank Cleaning (SF)	Recovery Wells	Conveyance Piping (LF)	Water Treatment Plant	Water Samples	Sewer Cleaning (LF)	Slip Line Sewer (LF)	Capacitor Removal and Disposal	Transformer Removal and Disposal
GAOI - 4c	Pickle Line Basement	3	1	0	6	2	10	1	0	0	0	0	0	0	0	200	500	0	0	0	0	0	3	0	0	0	0
GAOI - 4d	Tandem Mill Basement	3	1	0	6	2	10	1	0	0	0	0	0	0	0	200	500	0	0	0	0	0	3	0	0	0	0
GAOI - 5a	Water Retention Basin #1	8	3	0	22	6	0	0	0	0	0	1	0	1,000	0	0	0	0	0	10	1,000	1	20	0	0	0	0
GAOI - 5b	Water Retention Basin #2	8	3	0	22	6	0	0	0	0	0	1	0	1,000	0	0	0	0	0	10	1,000	0	20	0	0	0	0
GAOI - 5c	Water Retention Basin #3	8	3	0	22	6	0	0	0	0	0	1	0	500	0	0	0	0	0	10	1,000	0	20	0	0	0	0
GAOI - 5d	Water Retention Basin #4	8	3	0	22	6	0	0	0	0	0	1	0	2,000	0	0	0	0	0	10	1,000	0	20	0	0	0	0
GAOI - 6	Southeast Fill Area	0	6	0	12	12	0	0	0	0	0	1	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0
75	Outfall 004	0	0	0	0	2	6	1	0	0	0	0	0	0	0	0	100	6,000	0	0	0	0	5	600	0	0	0
14	Former Sinter Building Holding Pits	5	0	0	15	0	0	1	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0
17	Blast Furnace Recycle Water Clarifier Sludge Filter Press Loadout Area	0	0	0	0	0	4	0	0	0	0	0	0	0	200	0	200	30,000	0	0	0	0	0	0	0	0	0
32	Kish Control Bag House Loadout Area	0	0	0	5	0	0	0	0	0	0	0	0	0	200	0	0	30,000	0	0	0	0	0	0	0	0	0
78	Blast Furnace #1 Scrubber Loadout Area	0	0	0	0	0	2	0	0	1,000	10	0	0	0	200	0	200	20,000	0	0	0	0	0	0	0	0	0
79	Blast Furnace #2 Scrubber Loadout Area	0	0	0	0	0	2	0	0	1,000	10	0	0	0	200	0	200	20,000	0	0	0	0	0	0	0	0	0
48	Transformer Release (Sec #60)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	West Process Sewer - North	0	0	0	0	0	0	0	0	2,000	0	0	0	0	100	0	0	0	0	0	0	0	0	4000	4000	0	0
4	West Process Sewer - South	0	0	0	0	0	0	0	0	2,000	0	0	0	0	100	0	0	0	0	0	0	0	0	2000	2000	0	0
15	Wastewater Treatment Plant	5	5	15	40	10	50	5	0	0	0	0	0	0	500	0	1,000	100,000	5,000	0	0	0	0	10000	0	0	0

Attachment I
Prioritization Schedule Costing Assumptions

DSC Ltd.
Trenton and Gibraltar Plants
Trenton and Gibraltar, Michigan

		Investigation							Interim or Final Corrective Measures																		
		Soil Borings	Monitoring Wells	Test Pits	Soil Samples	Groundwater Samples	Structure Samples	Waste Profile Samples	Fencing (LF)	Surface Soil Removal (CY)	Confirmation Samples (soil)	Soil Cover (Acres)	Asphalt Cover (Acres)	Grading and Compaction (CY)	Excavation and Offsite Disposal as Solid Waste (Tons)	Excavation and Offsite Disposal as Hazardous Waste, no on-site treatment (Tons)	Excavation and Onsite Stabilization of Sediment (Tons)	Structure Cleaning (SF)	Tank Cleaning (SF)	Recovery Wells	Conveyance Piping (LF)	Water Treatment Plant	Water Samples	Sewer Cleaning (LF)	Slip Line Sewer (LF)	Capacitor Removal and Disposal	Transformer Removal and Disposal
WMU/AOI Number	WMU/AOI Name																										
16	East Process Sewer	0	0	0	0	0	0	0	0	2,000	0	0	0	0	100	0	0	0	0	0	0	0	0	2500	2500	0	0
63	Boiler House Fuel Tank	3	0	0	9	0	3	1	0	0	3	0	0	0	25	0	0	0	3,000	0	0	0	3	0	0	0	0
29	TSCA Storage Building	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	5,000	0	0	0	0	0	0	0	0	
27	Equipment Storage Yard	0	0	5	10	0	0	1	0	0	0	0	0	200	100	0	0	0	0	0	0	0	0	0	0	0	0
39	Suspected Releases from Locomotive Repair Shop (a.k.a. Roundhouse)	5	0	0	15	0	2	1	0	0	0	0	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0
40	Suspected Releases from Paint Shop	5	0	0	15	0	2	1	0	0	0	0	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0
9	Centrifuge Sludge Pit	4	1	0	8	2	10	1	0	0	0	0	0	0	0	0	200	5,000	0	0	0	0	3	0	0	0	0
74	Outfall 002	0	0	0	0	2	6	1	0	0	0	0	0	0	0	0	100	4,000	0	0	0	0	5	600	0	0	0
76	Outfall 005	0	0	0	0	2	6	1	0	0	0	0	0	0	0	0	100	2,000	0	0	0	0	5	600	0	0	0
66	PCB Spill (See #60)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C Order All 1
Express 07/7/98

