



Certified Mail

October 21, 2016

Mr. Paul F. Burgio
BRAC Environmental Coordinator
NAVFACHQ, BRAC PMO
Building 679, Naval Business Center
4911 South Broad Street
Philadelphia, PA 19112-1303

RE: Charleston Naval Complex
SC0 170 022 560
Resource Conservation and Recovery Act (RCRA)
Final Permit Decision

Dear Mr. Burgio:

The South Carolina Department of Health and Environmental Control (Department) has made a decision to issue a hazardous waste permit to Charleston Naval Complex located in Charleston, South Carolina. Please find the hazardous waste permit in Attachment 1 to this letter.

This action constitutes a final permit decision for Charleston Naval Complex. The permit will become effective on November 6, 2016 unless the Permit is appealed in accordance with the procedures described in Attachment 2 – Guide to Board Review.

The Department is committed to the protection of human health and the environment. No comments were submitted regarding this permit. Additionally, we would like to receive comments that summarize how our procedures and staff worked to meet your needs during the permitting process. A comment card is attached for this purpose.

If you have any questions, please contact Meredith Amick at (803) 898-0368.

Sincerely,

A handwritten signature in blue ink that reads "D. M. Scaturo". The signature is stylized with a long horizontal line extending from the end of the name.

David M. Scaturo, P.E., P.G., Director
Division of Waste Management
Bureau of Land & Waste Management

Attachment 1 – Final Hazardous Waste Permit
Attachment 2 – Guide to Board Review

cc: Denise Housely, EPA (via email)
Christine Sanford-Coker, EQC Regional Office Charleston (via email)
Curtis Joyner, DHEC-OCRM (via email)
Meredith Amick
File #50484

TABLE OF CONTENTS

Charleston Naval Complex
SC0 170 022 560
Charleston County

Module I	Standard Conditions	Page 4
Module II	Corrective Action for Solid Waste Management Units and Areas of Concern	Page 17
Module III	Waste Minimization	Page 38
Module IV	Land Disposal Restrictions	Page 39

Appendices

Appendix A	Solid Waste Management Units and Areas of Concern
Appendix B	RCRA Facility Investigation (RFI) Work Plan Outline
Appendix C	Corrective Measures Study (CMS) Work Plan Outline
Appendix D	Schedule of Compliance
Appendix E	Waste Minimization Objectives
Appendix F	Land Use Control Management Plan
Appendix G	Facility Map

**CHANGES MADE TO THE HAZARDOUS WASTE PERMIT
CHARLESTON NAVAL COMPLEX
SC0 170 022 560**

<u>Location in Permit</u>	<u>Date of Change</u>	<u>Description of Change</u>
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MODULE I - STANDARD CONDITIONS

I.A. PURPOSE

- I.A.1. This permit sets forth the terms and Conditions for completion by the Permittee of those Corrective Actions which remain to be completed in order to satisfy the requirements of the Resource Conservation and Recovery Act (RCRA) and South Carolina Hazardous Waste Management and petroleum Regulations, R61-79 and R.61-92 Part 280. The corrective action status of all previously identified SWMUs, AOCs, LUC Zone, and Zone J as defined in I.E. and as further detailed in Appendix A of this permit are summarized below
- I.A.1.a) Those SWMUs, AOCs, LUC Zone, and Zone J identified in Appendix A-1 include all identified SWMUs, AOCs, LUC Zone, and Zone J situated within the original facility.
- I.A.1.b) Those SWMUs and AOCs identified in Appendix A-2 of this Permit where RCRA Facility Investigations (RFI) have yet to be completed to address known or suspected releases of hazardous waste or hazardous constituents;
- I.A.1.c) Those SWMUs and AOCs identified in Appendix A-3 of this Permit where Confirmatory Sampling Investigations (CSI) have yet to be completed to address known or suspected releases of hazardous waste or hazardous constituents;
- I.A.1.d) Those SWMUs, AOCs, and Zone J identified in Appendix A-4 of this Permit where no further action (NFA) at this time is required, however those SWMUs, AOCs, and Zone J listed in the column labeled "non-cross hatched area" are located in areas that have been removed from the boundaries of the facility and are no longer subject to this permit except as otherwise provided under Conditions II.B.3 and II.C.2;
- I.A.1.e) Those SWMUs and AOCs identified in Appendix A-5 of this Permit where Clean Closure has been completed to address known or suspected releases of hazardous waste or hazardous constituents and no further action is required at this time;
- I.A.1.f) Those SWMUs and AOCs identified in Appendix A-6 of this Permit that are addressed as petroleum sites;
- I.A.1.g) Those SWMUs and AOCs identified in Appendix A-7 of this Permit where Corrective Measure Studies (CMS) have yet to be completed to address known releases of hazardous waste or hazardous constituents;
- I.A.1.h) Those SWMUs, AOCs, and LUC Zone identified in Appendix A-8 of this Permit where LUC remedies requiring periodic oversight to ensure their integrity have been implemented and must be maintained.

I.A.2. This Permit also sets forth the terms and Conditions for completion by the Permittee of those Corrective Actions necessary to address any newly discovered releases of hazardous waste or hazardous constituents which the Department determines are attributable to the Permittee. The Department acknowledges that the Permittee conveyed ownership of the real property, buildings, and related structures which comprised the former Charleston Naval Complex (CNC) for community reuse. Although the Permittee shall not be responsible for either the waste management practices of, or any hazardous waste or hazardous constituent releases caused by, any new owner or operator of those conveyed properties, the Permittee retains responsibility under this Permit to address any newly discovered releases which are attributable to the Permittee's operations, including any newly discovered releases at previously identified SWMUs or AOCs. Each newly identified SWMU or AOC shall be addressed by the Permittee as provided for under Module II of this Permit.

I.B. EFFECT OF PERMIT

This Permit is issued pursuant to the RCRA, as amended. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 106(a), 104, or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq., commonly known as CERCLA), or any other law providing for protection of public health or the environment. [R.61-79.270.4, 270.30(g)]

The Permittee shall perform Corrective Action in accordance with the Conditions of this Permit. Any storage, treatment, and/or disposal of hazardous waste not authorized in this Permit, is prohibited, except as allowed by the South Carolina Hazardous Waste Management Regulations, R61-79.

I.C. PERMIT ACTIONS

I.C.1. Permit Modification, Revocation and Reissuance, and Termination

This Permit may be modified, revoked and reissued, or terminated for cause as specified in R.61-79.270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit Condition. [R.61-79.270.30(f)]

I.C.2. Permit Renewal

This Permit may be renewed as specified in Permit Condition I.F.2. Review of any

application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations. [R.61-79.270.30(b)] All property owners must be notified of the Permittee's request for permit renewal.

I.C.3. Permit Expiration

Pursuant to R.61-79.270.50, this Permit shall be effective for a fixed term not to exceed ten years. This Permit and all Conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application (see R.61-79.270.10, 270.13 through 270.29) and, through no fault of the Permittee, the Department has not issued a new permit, as set forth in R.61-79.270.51.

I.D. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

I.E. DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in R.61-79 Parts 124, 260, 264, 266, 268, and 270, unless this Permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

I.E.1. "Area of Concern" (AOC):

for purposes of this Permit includes any area having a probable release of a hazardous waste, hazardous constituent, or petroleum constituent which is not from a solid waste management unit and is determined by the Department to pose a current or potential threat to human health or the environment. Such areas of concern may require investigations and remedial action as required under Section 3005(c)(3) of the Resource Conservation and Recovery Act and R.61-79.270.32(b)(2) in order to ensure adequate protection of human health and the environment.

I.E.2. "Certified Laboratory":

for the purposes of this Permit means a laboratory that has been approved by the Department to perform specific analyses referenced in R.61-79.260 through R.61-79.270.

I.E.3. "Compliance Period":

for the purposes of the groundwater requirements of this Permit is the number of years equal to the active life of the unit prior to the Department's approval of certification of

closure. The compliance period includes any period of waste management activity that may have occurred prior to permitting and begins when the owner/operator initiates a compliance monitoring program for groundwater pursuant to R.61-79.264.99.

I.E.4. "Contamination":

for purposes of this Permit refers to the presence of any hazardous constituent in a concentration which exceeds the naturally occurring concentration of that constituent in areas not affected by the Permittee.

I.E.5. "Corrective Action":

for purposes of this Permit, may include all corrective actions necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents regardless of the time at which waste was placed in the unit, as required under R.61-79.264.100(b) and 264.101. Corrective action may address releases to air, soils, surface water, groundwater, or subsurface gas.

I.E.6. A "Corrective Action Management Unit" (CAMU):

for purposes of this Permit, includes any area that is designated by the Department under R.61-79.264 Subpart S, for the purpose of implementing corrective action requirements under 264.101 and RCRA section 3008(h). A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements.

I.E.7. "Department":

for purposes of this permit means the Department of Health and Environmental Control, including personnel thereof authorized by the Board to act on behalf of the Department or Board.

I.E.8. "Extent of Contamination":

for the purposes of this Permit is defined as the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being investigated are above the naturally occurring concentration of that constituent in areas not affected by the Permittee.

I.E.9. "Facility":

for purposes of this Permit shall mean a subset of the original facility encompassing those cross-hatched land areas identified in Appendix G, Facility Map, for implementing corrective action under R.61-79.264.100 and R.61-79.264.101

I.E.10. A "Hazardous Constituent":

for purposes of this Permit are those substances listed in Appendix VIII of R.61-79.261 and Appendix IX of R.61-79.264.

I.E.11. "Interim Measures":

for purposes of this Permit are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented.

I.E.12. "Land Disposal":

for purposes of this Permit and R.61-79.268 means placement in or on the land except for a CAMU and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes.