ATTACHMENT J
TRUST AGREEMENT

Trust Agreement (the "Agreement") entered into as of _____, 1999 by and between the DSC Ltd., a Michigan corporation, (the "Grantor"), Comerica Bank, a Michigan banking corporation, (the "Trustee") and the Director, Michigan Department of Environmental Quality (the "Director") as beneficiary.

Whereas, the Grantor owns a facility within the State of Michigan which is subject to the corrective action provisions of Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (the "NREPA"), and the administrative rules promulgated thereunder;

Whereas the Grantor owns two facilities within the State of Michigan which are subject to the remediation provisions of Part 201, Environmental Remediation, of the NREPA, and the administrative rules promulgated thereunder;

Whereas, the Director has promulgated administrative rules applicable to the Grantor, requiring that the owner or operator of a facility must provide financial assurance that funds will be available when needed for the cost of proper corrective action and remediation of the facilities;

Whereas, the Grantor has signed a Comprehensive Corrective Action and Remedial Consent Order, WMD Order No. _____ (the "Order"), which requires financial assurance for corrective action and remediation of the facilities identified herein;

Whereas, the Grantor has elected to establish this Trust Fund to provide all or part of such financial assurance for the facilities identified herein;

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement;

Whereas, the trust operations of the Trustee are regulated and examined by a state or federal agency and the Trustee has authority to act as trustee; and

Whereas, the Trustee is willing to act as trustee;

Now, therefore, the Grantor, Trustee, and Director agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Director" means the duly appointed and acting Director of the Department of Environmental Quality or any successor department or agency or his or her authorized representative.

(b) The term "Fiduciary" means any person who exercises any power of control, management, or disposition, or renders investment advice for a fee or other compensation, direct or indirect, with respect to any moneys or other property of this Trust Fund, or has any authority or responsibility to do so, or who has any authority or responsibility in the administration of this Trust Fund.

(c) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(d) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities.

This Agreement pertains to the following facilities owned and/or operated by the Grantor, and the current corrective action and response activity cost estimate:

DSC Ltd.
Trenton Facility
1491 West Jefferson Avenue
Trenton, MI
EPA ID Number: MID 017 422 304

DSC Ltd.
Gibraltar Facility
28000 West Jefferson
Gibraltar, MI

Combined Corrective Action and Remediation Cost Estimate: \$ _____

This cost estimate will be revised from time to time by the Grantor as required by the NREPA.

Section 3. Establishment of Fund.

The Grantor and the Trustee hereby establish a trust fund (the "Trust Fund") for the exclusive use and benefit of the Director as beneficiary, and intend that no other party shall have access to said Trust Fund without the express written approval and direction of the Director.

The Trust Fund is established initially as consisting of the cash and securities, which are acceptable to the Trustee, described in attached Exhibit A. Such property and all other property subsequently conveyed by the Grantor to the Trustee is collectively referred to as the Trust Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Trust Fund shall be held by the Trustee, in trust, as hereinafter provided.

Section 4. Payments from the Trust Fund

The Trustee shall make payments from the Trust Fund to the Director, the Grantor, or other persons, as instructed in writing by the Director. The Grantor and Director shall comply with the provisions of R 299.9704 of the Michigan Administrative Code for payments from the Trust Fund, except as otherwise provided in the Order. The Trustee shall not make any payments from the Trust Fund without the prior written approval from the Director.

The Trust Fund so established shall be used solely to provide for the payment of the costs of corrective action and response activities at the facilities covered by this Agreement; to reimburse the Grantor for legitimate expenses in carrying out corrective action and response activities as approved by the Director; or to disburse to the Grantor excess funds as determined by the Director not required to be part of this Trust Fund.

If the Director issues a notice of violation or other order to the Grantor alleging violation of the corrective action or response activity requirements, the Director may, after providing the Grantor 7 days' notice and opportunity for hearing, access the funds in the Trust Fund to correct the violations, complete corrective action or response activities, and maintain the facilities in accordance with the approved plans.

Section 5. Contributions to the Trust Fund.

Contributions to the Trust Fund by the Grantor shall consist of cash, certified check, and/or direct obligations of the United States of America or the State of Michigan, or obligations the principal and interest of which are unconditionally guaranteed by the United States of America or the State of Michigan, or certificates of deposit of any financial institution to the extent insured by an agency of the United States of America which certificates of deposit shall mature not later than one year from the date of deposit.

The Trustee undertakes no responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any contributions required to be made by Grantor to the Trust Fund or for contributions required of the Grantor to discharge any liabilities of the Grantor as required by the NREPA or the Order.

The Trustee shall notify the Director in writing of contributions made to the Trust Fund by the Grantor.

Section 6. Trustee Management.

The Trustee shall invest and reinvest the principle and income of the Trust Fund, in accordance with general investment policies and guidelines which the Grantor shall communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Agreement. In investing, reinvesting, exchanging, selling, and managing the Trust Fund, the Trustee or any other Fiduciary shall discharge his duties with respect to the Trust Fund solely in the best interests of the Director and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, provided that:

(a) Securities or other obligations of the Grantor or any other owner or operator of the facility, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held on behalf of the Trust Fund, unless they are securities or other obligations of the United States of America or the State of Michigan;

(b) The Trustee is authorized to invest the Trust Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the United States of America or the State of Michigan; and

(c) The Trustee is authorized to hold cash while awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment.

The Trustee is expressly authorized in its discretion and in accordance with the investment policies and guidelines transmitted to the Trustee by the Grantor pursuant to Section 6 hereof:

(a) To transfer from time to time any or all of the assets of the Trust Fund to any common, commingled, or collective trust created by the Trustee in which the Trust Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein so long as such management does not conflict with the requirements of this Trust Fund; and

(b) To purchase, on behalf of the Trust Fund, shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee.

Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held on behalf of the Trust Fund, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held on behalf of the Trust Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States of America, or any agency of instrumentality thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show that all such securities are held on behalf of the Trust Fund;

(d) To deposit any cash in the Trust Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the United States of America or the State of Michigan; and

(e) To compromise or otherwise adjust all claims in favor of or against the Trust Fund.

Section 9. Taxes and Expenses.

All taxes of any kind that may be assessed or levied against or in respect of the Trust Fund and all brokerage commissions incurred by the Trust Fund shall be paid from the Trust Fund. All other expenses incurred by the Trustee in connection with the administration of the Trust Fund, including fees for legal services rendered to the Trustee, the compensation of the Trustee (to the extent not paid directly by Grantor), and all other proper charges and disbursements to the Trustee shall be paid from the Trust Fund.

Notwithstanding the foregoing, it is the express obligation of the Grantor and the Grantor agrees to pay directly to the Trustee for the benefit of the Trust Fund, on demand, any and all taxes, expenses, costs, and fees occasioned by virtue of the Trust Fund so as to maintain, according to Section 2 of this Agreement, the level, amount, and value of the Trust Fund exclusively available for the purposes for which the Trust Fund has been created; provided further, that should the Trustee utilize any portion of the Trust Fund for costs, expenses, fees, taxes, and the like, the Grantor shall forthwith add to the Trust Fund such assets as will return the Trust Fund to the level, amount, and value required by Section 2 of this Agreement, notwithstanding disbursements by the Trustee.

Section 10. Annual Valuations.

The Trustee shall annually, within 30 days after the anniversary date of the establishment of the Trust Fund, furnish to the Grantor and to the Director a written statement of the current value of the Trust Fund. Any securities in the Trust Fund shall be valued at market value as of no more than 30 days prior to the date of the written statement.

Section 11. Advice of Counsel.

The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation.

The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee.

The Trustee may resign by written notice to all parties, or Grantor may replace the Trustee by written notice to all parties. Such resignation or replacement shall not be effective until Grantor has appointed a successor trustee and the successor trustee accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then held on behalf of the Trust Fund. The successor trustee shall specify the date on which it will assume administration of the Trust Fund in writing sent to the Director, Grantor, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee.

All orders, requests, and instructions to the Trustee by the Director shall be in writing and signed by the Director. All orders, requests, and instructions to the Trustee by the Grantor shall be in writing and signed by the Grantor. So long as such orders, requests, and instructions are consistent with the provisions of this agreement, the Trustee shall act in accordance with such orders, requests, and instructions, and in so acting will be fully protected to the extent permitted by law. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Director hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Director, except as otherwise provided for herein.

Section 15. Amendment of Agreement.

This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director, or by the Trustee and the Director if the Grantor ceases to exist.

Section 16. Irrevocability and Termination.