I.E.13. "Landfill":

for the purposes of this Permit includes any area where hazardous waste was placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

I.E.14. "Land Use Control (LUC)":

for the purpose of this Permit the term "land use control" or "LUC" with regard to real property, means any restriction or control that limits the use of and/or exposure to any portion of that property, including water resources, arising from the need to protect human health and the environment. The term encompasses "institutional controls", such as those involved in real estate interests, governmental permitting, zoning, public advisories, deed notices, and other "legal" restrictions. The term also includes restrictions on access, whether achieved by means of engineered barriers (e.g., fence or concrete pad) or by human means (e.g., the presence of security guards). Additionally, the term includes both affirmative measures to achieve the desired restrictions (e.g., night lighting of an area) and prohibitive directives (e.g., no drilling of drinking water wells for the duration of the corrective action). Considered altogether, the LUCs for a facility will provide a tool for how the property should be used in order to maintain the level of protectiveness that one or more corrective actions were designed to achieve.

I.E.15. "LUC Zone":

for purposes of this Permit shall mean those land areas within the boundaries of the facility but outside the boundaries of any known SWMU or AOC upon which the Permittee has imposed Land Use Controls (LUCs) in order to ensure future protection of human health and the environment in light of the presence of residual contamination in excess of unrestricted use cleanup criteria.

I.E.16. "Original Facility":

for the purposes of this Permit shall mean those distinct land areas identified by the entire boundary on the Facility Map in Appendix G for implementing corrective action under

R.61-79.264.100 and R.61-79.264.101.

I.E.17. "Permittee":

for the purposes of this Permit means that United States Department of the Navy, as represented by Director, US Navy BRAC Program Management Office East.

I.E.18. A "Release":

for purposes of this Permit includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous constituents.

I.E.19. "Remediation Waste":

for the purposes of this Permit includes all solid and hazardous wastes, and all media (including groundwater, surface water, soils and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under R.61-79.264.100, 264.101 and RCRA section 3008(h).

I.E.20. "Schedule of Compliance":

for the purposes of this Permit refers to a schedule of remedial measures included in this Permit, including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the Resource Conservation and Recovery Act and the South Carolina Hazardous Waste Management Regulations [R.61-79.270.2].

I.E.21. "Solid waste":

means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

I.E.22. "Solid Waste Management Unit" (SWMU):

for the purposes of this Permit includes any unit which has been used for the treatment, storage, or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. RCRA hazardous waste management units are also solid waste management units. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and

cannot be linked to solid waste management activities (e.g. product or process spills).

I.E.23. A "Temporary Unit" (TU):

for the purposes of this Permit includes any temporary tanks and/or container storage areas used solely for treatment or storage of hazardous remediation wastes during specific remediation activities. Designated by the Department, such units must conform to specific standards, and may only be in operation for a period of time as specified in R.61-79.264.553.

I.E.24. A "Unit":

for purposes of this Permit includes, but is not limited to, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, septic tank, drain field, wastewater treatment unit, elementary neutralization unit, transfer station, or recycling unit.

I.E.25. Zone J:

for purposes of this Permit encompasses areas which lie within the Cooper River, Noisette Creek, and Shipyard Creek that were investigated to determine the impact of the past operations of the Permittee.

I.F. DUTIES AND REQUIREMENTS

I.F.1. Duty to Comply

The Permittee shall comply with the approved permit application and all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and the South Carolina Hazardous Waste Management Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. [R.61-79.270.30(a)]

I.F.2. Duty to Reapply

If the Permittee intends to continue an activity allowed or required by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a new permit at least one hundred eighty (180) days prior to permit expiration. The Permittee must comply with the public notice requirements of R.61-79.124.10. [R.61-79.270.10(h), 270.30(b)]

I.F.3. Obligation for Corrective Action

The Permittee is required to continue this Permit for any period necessary to comply with the corrective action requirements of this Permit.[R61-79.264.101, 270.1(c),270.51]

I.F.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Conditions of this Permit. [R.61-79.270.30(c)]

I.F.5. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. [R.61-79.270.30(d)]

I.F.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of a backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the Conditions of this Permit. [R.61-79.270.30(e)]

I.F.7. Duty to Provide Information

The Permittee shall furnish to the Department, within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Department, upon request, copies of records required to be kept by this Permit. [R.61-79.264.74(a), 270.30(h)]

I.F.8. Inspection and Entry

The Permittee shall use its best efforts to exercise its access rights so as to facilitate the Department's entry onto all portions of the facility where the Permittee is undertaking Corrective Actions to include LUC oversight activities and to allow the Department to:

- I.F.8.a) Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the Conditions of this Permit;
- I.F.8.b) Have access to and copy, at reasonable times, any records that must be kept under the Conditions of this Permit;
- I.F.8.c) Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated as required under this Permit; and

- I.F.8.d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

I.F.9. Monitoring and Records

- I.F.9.a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste and/or contaminated media to be analyzed must be the appropriate method from Appendix I of R.61-79.261, the EPA Region IV Quality System and Technical Procedures for SESD Field Branches (most recent version) or an equivalent method as specified in the waste analysis plan of the approved permit application, or otherwise approved by the Department.

Laboratory methods must be those specified in the most recent edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent method approved by the Department, and must be performed by a laboratory certified pursuant to the State Environmental Laboratory Certification Regulations, R.61-81 and R.61-79.260.11. [R.61-79.270.30(j)(1)]

- I.F.9.b) The Permittee shall retain the following at the Program Management Office or at another location as approved by the Department:

- I.F.9.b)(i) records of all monitoring information required under the terms of this Permit, including all calibration and maintenance records,
- I.F.9.b)(ii) records of all original strip chart recordings for continuous monitoring instrumentation,
- I.F.9.b)(iii) copies of all reports and records required by this Permit and all data used to prepare them,
- I.F.9.b)(iv) records of all data used to complete the application for this Permit.

The Permittee shall retain these items for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application, or until corrective action is completed, whichever date is later.

This period may be extended by request of the Department at any time and

are automatically extended during the course of any unresolved enforcement action.

I.F.9.c) Pursuant to R.61-79.270.30(j)(3), records of monitoring information shall specify:

I.F.9.c)(i) The dates, exact place, and times of sampling or measurements;

I.F.9.c)(ii) The individuals who performed the sampling or measurements;

I.F.9.c)(iii) The dates analyses were performed;

I.F.9.c)(iv) The individuals who performed the analyses;

I.F.9.c)(v) The analytical techniques or methods used; and

I.F.9.c)(vi) The results of such analyses.

I.F.9.d) Monitoring results shall be reported at intervals specified by the Department. [R.61-79.270.30(l)(4)]

I.F.10. Reporting Planned Changes

The Permittee shall give notice to the Department as soon as it becomes aware of any physical alterations or additions to the facility planned by any new owner or operator, which may adversely impact any Solid Waste Management Units (SWMUs), Areas of Concern (AOCs), LUC Zone, or the areas contaminated by them. [R.61-79.270.30(l)(1)].

I.F.11. Reporting Anticipated Noncompliance

The Permittee shall notify the Department as soon as it becomes aware of information at the original facility that may impact the Permittee's compliance with the Permit.

I.F.12. Transfer of Permits

This Permit may be transferred to a new owner or operator only after notice to the Department pursuant to R.61-79.270.40 and only if it is modified or revoked and reissued pursuant to R.61-79.270.41 to identify the new Permittee and incorporate such other requirements as may be necessary. Before transferring operation of the facility or any portion thereof, the Permittee shall notify the new owners or operators in writing of the requirements of R.61-79.264 and 270, and this Permit. Additionally the requirements of Appendix F must be met.

I.F.13. Schedule of Compliance

Written notification of compliance or noncompliance with any item identified in the compliance schedule (Appendix D) of this Permit shall be submitted according to each

schedule date. If the Permittee does not notify the Department within fourteen (14) calendar days of its compliance or noncompliance with the schedule, the Permittee shall be subject to an enforcement action. Submittal of a required item according to the schedule constitutes notification of compliance.

I.F.14. Imminent Hazard Reporting

I.F.14.a) The Permittee shall report to the Department any noncompliance or any imminent or existing hazard from a release of hazardous waste or hazardous constituents at the facility which may endanger human health or the environment. Any such information shall be reported orally by the Permittee when they become aware of the circumstances. This report shall include the following to the extent that it is available to the Permittee:

I.F.14.a)(i) Information concerning the release of any hazardous waste or hazardous constituents which may endanger public drinking water supplies.

I.F.14.a)(ii) Information concerning the release or discharge of any hazardous waste, or hazardous constituents, or of a fire or explosion, which could threaten the environment or human health outside the original facility.

I.F.14.b) The description of the occurrence at the facility and its cause shall include:

I.F.14.b)(i) Name, address, and telephone number of the owner or operator;

I.F.14.b)(ii) Location of the occurrence;

I.F.14.b)(iii) Date, time, and type of incident;

I.F.14.b)(iv) Name and quantity of materials involved;

I.F.14.b)(v) The extent of injuries, if any;

I.F.14.b)(vi) An assessment of actual or potential hazard to the environment and human health, and

I.F.14.b)(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

I.F.14.c) A notification shall also be provided to the Department in a timely manner as the Permittee becomes aware of the circumstances of the

noncompliance or imminent or existing hazard at the facility covered under Condition I.F.14.a above. The notification shall contain the information specified under Conditions I.F.14(a) and (b) ; a description of the noncompliance or imminent hazard and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance or imminent hazard has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance or imminent hazard. [R.61-79.270.30(l)(6)]

I.F.15. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above by Permit Conditions I.F.11 and I.F.14 , at the time monitoring reports are submitted. The reports shall contain the information listed in Condition I.F.14 , as applicable. [R.61-79.270.30(l)(10)]

I.F.16. Other Information

Whenever the Permittee becomes aware that he/she failed to submit any relevant facts, or submitted incorrect information in a permit application or in any report to the Department, the Permittee shall promptly submit such facts or information. [R.61-79.270.30(l)(11)]

I.G. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the Department shall be signed and certified in accordance with R.61-79.270.11 and 270.30(k).