Subject to the right of the parties to amend this Agreement as provided in Section 15, this Trust Fund shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Director, or by the Trustee and the Director, if the Grantor ceases to exist. Upon termination of the Trust Fund, all remaining trust property, less final trust administration expenses, shall be paid to the Grantor, or if the Grantor ceases to exist, to the Director.

The parties agree that the purpose of this Trust Fund, which is to fund the corrective action and response activities in order to control, minimize, or eliminate, to the extent necessary to protect

human health and the environment, the escape of Contaminants, hazardous waste, and hazardous constituents to the ground or surface waters or to the atmosphere, is beneficial to the public as a whole. Accordingly, the parties agree that this Trust Fund is for public welfare purposes and comes within the statutory exception to the rule against perpetuities set forth in Michigan Compiled Laws §554.381 (Mich. Stat. Annot. §26.1201).

Section 17. Immunity and Indemnification.

The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of the Trust Fund, or in carrying out any directions by the Grantor and/or the Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its capacity as trustee of the Trust Fund, including all expenses reasonably incurred in its defense against related litigation.

Section 18. Choice of Law.

This Agreement shall be administered, construed, and enforced according to the laws of the State of Michigan.

Section 19. Interpretation.

As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified by the Michigan Department of Environmental Quality as of the date first above written.

FOR THE GRANTOR

By: _____ Date: _____
Name: _____
Title: _____

FOR THE TRUSTEE

By: _____ Date: _____
Name: _____
Title: _____

FOR THE DIRECTOR

By: _____ Date: _____
Name: _____
Title: _____

STATE OF MICHIGAN)
) SS.
COUNTY OF WAYNE)

The foregoing instrument was acknowledged before me this ____ day of _____, 1999, by _____, the _____ of DSC Ltd., a Michigan corporation, on behalf of the corporation, the Grantor named in the foregoing instrument.

Notary Public
_____ County, Michigan
My Commission Expires: ____

STATE OF MICHIGAN)
) SS.
COUNTY OF WAYNE)

The foregoing instrument was acknowledged before me this ____ day of _____, 1999, by _____, the _____ of _____, a Michigan banking corporation, on behalf of the corporation, the Trustee named in the foregoing instrument.

Notary Public
_____ County, Michigan
My Commission Expires: ____

STATE OF MICHIGAN)
) SS.
COUNTY OF INGHAM)

The foregoing instrument was acknowledged before me this ____ day of _____, 1999, by _____, the _____ of the Michigan Department of Environmental Quality, on behalf of the Director named in the foregoing instrument.

Notary Public
_____ County, Michigan
My Commission Expires: ____

EXHIBIT A

Trust Assets

The Trust Fund is established initially as consisting of the following:

By their signatures below, the parties agree that this Exhibit A is incorporated into and made part of the Trust Agreement dated _____.

FOR THE GRANTOR

By: _____ Date: _____
Name: _____
Title: _____

FOR THE TRUSTEE

By: _____ Date: _____
Name: _____
Title: _____

FOR THE DIRECTOR

By: _____ Date: _____
Name: _____
Title: _____

ATTACHMENT K

Trust Fund Reimbursement Request

DSC Ltd. – Trenton and Gibraltar Plants

Pursuant to the Trust Agreement dated _____, DSC Ltd., as Grantor, hereby requests the Department of Environmental Quality, as Beneficiary, to authorize _____, the Trustee, to reimburse DSC Ltd. for the following itemized costs incurred for the corrective action and remediation of the DSC Ltd. - Trenton and Gibraltar Plants, from Trust Fund Account Number _____:

Start Date	End Date	Trenton, X	Gibraltar, X	Unit or Area No.(s)	Activity Completed (reference attachments if necessary)	Cost, \$
					Total	

Relevant invoices and information to document the above costs are attached.

I hereby certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

For DSC Ltd.:

Independent Registered Professional Engineer:

Signature and date

Signature and date

Name and title

Name
Seal:

ATTACHMENT L
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL RESPONSE DIVISION

SUMMARY REPORT

Site Name DSC - Former McLouth Steel Facility

County Wayne

Site ID Number 821496

Project Number 454901

Total for Employee Salaries and Wages

Period Covered: 12/28/96 through 10/30/99

\$18,802.21

Indirect Dollars

\$3,975.31

Sub-Total

\$22,777.52

Total for Employee Travel Expenses

Period Covered: 8/15/97 through 5/19/99

\$343.30

Total for Contractual Expenses

Total for Miscellaneous Expenses

MDNR/MDEQ Lab

Total for MDPH/Community Health Expenses

Attorney General Expenses

Period Covered: 5/31/97 through 9/30/99

\$12,325.50

Total Combined Expenses for Site

\$35,446.32

Run Date 11/17/99