I.H. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DEPARTMENT

All reports, notifications, or other information which are required by this Permit to be submitted to the Department, should be sent to the Department by verifiable delivery at the following address:

S.C. Department of Health & Environmental Control
Attn: Mr. David Scaturo, P.E., P.G., Director
Division of Waste Management
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201
Phone: (803) 898-2000

A copy of all reports, notifications, or other information which are required by this Permit to be submitted to the Department, should also be sent to the US EPA, Region IV by

verifiable delivery at the following address:

U.S. Environmental Protection Agency
Attn: South Carolina RCRA Permitting & Corrective Action State Coordinator
RCRA Corrective Action & Permitting Section
RCRA Cleanups & Brownfields Branch
Resource Conservation & Restoration Division
US Environmental Protection Agency, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303
Phone: (404) 562-8527

I.I. CONFIDENTIAL INFORMATION

In accordance with R.61-79.270.12, the Permittee may claim confidential certain information required to be submitted by this Permit.

I.J. DOCUMENTS TO BE MAINTAINED BY THE PERMITTEE

Until corrective action activities are completed, certified by an independent registered professional engineer, and verified by the Department, the Permittee shall maintain at the Program Management Office or other location approved by the Department, the following documents and amendments, revisions, and modifications to these documents:

I.J.1. The Permit Application

The approved Permit Application pursuant to R61-79.270.2.

I.J.2. Inspection schedules

As required by R.61-79.264.15(b) and this Permit.

I.J.3. Installation records

For all monitoring wells and all groundwater elevation data collected at the original facility.

I.J.4. Groundwater Monitoring Records

As required by R61-79.264.100. and this Permit.

I.J.5. Corrective Action Plan(s) and reports

As required by R.61-79.264.100 and 264.101 and this Permit.

I.J.6. All other documents

As required by Permit Conditions I.F.9., I.F.10. or I.F.11 of this Permit.

MODULE II - CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN

II.A. APPLICABILITY

Permit Conditions II.A through II.L of this Module apply to:

II.A.1. SWMUs, AOCs, and LUC Zone

Those SWMUs, AOCs, and LUC Zone listed in Appendices A-2 through A-5, A-7, and A-8 of this Permit with known releases of hazardous waste or hazardous constituents attributable to the past operations of the Permittee at the original facility as identified by the initial RCRA Facility Assessment, subsequent investigations, or through other means.

II.A.2. Additional SWMUs or AOCs

Defined as any additional SWMUs or AOCs discovered during the course of ongoing or future groundwater monitoring, field investigations, environmental audits, or other means which are attributable to the Permittee's operations (past, present, or future). As used in this part of the Permit, the terms "discover", "discovery", or "discovered" refer to the date on which the Permittee or a Department representative either, (1) visually observes evidence of a new SWMU or AOC, (2) visually observes evidence of a previously unidentified release of hazardous constituents to the environment, or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment.

II.A.2.a Responsibility Demonstration

Should the Permittee believe that any new hazardous waste or hazardous constituent contamination discovered is not attributable to its operations, the Permittee shall advise the Department to that effect in the notification required under the Permit Conditions II.B.1 and II.C.1, below. The Permittee shall use its best efforts to work with the Department to determine the source(s) of that contamination and shall have the burden to demonstrate to the Department's satisfaction that it did not cause, or contribute to, such release or releases. Such demonstration shall further be subject to the dispute resolution provisions of Condition II.L. herein.

II.A.3. Contamination Beyond Facility Boundary

The Permittee shall implement corrective actions beyond the facility boundary where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Department that it did not cause or contribute to the release or that, despite the Permittee's best efforts, as

determined by the Department, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied.

II.B. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs

II.B.1. Notification

The Permittee shall notify the Department in writing, within fifteen (15) calendar days of discovery, of any additional AOCs and/or SWMUs as discovered under Permit Condition II.A.2. The notification shall include, at a minimum, a unique identification number, the location of the SWMU or AOC and all available information pertaining to the nature of the release (e.g., known or suspected source(s), media affected, hazardous constituents released, magnitude of release, etc.). Should the Permittee believe that any new release found is not attributable to its operations, the Permittee shall comply with the requirements set forth in Permit Condition II.A.2.a.

II.B.2. Assessment Report (AR)

The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of notification, an Assessment Report (AR) for each SWMU or AOC identified under Permit Condition II.B.1. At a minimum, the AR shall provide the following information:

- II.B.2(a) A unique sequential identification for the SWMU or AOC.
- II.B.2(b) Location of unit(s) on a topographic map of appropriate scale such as required under R.61-79.270.14(b)(19).
- II.B.2(c) Designation of type and function of unit(s).
- II.B.2(d) General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).
- II.B.2(e) Dates that the unit(s) was(were) operated.
- II.B.2(f) Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on R.61-79.261, Appendix VIII constituents contained in the wastes.
- II.B.2(g) All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include groundwater data, soil analyses, air, and/or surface water data).

II.B.3. Department Determination

Based on the results of the AR, the Department shall determine in accordance with Permit Conditions II.D. and II.E, the need for further investigations by the Permittee for any newly identified SWMUs or AOCs at the facility. If the Department determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations and the Permit will be modified in accordance with R.61-79.270 Subpart D.

II.B.3(a)

Non Cross-Hatched Portion of the Original Facility

The Department has previously granted no further action (NFA) status to all SWMUs, AOCs, and Zone J within the remaining portions of the original facility. Additionally, Permittee has certain independent legal authorities and obligations under Sections 104 and 120 of CERCLA respectively, to address any newly discovered hazardous waste contamination attributable to its historical operations across the original facility. In recognition of these facts, this permit removes from within the boundaries of the facility, those remaining portions of the original facility reflected in 2010 Permit Renewal Application as amended by the Schedule of Compliance as non-cross hatched areas and all SWMUs and AOCs previously granted NFA status lying therein, subject to the following Conditions:

- II.B.3(a)(i) The Permittee may utilize the CERCLA remedial action process to address any such hazardous waste contamination for which it is determined to be responsible. Alternatively, the Permittee may request the Department modify this permit to add such newly discovered contamination as a new or reopened SWMU, AOC, or Zone J in which case all applicable provisions of RCRA and Module II of the permit shall apply. The permittee will submit all workplans and reports to the Department for review and concurrence. Should Permittee pursue remedy selection through the CERCLA process, upon selection of that remedy, the Department may effect a permit modification to incorporate that remedy into Appendix A of the Permit for historical tracking purposes. In the event that the Department and Permittee cannot reach agreement through dispute resolution pursuant to Condition II.L. herein, over whether any CERCLA implemented remedy satisfies substantive requirements of RCRA, the Department reserves all rights and authorities they may have under CERCLA, RCRA, and state law to seek implementation of a more protective remedy.

II.B.3(a)(ii) The Permittee shall use its best efforts to facilitate Department access to any area on the non-cross hatched portion of the original facility undergoing any response action

II.C. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED SWMUs OR AOCs

II.C.1. Department Notification

The Permittee shall notify the Department in writing of any newly discovered release(s) of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within fifteen (15) calendar days of discovery. Should the Permittee believe that any new release found is not attributable to its operations, the Permittee shall comply with the requirements set forth in Permit Condition II.A.2.a. Such newly discovered releases may be from SWMUs/AOCs identified in Permit Condition II.A.1. or SWMUs/AOCs identified in Permit Condition II.A.2. for which further investigation under Permit Condition II.B.3. was not required.

II.C.2. Plan for Investigation

Based on the results of the AR, the Department shall determine in accordance with Permit Conditions II.D. and II.E, the need for further investigations by the Permittee for any newly identified release at previously identified SWMUs or AOCs at the facility. If the Department determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations and the Permit will be modified in accordance with R.61-79.270 Subpart D.

II.C.2(a) Non Cross-Hatched Portion of the Original Facility

The Department has previously granted no further action (NFA) status to all SWMUs and AOCs within the remaining portions of the original facility. Additionally, Permittee has certain independent legal authorities and obligations under Sections 104 and 120 of CERCLA respectively, to address any newly discovered hazardous waste contamination attributable to its historical operations across the original facility. In recognition of these facts, this permit removes from within the boundaries of the facility, those remaining portions of the original facility reflected in 2010 Permit Renewal Application as amended by the Schedule of Compliance as non-cross hatched areas and all SWMUs and AOCs previously granted NFA status lying therein, subject to the following Conditions:

II.C.2(a)(i) The Permittee may utilize the CERCLA remedial action process to address any such hazardous waste contamination for which it is

determined to be responsible. Alternatively, the Permittee may request the Department modify this permit to add such newly discovered contamination as a new or reopened SWMU or AOC in which case all applicable provisions of RCRA and Module II of the permit shall apply. The permittee will submit all workplans and reports to the Department for review and concurrence. Should Permittee pursue remedy selection through the CERCLA process, upon selection of that remedy, the Department may effect a permit modification to incorporate that remedy into Appendix A of the Permit for historical tracking purposes. In the event that the Department and Permittee cannot reach agreement through dispute resolution pursuant to Condition II.L., herein, over whether any CERCLA implemented remedy satisfies substantive requirements of RCRA, the Department reserves all rights and authorities they may have under CERCLA, RCRA, and state law to seek implementation of a more protective remedy.

II.C.2(a)(ii) The Permittee shall use its best efforts to facilitate Department access to any area on the non-cross hatched portion of the original facility undergoing any response action.

II.D. CONFIRMATORY SAMPLING (CS)

II.D.1. CS Workplan

The Permittee shall prepare and submit to the Department within forty five (45) calendar days of notification by the Department a Confirmatory Sampling (CS) Workplan to determine any releases from, or to better quantify the nature and extent of a known release at, those SWMUs, AOCs, or Zone J identified in Permit Conditions II.A.1. and II.A.2. and listed on Appendix A-3, or as determined under Permit Condition II.B.3. and /or II.C.2 that further investigation is warranted. The CS Workplan shall include schedules of implementation and completion of specific actions necessary to determine whether or not a release has occurred. It should also address applicable requirements and affected media.

II.D.2. Approval Required

The CS Workplan must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the CS Workplan in the letter approving the CS Workplan or within sixty (60) days if a time frame is not provided. If the Department disapproves the CS Workplan, the Department shall either (1) notify the Permittee in writing of the CS Workplan's deficiencies and specify a due date for submission of a revised CS Workplan, or (2) Conditionally approve the CS Workplan and notify the Permittee of the Conditions. The modified CS Workplan becomes the approved CS Workplan.

II.D.3. Implementation

The Permittee shall implement the confirmatory sampling in accordance with the approved CS Workplan.

II.D.4. CS Report

The Permittee shall prepare and submit to the Department in accordance with the schedule in the approved CS Workplan, a Confirmatory Sampling (CS) Report, identifying those SWMUs, AOCs, or Zone J identified in Permit Conditions II.A.1. & II.A.2. and listed on Appendix A-3 or as required by Permit Condition II.B.3. and II.C.2., that have released hazardous waste or hazardous constituents into the environment. The CS Report shall include all data, including raw data, and an analysis and summary of the data, that supports the above determination.

II.D.5. Department Determination

Based on the results of the CS Report, the Department shall determine the need for further investigations at the SWMUs, AOCs, or Zone J covered in the CS Report. If the Department determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Permit Condition II.E. The Department shall notify the Permittee of any no further action decision.

II.E. RCRA FACILITY INVESTIGATION (RFI)

II.E.1. RFI Workplan

For newly identified SWMUs/AOCs or newly identified releases at previously identified SWMUs/AOCs/Zone J within ninety (90) calendar days of notification by the Department, the Permittee shall prepare and submit a RFI Workplan for any additional SWMUs or AOCs where the Department has determined under Permit Conditions II.B.3., II.C.2. or II.D.5 that further investigation is warranted. The RFI Workplan(s) shall be developed to meet the requirements of Permit Condition II.E.2.

II.E.2. Required Contents

The RFI Workplan(s) shall meet the requirements of Appendix B. The Permittee shall provide sufficient written justification for any omissions or deviations from any requirements of Appendix B. Such omissions or deviations are subject to the approval of the Department.

The RFI Workplan(s) shall include schedules of implementation and completion of specific actions necessary to determine the nature and extent of releases and the potential pathways of contaminant releases to the air, land, surface water, and groundwater. The Permittee must provide sufficient justification and/or documentation that a release is not probable if a unit or a media/pathway associated with a unit (groundwater, surface water, soil, air or subsurface gas) is

not included in the RFI Workplan(s). Such deletions of a unit, media or pathway from the RFI(s) are subject to the approval of the Department. In addition, the scope of the RFI Workplan(s) shall include all investigations necessary to ensure compliance with R.61-79.264.101(c).

II.E.3. Department Approval

The RFI Workplan(s) must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the RFI Workplan schedule in the letter approving the RFI Workplan(s). If the Department disapproves the RFI Workplan(s), the Department shall either (1) notify the Permittee in writing of the RFI Workplan's deficiencies and specify a due date for submission of a revised RFI Workplan, or (2) Conditionally approve the RFI Workplan and notify the Permittee of the Conditions. The modified RFI Workplan becomes the approved RFI Workplan.

II.E.4. RFI Implementation

The Permittee shall implement the RFI(s) in accordance with the approved RFI Workplan(s). The Permittee shall notify the Department within twenty (20) days prior to any sampling activity.

II.E.5. RFI Progress Reports

If the time required to conduct the RFI(s) is greater than one hundred eighty (180) calendar days, the Permittee shall provide the Department with quarterly RFI Progress Reports (90 day intervals) beginning ninety (90) calendar days from the start date specified by the Department in the RFI Workplan approval letter. The Progress Reports shall contain the following information at a minimum:

- II.E.5(a) A description of the portion of the RFI completed;
- II.E.5(b) Summaries of findings;
- II.E.5(c) Summaries of any deviations from the approved RFI Workplan during the reporting period;
- II.E.5(d) Summaries of any significant contacts with local community public interest groups or State government;
- II.E.5(e) Summaries of any problems encountered during the reporting period;
- II.E.5(f) Actions taken to rectify problems;
- II.E.5(g) Changes in relevant personnel; and
- II.E.5(h) Projected work for the next reporting period.

II.E.6. RFI Report

The Permittee shall prepare and submit to the Department a RCRA Facility Investigation Report(s) for the investigations conducted pursuant to the RFI Workplan(s) submitted under Permit Conditions II.E.1. and II.E.2. The RFI Report(s) shall be submitted to the Department for review in accordance with the schedule in the approved RFI Workplan(s). Any revised RFI Report(s) shall be submitted to the Department within thirty (30) calendar days of receipt of the Department's comments. The RFI Report(s) shall include an analysis and summary of all required investigations of SWMUs and AOCs and their results. The summary shall describe the type and extent of contamination, including sources and migration pathways, identify all hazardous constituents present in all media, and describe actual or potential receptors. The RFI Report(s) shall also describe the extent of contamination (qualitative/quantitative) in relation to background levels indicative of the area. If the RFI Report is a summary of the initial phase investigatory work, the report shall include a Workplan for the final phase investigatory actions required based on the initial findings. Approval of the final phase Workplan shall be carried out in accordance with Permit Condition II.E.4. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support a Corrective Measures Study (CMS), if necessary.

II.E.7. Department Notification

The Department will review the RFI Report(s) and shall notify the Permittee of the need for further investigation, if necessary; and if appropriate, the need for a CMS to meet the requirements of Permit Condition II.G. and R.61-79.264.101.

II.F. INTERIM MEASURES (IM)

II.F.1. IM Workplan

- II.F.1(a) Either voluntarily upon its own initiative or upon notification by the Department, the Permittee shall prepare and submit an Interim Measures (IM) Workplan for any SWMU, AOC, LUC Zone, or Zone J which poses a current or potential threat to human health or the environment. The Permittee may submit an IM Workplan for approval prior to notification by the Department. The Permittee shall report as required on Permit Condition II.F.3.

IM are necessary in order to minimize or prevent the further migration of contaminants thereby limiting current and future potential for human and

environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented. The IM Workplan shall be submitted within thirty (30) calendar days of notification by the Department and shall include the elements listed in Permit Condition II.F.1(b) Such interim measures may be conducted concurrently with investigation required under the terms of this Permit.

- II.F.1(b) The IM Workplan shall ensure that the interim measures are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the SWMU, AOC, LUC Zone, or Zone J. The IM Workplan shall include: the interim measures objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.
- II.F.1(c) The IM Workplan must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the IM Workplan schedule in the letter approving the IM Workplan. If the Department disapproves the IM Workplan, the Department shall either (1) notify the Permittee in writing of the IM Workplan's deficiencies and specify a due date for submission of a revised IM Workplan, or (2) Conditionally approve the IM Workplan and notify the Permittee of the Conditions. The modified IM Workplan becomes the approved IM Workplan.

II.F.2. IM Implementation

- II.F.2(a) The Permittee shall implement interim measures in accordance with the approved IM Workplan.
- II.F.2(b) The Permittee shall give notice to the Department prior to any changes, reductions or additions to the IM Workplan.
- II.F.2(c) Final approval of corrective action required under R.61-79.264.101 which is achieved through interim measures shall be in accordance with R.61-79.270.41 and Permit Condition II.H. as a Permit modification.

II.F.3. IM Reports

- II.F.3(a) If the time required for completion of interim measures is greater than one year, the Permittee shall provide the Department with progress reports at intervals specified in the approved Workplan. The Progress Reports shall contain the following information at a minimum:
- II.F.3(a)(i) A description of the portion of the interim measures completed;

- II.F.3(a)(ii) Summaries of findings;
 - II.F.3(a)(iii) Summaries of any deviations from the IM Workplan during the reporting period;
 - II.F.3(a)(iv) Summaries of any problems encountered during the reporting period; *and*
 - II.F.3(a)(v) Projected work for the next reporting period.
- II.F.3(b) The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of completion of interim measures conducted under Permit Condition II.F. , an Interim Measures (IM) Report. The IM Report shall contain the following information at a minimum:
- II.F.3(b)(i) A description of interim measures implemented;
 - II.F.3(b)(ii) Summaries of results;
 - II.F.3(b)(iii) Summaries of all problems encountered;
 - II.F.3(b)(iv) Summaries of accomplishments and/or effectiveness of interim measures; and
 - II.F.3(b)(v) Copies of all relevant laboratory/monitoring data, etc. in accordance with Permit Condition I.E.9.

II.G. CORRECTIVE MEASURES STUDY

II.G.1. Corrective Measures Study (CMS) Workplan

- II.G.1.(a) The Permittee shall prepare and submit a CMS Workplan for those units listed in Appendix A-7 requiring a CMS, within ninety (90) calendar days of notification by the Department that a CMS is required. This CMS Workplan shall be developed to meet the requirements of Permit Condition II.G.1(b). The Permittee may seek approval from the Department for concurrent RFI/CMS. The CMS may be performed concurrent with the RFI process if the Department determines that sufficient investigative details are available to allow concurrent action.
- II.G.1.(b) The CMS Workplan shall meet the requirements of Appendix C at a minimum. The CMS Workplan shall include schedules of implementation and completion of specific actions necessary to complete a CMS. The Permittee must provide sufficient written justification and documentation

for any unit deleted from the CMS Workplan. Such deletion of a unit is subject to the approval of the Department. The CMS shall be conducted in accordance with the approved CMS Workplan. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix C. Such omissions or deviations are subject to the approval of the Department. The scope of the CMS Workplan shall include all investigations necessary to ensure compliance with R.61-79.264.101, 264.552, 264.553, and 270.32(b)(2). The Permittee shall implement corrective actions beyond the facility boundary, as set forth in Permit Condition II.A.3.

II.G.1.(c) The Department shall either approve or disapprove, in writing, the CMS Workplan. If the Department disapproves the CMS Workplan, the Department shall either (1) notify the Permittee in writing of the CMS Workplan's deficiencies and specify a due date for submittal of a revised CMS Workplan, or (2) Conditionally approve the CMS Workplan and notify the Permittee of the Conditions. This modified CMS Workplan becomes the approved CMS Workplan.

II.G.2. Corrective Measures Study Implementation

The Permittee shall implement the Corrective Measures Study according to the schedules specified in the CMS Workplan, or no later than fifteen (15) calendar days after the Permittee has received written approval from the Department for the CMS Workplan. Pursuant to Permit Condition II.G.1(b) the CMS shall be conducted in accordance with the approved CMS Workplan.

II.G.3. CMS Report

II.G.3(a) The Permittee shall prepare and submit to the Department a CMS Report for the study conducted pursuant to the approved CMS Workplan. The CMS Report shall be submitted to the Department in accordance with the schedule in the approved CMS Workplan. Any revised CMS Report(s) shall be submitted to the Department within thirty (30) days of receipt of the Department's comments. The CMS Report shall summarize any bench-scale or pilot tests conducted. The CMS Report must include an evaluation of each remedial alternative. The CMS Report shall present all information gathered under the approved CMS Workplan. The CMS Report must contain adequate information to support the Department's decision on the recommended remedy, described under Permit Condition II.H.

II.G.3(b) If the Department determines that the CMS Report does not fully satisfy the information requirements specified under Permit Condition II.G.3(a), the Department may disapprove the CMS Report. If the Department

disapproves the CMS Report, the Department shall notify the Permittee in writing of deficiencies in the CMS Report and specify a due date for submittal of a revised CMS Report. The Department will notify the Permittee of any no further action decision.

- II.G.3(c) As specified under Permit Condition II.G.3(b) based on preliminary results and the CMS Report, the Department may require the Permittee to evaluate additional remedies or particular elements of one or more recommended remedies.

II.H. REMEDY APPROVAL AND PERMIT MODIFICATION

II.H.1. Remedy Selection

The Department shall select a remedy from the remedial alternatives evaluated in the CMS. It will be based at a minimum on protection of human health and the environment, as per specific site Conditions including current and reasonably anticipated future land uses, existing regulations, and guidance. The selected remedy may include any interim measures implemented to date.

II.H.2. Permit Modification

Pursuant to R.61-79.270.41, a Permit modification will be initiated by the Department after recommendation of a remedy under Permit Condition II.H.1. This modification will serve to incorporate a final remedy into this Permit.

II.I. CORRECTIVE MEASURES IMPLEMENTATION (CMI)

II.I.1. CMI Workplan

Within thirty (30) days of the effective date of the Permit modification for the remedy selection, the Permittee shall prepare and submit a Corrective Measures Implementation (CMI) Workplan for the SWMUs, AOCs and LUC Zone listed on Appendix A - 8. At a minimum, this Workplan shall include the following:

- II.I.1(a) A description of the conceptual design, technical features (e.g., Plans and Specifications) and a Construction Plan for the selected remedy(ies) to achieve media cleanup standards protective of human health and the environment, controlling the source(s) of release, and complying with standards for the management of wastes and any remedial residue.
- II.I.1(b) A proposed schedule that takes into account all phases of the CMI. The schedule also include dates for the submittal of documents to support the Corrective Measures Implementation (CMI) (e.g., Operation and Maintenance Plan, Construction Completion Report, etc.), as described in Permit Conditions II.I.2. and II.I.4.
- II.I.1(c) Requirements for removal and decontamination of units, equipment,

devices or structures that will be used to implement the remedy.

II.I.1(d) For remedies including land use controls, the CMI Workplan should satisfy the requirements of the Permit Conditions II.I.5

II.I.2. Operation and Maintenance Plan:

Where required by the approved CMI Workplan, an Operation and Maintenance Plan (O&MP) shall be submitted to the Department in accordance with the schedule in Permit Condition II.I.1(b). The Operations and Maintenance Plan, at a minimum shall include the following:

II.I.2(a) A system description, start-up procedures, operation and maintenance procedures and a schedule for inspection and maintenance;

II.I.2(b) Waste management practices, sampling and analysis required for operation and contingency procedures; and

II.I.2(c) A description of the Corrective Measure(s) completion criteria and the method to be used for showing when the criteria are met.

II.I.3. Department Approval

All Plans required for the (CMI) phase, required by Permit Condition II.I. must be approved, in writing, by the Department prior to implementation, in accordance with Permit Condition II.K.1.

II.I.4. Construction Completion Report:

A Construction Completion Report (CCR) shall be submitted to the Department, in accordance with the schedule required by Permit Condition II.I.1(b), that demonstrates the completion of the remedy construction in accordance with approved plans and specifications. The CCR shall be submitted when all operational tests have been completed. Any necessary documentation required by the Department shall be included in this report.

II.I.5. Remedy with Land Use Controls:

II.I.5(a) When corrective measures incorporate land use controls (LUCs) as part of the selected remedy (SWMUs, AOCs, and LUC Zone listed in Appendix A-8), the following information should be provided in the CMI Workplan:

II.I.5(a)(i) Point of Contact: The name, address, and phone number of the person to contact about LUC integrity at the SWMU, AOC, or LUC Zone;

II.I.5(a)(ii) LUC Boundary Data: (e.g., survey plat map, GIS coordinates or other means by which the boundaries of each SWMU, AOC, or

LUC Zone can be identified with a reasonable degree of particularity);

- II.I.5(a)(iii) Description of LUC(s) Implemented and Corresponding Objective(s): (e.g., installation of a fence to restrict public access, etc.);
 - II.I.5(a)(iv) Reference to applicable Corrective Action Selection Document: (e.g., CMS dated _____);
 - II.I.5(a)(v) Field Implementation Methods with Appropriate Figures: (e.g., engineering design drawings, etc.);
 - II.I.5(a)(viii) LUC Inspection Checklist: An inspection checklist describing the land use control elements to be inspected and the frequency of inspection. The checklist shall contain an area where the inspector may enter his/her name, the date of inspection, and the date upon which any problems encountered are remediated;
 - II.I.5(a)(ix) Contingency Measures: Procedure(s) to follow when a determination is made that the Institutional Controls are not effective and require modification;
 - II.I.5(a)(x) Deed Notification: The mechanism by which a notification will be recorded on the deed for the facility property, or some other instrument which is normally examined during title search, that will in perpetuity notify any potential future purchaser of the property, that the property had been used for waste management and disposal activities and that restrictions exist precluding a residential use of the land.
 - II.I.5(a)(xi) Notification of Other Agencies: The mechanism by which other pertinent agencies (State or Federal) will be given notice of restrictions placed on the use of the property, that is affecting or may affect in the future, areas under the regulatory control of other such State or Federal agencies.
 - II.I.5(a)(xii) LUCMP: The above information is outlined in detail in Appendix F – Land Use Control Management Plan (LUCMP).
- II.I.5(b) Those SWMUs, AOCs, and LUC Zone for which LUCs have been selected as an integral part of the final remedy are listed in Appendix A-8. The Permittee shall manage those controls in accordance with the requirements set forth in Appendix F of this Permit. Should the Permittee desire to implement any

additional LUC remedies, the Permittee shall satisfy the requirements of Module II to include providing the information required by paragraph II.1.5(a) above. The Permittee may transfer those specific LUC inspection, reporting, and certification requirements described in Section III of Appendix F to any owner or operator of the real property comprising the facility in accordance with the following:

II.1.5(b)(i) Should any person or entity owning or operating any portion of the facility enter into a Voluntary Cleanup Contract (VCC), Consent Order or other formal arrangement with the Department whereby they agree to abide by those LUC inspection and reporting requirements set forth in Appendix F of this Permit (or alternative requirements agreed to by the Department), then the Permittee shall be relieved of such responsibilities for as long as that VCC, Order, or other arrangement shall remain in full force and effect. The Permittee is not relieved of their certification requirements per Appendix F.

II.1.5(b)(ii) Notwithstanding the acceptance by any other person or entity owning or operating the facility of those LUC inspection, reporting, and certification requirements referred to in Paragraph II.1.5(b)(i), the Permittee shall remain responsible for overall LUC remedy integrity at each SWMU, AOC, and LUC Zone listed in Appendix A-8 where the Permittee has implemented corrective measures pursuant to the requirements of this Permit until such time as those LUCs are no longer needed for protection of human health and the environment and this Permit has been modified to reflect a no-further-action determination by the Department.

II.1.6. CMI Progress Reports

If the time required to complete corrective measures implementation is greater than one hundred and eighty (180) days, the Permittee shall provide the Department with biannual Corrective Measures Implementation Progress Reports (180 days intervals) beginning from the date the CMI Workplan is approved by the Department, until the Remedy Completion Report (RCR) is approved by the Department. The time frame stated is effective unless otherwise agreed to by the Department. The CMI Progress reports shall contain at least the following information:

- II.1.6(a) A description of the portion of the CMI Workplan completed (e.g., sampling events, operations, volumes removed/treated, wastes generated, etc.);
- II.1.6(b) A summary of system performance/compliance and progress toward achieving cleanup goals;
- II.1.6(c) A summary of any deviations from the approved CMI Workplans during

the reporting period;

- II.I.6(d) Summaries of all significant contacts with local community and public interest groups or State and Federal government;
- II.I.6(e) A summary of any problems or potential problems encountered during the reporting period;
- II.I.6(f) A summary of actions taken to rectify the problems;
- II.I.6(g) Any changes in relevant personnel;
- II.I.6(h) Projected work for the next reporting period.

II.I.7. Remedy Completion Report:

- II.I.7(a) Within ninety (90) days of completion of Corrective Measures Implementation (CMI) phase, unless otherwise agreed by the Department, the Permittee shall submit a Remedy Completion Report (RCR), including a certification of completion of the corrective measures activities. The RCR should summarize the activities and results from the entire period of Corrective measures Implementation. The RCR shall demonstrate compliance with all media cleanup goals and meet the corrective measures completion criteria in accordance with Permit Condition II.I.2(c). Approval by the Department of the final RCR constitutes remedy completion.
- II.I.7(b) For corrective measures involving the cleanup of groundwater, the Permittee must demonstrate that the concentrations of the constituents of concern remain at or below cleanup goals for the period specified in the approved CMI Report after the corrective measures have been terminated.

II.J. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE

II.J.1. Initiation

If at any time the Department determines that modification of the Corrective Action Schedule of Compliance is necessary, the Department may initiate a modification to the Schedule of Compliance (Appendix D) in accordance with the applicable provisions of R.61-79.270.

II.J.2. Permittee Requested Modification

The Permittee may request a Permit modification in accordance with R.61-79.270. to change the Schedule of Compliance.

II.K. WORKPLAN AND REPORT REQUIREMENTS

II.K.1. Department Approval

All Workplans and schedules shall be subject to approval by the Department prior to implementation to assure that such Workplans and schedules are consistent with the requirements of this Permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as agreed to by the Department. Upon approval, the Permittee shall implement all Work plans and schedules as written.

II.K.2. Extensions for Submittals

All Workplans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Department based on the Permittee's demonstration that sufficient justification for the extension exists.

II.K.3. Amendment of the Workplan(s)

If the Permittee at any time determines that the AR information required under Permit Condition II.B., the CS Work Plan under Permit Condition II.D., or RFI Workplan(s) required under Permit Condition II.E., no longer satisfy the requirements of R.61-79.264.101 or this Permit for prior or continuing releases of hazardous waste or hazardous constituents from solid waste management units and/or areas of concern, the Permittee shall submit an amended AR and/or Workplan(s) to the Department within ninety (90) calendar days of such determination.

II.L. APPROVAL/DISAPPROVAL OF SUBMITTALS

The Department will review the Workplans, reports, schedules, and other documents ("submittals") which require the Department's approval in accordance with the Conditions of this Permit. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore.

Department Review and Approval are subject to Dispute Resolution in as set forth in Section IV of the Department of Defense States Memorandum of Agreement and its most recent amendment.

II.M. PETROLEUM APPLICABILITY

Petroleum contamination will be addressed in accordance with R.61-79.270.32(b)(2), South Carolina Risk Based Corrective Action, and R.61-92, Part 280. Permit Conditions II.M through II.R apply to:

II.M.1 SWMUs and AOCs

Those solid waste management units (SWMUs) and areas of concern (AOCs)

listed in Appendix A-6 of this Permit with known releases of petroleum and petroleum constituents attributable to past operations of the Permittee at the original facility as identified by the initial RCRA Facility Assessment, subsequent investigations, or through other means.

II.M.2. Additional AOCs

Defined as any additional AOCs discovered during the course of ongoing or future groundwater monitoring, field investigations, environmental audits, or other means which are attributable to the Permittee's operations (past, present, or future) at the original facility. As used in this part of the Permit, the terms "discover", "discovery", or "discovered" refer to the date on which the Permittee or a Department representative either, (1) visually observes evidence of a new AOC, (2) visually observes evidence of a previously unidentified release of petroleum constituents to the environment, or (3) receives information which suggests the presence of a new release of petroleum or petroleum constituents to the environment.

II.M.2.a Responsibility Demonstration

Should the Permittee believe that any new petroleum or petroleum constituent contamination discovered is not attributable to its operations at the original facility, the Permittee shall advise the Department to that effect in the notification required under the Permit Condition II.N.1, below. The Permittee shall use its best efforts to work with the Department to determine the source(s) of that contamination and shall have the burden to demonstrate to the Department's satisfaction that it did not cause, or contribute to, such release or releases.

II.M.3. Contamination Beyond Facility Boundary

The Permittee shall implement corrective actions beyond the facility boundary where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Department that it did not cause or contribute to the release or that, despite the Permittee's best efforts, as determined by the Department, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied.

II.N. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs

II.N.1. Notification

The Permittee shall notify the Department in writing, within fifteen (15) calendar days of discovery, of any "new petroleum contamination" as discovered under Permit Condition II.M.2. The notification shall include, at a minimum, the

location and all available information pertaining to the nature of the release (e.g., known or suspected source(s), media affected, petroleum constituents released, magnitude of release, etc.). Should the Permittee believe that any new release found is not attributable to its operations on the original facility, the Permittee shall comply with the requirements set forth in Permit Condition II.M.2.a.

II.N.2. Department Determination

Based on the notification, the Department shall evaluate the need for further investigations. If the Department determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations and submit to the Department in a timely manner. If the Department determines that further investigation is required, the Permit will be modified, to identify a new AOC.

II.N.3 Plan for Investigation

If the Department determines that the Permittee caused, or contributed to, the new release and that further investigation of the AOCs is needed, the Permittee shall be required to prepare a plan for such investigations and submit to the Department in a timely manner. The Department will review the workplans, associated reports, schedules, and other documents (“submittals”) submitted by the Permittee. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore.

II.O. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED AOCs

II.O.1. Department Notification

The Permittee shall notify the Department in writing of any newly discovered release(s) of petroleum or petroleum constituents at a currently defined SWMU or AOC under Permit Condition II.M.2, within fifteen (15) calendar days of discovery. Should the Permittee believe that any new release found is not attributable to its operations on the original facility, the Permittee shall comply with the requirements set forth in Permit Condition II.M.2.a. Such newly discovered releases may be either from SWMUs or AOCs identified in Permit Condition II.M.1. or II.M.2. for which further investigation was not required.

II.O.2. Plan for Investigation

If the Department determines that the Permittee caused or contributed to the new release and that further investigation of the AOCs is needed, the Permittee shall be required to prepare a plan for such investigations and submit to the Department in a timely manner. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore.

II.P. REMEDY APPROVAL AND PERMIT MODIFICATION

II.P.1. Remedy Selection

The Department shall select a remedy based on the remedy selection document. It will be based at a minimum on protection of human health and the environment, as per specific site Conditions including current and reasonably anticipated future land uses using South Carolina Risk Based Corrective Action as an ARAR.

II.P.2. Permit Modification

A Permit modification will be initiated by the Department after recommendation of a remedy under Permit Condition II.P.1. to incorporate a final remedy into this Permit.

II.Q. REMEDIES CONTAINING LAND USE CONTROLS

II.Q.1 Those AOCs for which LUCs have been selected as an integral part of the final remedy are listed in Appendix A-8. The Permittee shall manage those controls in accordance with the requirements set forth in Appendix F of this Permit. The Permittee may transfer those specific LUC inspection, reporting, and certification requirements described in Section III of Appendix F to any owner or operator of the real property comprising the facility in accordance with the following:

II.Q.1.a. Should any person or entity owning or operating any portion of the facility enter into a Voluntary Cleanup Contract (VCC), Consent Order or other formal arrangement with the Department whereby they agree to abide by those LUC inspection and reporting requirements set forth in Appendix F of this Permit (or alternative requirements agreed to by the Department), then the Permittee shall be relieved of such responsibilities for as long as that VCC, Order, or other arrangement shall remain in full force and effect. The Permittee is not relieved of their certification requirements per Appendix F.

II.Q.1.b. Notwithstanding the acceptance by any other person or entity owning or operating the facility of those LUC inspection, reporting, and certification requirements referred to in Paragraph II.Q.1.a, the Permittee shall remain responsible for overall LUC remedy integrity at each AOC listed in Appendix A-8 where the Permittee has implemented corrective measures pursuant to the requirements of this Permit until such time as those LUCs are no longer needed for protection of human health and the environment and this Permit has been modified to reflect a no-further-action determination by the Department.

II.R. APPROVAL/DISAPPROVAL OF SUBMITTALS

The Department will review the Workplans, reports, schedules, and other

documents (“submittals”) which require the Department's approval in accordance with the Conditions of this Permit. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore. Department Review and Approval are subject to Dispute Resolution in as set forth in Section IV of the Department of Defense States Memorandum of Agreement and its most recent amendment.

MODULE III – WASTE MINIMIZATION

III.A. GENERAL RESTRICTIONS

III.A.1 To the extent that in fulfilling its Corrective Action obligations under this Permit, the Permittee must treat, store, or dispose of hazardous wastes and petroleum constituents where such wastes were generated, the permittee must comply with R.61-70.264.73(b)9. and Section 3005(h) of RCRA (42 U.S.C. 6925(h)), and the Permittee must certify, no less than annually, that:

III.A.1(a) The Permittee has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and

III.A.1(b) The proposed method of treatment, storage, or disposal is the most practicable method available to the Permittee which minimizes the present and future threat to human health and the environment.

III.B RECORDING REQUIREMENTS

If Condition III.A. is applicable, the Permittee shall maintain copies of this certification at the Program Management Office or other location approved by the Department.

III.C WASTE MINIMIZATION OBJECTIVES

If Condition III.A. is applicable, then the Waste Minimization program required under Condition III.A. should address the objectives listed in Appendix E.

MODULE IV – LAND DISPOSAL RESTRICTIONS

IV.A. GENERAL RESTRICTIONS

- IV.A.1. R61.79.268 identifies hazardous wastes and petroleum constituents that are restricted from land disposal and defines those limited circumstances under which and otherwise prohibited waste may continue to be placed on or in a land treatment, storage, or disposal unit. The Permittee shall maintain compliance with the requirement of R61-79.268. Where the permittee has applied for an extension, waiver, or variance under R61-79.268, the Permittee shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached pending final approval of such application.

IV.B LAND DISPOSAL PROHIBITIONS AND TREATMENT STANDARDS

- IV.B.1. A restricted waste identified in R61-79.269 Subpart C may not be placed in a land disposal unit without further treatment unless the requirements of R61-79.268 Subparts C and/or D are met.
- IV.B.2. The storage of hazardous wastes restricted from land disposal under R.61-79.268 is prohibited unless the requirements of R.61-79.268 Subpart E are met.

Appendix A-1
All Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 1	RFI	NFA	SCDHEC Itr 02/02/02	1991 RFA	DRMO Storage Area	DRMO	A
SWMU 2	RFI	NFA	SCDHEC Itr 02/02/02	1991 RFA	Lead Contaminated Area	DRMO	A
SWMU 3	RFI	CMI	SCDHEC Itr 03/02/04	1991 RFA	Pesticide Mixing Area	Building 249	G
SWMU 4	RFI	NFA	SCDHEC Itr 9/18/01	1991 RFA	Pesticide Storage Building	Building 381	F
SWMU 5	RFI	CMI	SCDHEC Itr 01/16/04	1991 RFA	Battery Electrolyte Treatment Area	Building 1797 Area	E
SWMU 6	RFI	CMI		1991 RFA	Public Works Storage Yard (Old Corral)	Old Corral SW of Bldg. 380	G
SWMU 7	RFI	CMI		1991 RFA	PCB Transform Storage Yard	Old Corral SW of Bldg. 380	G
SWMU 8	RFI	CMI	SCDHEC Itr 08/14/03	1991 RFA	Oil Sludge Pit	Parking Area SW of Bldg. 161	G
SWMU 9	RFI	CMI	SCDHEC Itr 03/10/04	1991 RFA	Closed Landfill	Open Area Between Bainbridge and West Road	H
SWMU 10	RU	CLOSED		1991 RFA	Hazardous Waste Storage	Building 246	G
SWMU 11	RFI	NFA	SCDHEC Itr 7/19/96	1991 RFA	Caustic Pond	SE of Bldg. 190	G
SWMU 12	RFI	NFA	SCDHEC Itr 11/20/01	1991 RFA	Old Fire Fighter Training Area	Southern Tip of Base	I
SWMU 13	RFI	NFA	SCDHEC Itr 8/23/00	1991 RFA	Current Fire Fighter Training Area	Building 1303 Area	H
SWMU 14	RFI	NFA	SCDHEC Itr 04/25/03	1991 RFA	Chemical Disposal Area	South of Building 1897	H
SWMU 15	RFI	NFA	SCDHEC Itr 04/25/03	1991 RFA	Incinerator	South of Building 1843	H
SWMU 16	RFI	NFA	USEPA Itr 03/28/02	1991 RFA	Paint Storage Bunker	West of Building X-55	I
SWMU 17	RFI	CMI	SCDHEC Itr 5/11/06	1991 RFA	Oil Spill Area	North Side of Building 61	H
SWMU 18	RFI	CMI	SCDHEC Itr 01/16/04	1991 RFA	PCB Spill Area	Building 1278	E
SWMU 19	RFI	CMI	SCDHEC Itr 03/10/04	1991 RFA	Solid Waste Transfer Station	West of Least Tern Lane	H
SWMU 20	RFI	CMI	SCDHEC Itr 03/10/04	1991 RFA	Waste Disposal Area	NE of Building 903	H
SWMU 21	RFI	CMI	SCDHEC Itr 01/16/04	1991 RFA	Waste Paint Storage Pad	Facility 1275 Area	E
SWMU 22	RFI	CMI	USEPA Itr 09/30/03	1991 RFA	Old Plating Shop Wastewater Treatment System	Alley Between Bldgs. 5 and 44	E
SWMU 23	RFI	CMI	SCDHEC Itr 08/06/03	1991 RFA	New Plating Shop Wastewater Treatment System	Building 226	E
SWMU 24	RFI	CMI	SCDHEC Itr 07/01/03	1991 RFA	Waste Oil Reclamation Facility	Fuel Farm Area	G
SWMU 25	RFI	CMI	USEPA Itr 09/30/03	1991 RFA	Building 44, Old Plating Operation	Building 44	E
SWMU 26	NFA	NFA		1991 RFA	Waste Storage Area	Building 84-40, Pier C	E
SWMU 27	NFA	NFA		1991 RFA	Waste Storage Area	East End Pier C	E
SWMU 28	NFA	NFA		1991 RFA	Waste Storage Area	West End Pier C	E
SWMU 29	NFA	NFA		1991 RFA	Building X-10	Building X-10	E
SWMU 30	NFA	NFA		1991 RFA	Building 13 SAA	Building 13	E
SWMU 31	NFA	NFA		1991 RFA	Waste Paint Storage Area	Drydock #5	E
SWMU 32	NFA	NFA		1991 RFA	Waste Paint Storage Area	Building 195	E
SWMU 33	NFA	NFA		1991 RFA	Waste Paint Storage Area	Drydock #2	E
SWMU 34	NFA	NFA		1991 RFA	Morale, Welfare and Recreation Area	SE of Building X-10	G
SWMU 35	NFA	NFA		1991 RFA	Building X-12	Building X-12	G
SWMU 36	RFI	CMI	SCDHEC Itr 09/19/03	1991 RFA	Building 68, Battery Shop	Building 68	F
SWMU 37	RFI	NFA	SCDHEC Itr 7/20/01	I-4.1	Sanitary Sewer System	Basewide	L
SWMU 38	CSI	NFA	SCDHEC Itr 03/25/03	II-4.1	Miscellaneous Storage	North of Bldg. 1605	A
SWMU 39	RFI	CMI	SCDHEC Itr 06/25/03	I-4.2	POL Drum Storage	North of Bldg. 1604	A
SWMU 40	RU	CLOSED		I-4.3	Hazardous Waste Storage	Building 1640	A
SWMU 41	NFA	NFA		II-4.2	Battery Charging Station	Building 1624	A
SWMU 42	CSI	NFA	SCDHEC Itr 02/27/03	II-4.3	Former Asphalt Plant and Tanks	NW of Bldg. 1803	A

Appendix A-1
All Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 43	CSI	NFA	SCDHEC ltr 12/05/00	II - 4.4	Publications and Printing Plant	Building 1628	A
SWMU 44	RFI	NFA	SCDHEC ltr 05/13/02	I - 4.4	Coal Storage Yard	South Side of Noisette Creek	C
SWMU 45	NFA	NFA		I - 4.5	Building NH-51 SAA	Building NH-51	C
SWMU 46	NFA	NFA		I - 4.6	NH-21 SAA	Building NH-21	C
SWMU 47	RFI	NFA	SCDHEC ltr 5/14/01	II - 4.5	Burning Dump	Building NSC 66 Area	C
SWMU 48	NFA	NFA		I - 4.7	Building 234 SAA	Building 234	C
SWMU 49	NFA	NFA		II - 4.6	Forklift Battery Charging Station	Building 219	C
SWMU 50	NFA	NFA		I - 4.8	Building NH-1 SAA	Building NH-1	C
SWMU 51	NFA	NFA		I - 4.9	Building NH-1 SAA	Building NH-1	D
SWMU 52	NFA	NFA		I - 4.10	Building NH-1 SAA	Building NH-1	D
SWMU 53	RFI	CMI	SCDHEC ltr 08/05/03	I - 4.11	Building 212 SAA	Building 212	E
SWMU 54	RFI	CMI	SCDHEC ltr 01/16/04	I - 4.12	Former Abrasive Blast Area	Building 1275 Area	E
SWMU 55	NFA	NFA		I - 4.13	Building 59 SAA	Building 59	E
SWMU 56	NFA	NFA		I - 4.14	Building 2A, SAA	Building 2A	E
SWMU 57	NFA	NFA		I - 4.15	Building 35 SAA	Building 35	E
SWMU 58	NFA	NFA		I - 4.16	Building 35 SAA	Building 35	E
SWMU 59	NFA	NFA		I - 4.17	Building 35 SAA	Building 35	E
SWMU 60	NFA	NFA		I - 4.18	Less than 90 Day Accumulation Area	Building 2	E
SWMU 61	NFA	NFA		I - 4.19	Less than 90 Day Accumulation Area	Building 228	E
SWMU 62	NFA	NFA		I - 4.20	Building 226 SAA	Building 226	E
SWMU 63	CSI	CMI	SCDHEC ltr 08/05/03	II - 4.7	Battery Charging Station	Building 226 Area	E
SWMU 64	NFA	NFA		I - 4.21	Building 56 SAA	Building 56	E
SWMU 65	RFI	CMI	SCDHEC ltr 04/27/04	I - 4.22	Lead Storage Area	Building 221	E
SWMU 66	NFA	NFA		I - 4.23	Pier C SAA	Pier C	E
SWMU 67	CSI	CMI	SCDHEC ltr 07/03/03	II - 4.8	Mercury Gauge Room	Building 3	E
SWMU 68	NFA	NFA		I - 4.24	Building 5 SAA	Building 5	E
SWMU 69	NFA	NFA		I - 4.25	Building 5 SAA	Building 5	E
SWMU 70	RFI	CMI	USEPA ltr 09/30/03	II - 4.9	Dip Tank Area	Building 5	E
SWMU 71	NFA	NFA		I - 4.26	Building 44 SAA	Building 5	E
SWMU 72	NFA	NFA		II - 4.10	Building 44, SAA	Building 44	E
SWMU 73	NFA	NFA		I - 4.27	Building 43 SAA	Building 44	E
SWMU 74	NFA	NFA		I - 4.28	Building 57 SAA	Building 43	E
SWMU 75	NFA	NFA		I - 4.29	Drydock #1 SAA	Building 57	E
SWMU 76	NFA	NFA		I - 4.30	Building 32 SAA	Building 32	E
SWMU 77	NFA	NFA		I - 4.31	Drydock #2 SAA	Drydock #1	E
SWMU 78	NFA	NFA		I - 4.32	Drydock #2 SAA	Drydock #2	E
SWMU 79	NFA	NFA		I - 4.33	Building 250, SAA	Drydock #2	E
SWMU 80	CSI	NFA	SCDHEC ltr 08/18/02	II - 4.11	Paint Shop Storage	Building 250	E
SWMU 81	CSI	NFA	SCDHEC ltr 09/09/02	I - 4.34	Less than 90 Day Accumulation Area	Building 194	E
SWMU 82	NFA	NFA		I - 4.35	Building 177 SAA	Building 1245	E
SWMU 83	RFI	CMI	USEPA ltr 01/22/04	I - 4.36	Foundry	Building 177	E
SWMU 84	RFI	CMI	USEPA ltr 01/22/04	I - 4.37	Lead Storage	Building 9	E

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 85	NFA	NFA		I-4.38	Building 9 SAA	Building 9	E
SWMU 86	NFA	NFA		I-4.39	Less than 90 Day Accumulation Area	Building 9	E
SWMU 87	CSI	CMI	USEPA Itr 09/30/03	I-4.40	Less than 90 Day Accumulation Area	Building 80	E
SWMU 88	NFA	NFA		I-4.41	Building 25 SAA	Building 25	E
SWMU 89	NFA	NFA		I-4.42	Building 13 SAA	Building 13	E
SWMU 90	NFA	NFA		I-4.43	Building 13, SAA	Building 13	E
SWMU 91	NFA	NFA		I-4.44	Building 13, SAA	Building 13	E
SWMU 92	NFA	NFA		I-4.45	Building 13 SAA	Building 13	E
SWMU 93	NFA	NFA		I-4.46	Building 13 SAA	Building 13	E
SWMU 94	NFA	NFA		I-4.47	Building 13 SAA	Building 13	E
SWMU 95	NFA	NFA		I-4.48	Building 13 SAA	Building 13	E
SWMU 96	NFA	NFA		I-4.49	Less than 90 Day Accumulation Area (Site ID 16459)	Building 236	E
SWMU 97	CSI	NFA	SCDHEC Itr 07/25/02	I-4.50	Less than 90 Day Accumulation Area (Site ID 16459)	Building 236	E
SWMU 98	NFA	NFA		I-4.51	Pier G SAA	Pier G	E
SWMU 99	NFA	NFA		I-4.52	Pier G SAA	Pier G	E
SWMU 100	RFI	NFA	SCDHEC Itr 05/29/02	I-4.53	Building 118 SAA	Building 218	E
SWMU 101	NFA	NFA		I-4.54	Building 1173, SAA	Building 1173	E
SWMU 102	CSI	CMI	USEPA Itr 08/05/03	II-4.12	Mercury Spill Area	Building 79	E
SWMU 103	NFA	NFA		I-4.55	Pier H SAA	Pier H	E
SWMU 104					Not Assigned		
SWMU 105	NFA	NFA		I-4.56	Building 1518 SAA	Building 1518	E
SWMU 106	RFI	NFA	SCDHEC Itr 05/09/02	I-4.57	Blast Area Dry Dock #3	Drydock #3	E
SWMU 107	NFA	NFA		I-4.58	Chapel CBU-412 SAA	Chapel CBU-412	F
SWMU 108	NFA	NFA		I-4.59	Building 187 SAA	Building 187	F
SWMU 109	CSI	NFA	USEPA Itr 01/15/02	I-4.60	Abrasive Blast Media Storage Area	Structures 1364, 1365	F
SWMU 110	NFA	NFA		I-4.61	Building 1346 SAA	Building 1346	F
SWMU 111	NFA	NFA		I-4.62	Building 241 SAA	Building 241	F
SWMU 112	NFA	NFA		I-4.63	Building 241 SAA	Building 241	F
SWMU 113	NFA	NFA		I-4.64	Building 241 SAA	Building 241	F
SWMU 114	NFA	NFA		I-4.65	Building 241 SAA	Building 241	F
SWMU 115	NFA	NFA		I-4.66	Building 242 SAA	Building 242	F
SWMU 116	NFA	NFA		I-4.67	Building 1175 SAA	Building 1175	F
SWMU 117	NFA	NFA		I-4.68	Building 249, SAA	Building 249	G
SWMU 118	NFA	NFA		II-4.14	Pier Z SAA	Pier Z	G
SWMU 119	NFA	NFA		II-4.15	Garbage Handling Facility 1271	End of Building 336	G
SWMU 120	RFI	NFA	SCDHEC Itr 05/06/02	I-4.69	Pier M Laydown	Pier M	G
SWMU 121	RFI	NFA	SCDHEC Itr 03/10/04	I-4.70	Building 801 SAA	Building 801	H
SWMU 122	NFA	NFA		I-4.71	Building 636 SAA	Building 636	H
SWMU 123	NFA	NFA		I-4.72	Building 636 SAA	Building 636	H
SWMU 124	NFA	NFA		I-4.73	Building 1508, SAA	Building 1508	H
SWMU 125	NFA	NFA		I-4.74	Building 202 SAA	Building 202	H
SWMU 126	NFA	NFA		I-4.75	Building 202 SAA	Building 202	H

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 127	NFA	NFA		I-4.76	Building 202 SAA	Building 202	H
SWMU 128	NFA	NFA		I-4.77	Building 202 SAA	Building 202	H
SWMU 129	NFA	NFA		I-4.78	Building 202 SAA	Building 202	H
SWMU 130	NFA	NFA		I-4.79	Building 202 SAA	Building 202	H
SWMU 131	NFA	NFA		I-4.80	Building NS-67 SAA	Building NS-67	H
SWMU 132	NFA	NFA		I-4.81	Building 61 SAA	Building 61	H
SWMU 133	NFA	NFA		I-4.82	Building 61 SAA	Building 61	H
SWMU 134	NFA	NFA		I-4.83	Building 61 SAA	Building 61	H
SWMU 135	NFA	NFA		I-4.84	Building 61 SAA	Building 61	H
SWMU 136	CSI	NFA	SCDHEC ltr 06/20/03	I-4.85	Building NS-53 SAA	Building NS-53	H
SWMU 137	NFA	NFA		I-4.86	Building 675 SAA	Building 657	H
SWMU 138	CSI	NFA	SCDHEC ltr 01/19/04	I-4.87	Building 1776 SAA	Building 1776	H
SWMU 139	NFA	NFA		II-4.16	Pier P SAA	Pier P	I
SWMU 140	NFA	NFA		II-4.17	Pier P SAA	Pier P	I
SWMU 141	NFA	NFA		I-4.88	Pier Q SAA	Pier Q	I
SWMU 142	NFA	NFA		I-4.89	Building 681 SAA	Building 681	I
SWMU 143	NFA	NFA		III-4.1	Building 222	Building 222	E
SWMU 144	NFA	NFA		III-4.2	Building 222 SAA	Building 222	E
SWMU 145	CSI	NFA	SCDHEC ltr 01/29/02	III-4.3	Mercury Spill Area	Under Building 13A	E
SWMU 146	NFA	NFA		III-4.4	Building 13A, SAA	Building 13A	E
SWMU 147	NFA	NFA		III-4.5	Pier C, SAA	Pier C	E
SWMU 148	NFA	NFA		III-4.6	Building 194, SAA	Building 194	E
SWMU 149	NFA	NFA		III-4.7	Drydock #5, SAA	Drydock #5 Area	E
SWMU 150	NFA	NFA		III-4.8	Pier Z, SAA	Pier Z	G
SWMU 151	NFA	NFA		III-4.9	Building 79A	Building 79A	E
SWMU 152	NFA	NFA		III-4.10	Building 79A, SAA	Building 79A	E
SWMU 153	NFA	NFA		III-4.11	Pier H, SAA	Pier H	E
SWMU 154	NFA	NFA		III-4.12	Pier H, SAA	Pier H	E
SWMU 155	NFA	NFA		III-4.13	Building 101	Building 101	E
SWMU 156	NFA	NFA		III-4.14	Drydock #4	Drydock #4 Area	E
SWMU 157	NFA	NFA		III-4.15	Building 1278	Building 1278	E
SWMU 158	NFA	NFA		III-4.16	Pier M Quaywall, SAA	Pier M Quaywall	G
SWMU 159	RFI	NFA	SCDHEC ltr 09/18/01	III-4.17	SAA, Building 665, SAA	Building 665	H
SWMU 160	NFA	NFA		III-4.18	Port Services, SAA	Pier S Quaywall	I
SWMU 161	CSI	NFA	SCDHEC ltr 11/03/01	IV-4.1	Vehicle Maintenance Shop	Building 2505	K
SWMU 162	CSI	NFA	SCDHEC ltr 9/18/01	IV-4.2	Sludge Drying Field	South of Building 2509	K
SWMU 163	CSI	CMI		IV-4.3	Concrete Pit	North of Building 2513	K
SWMU 164	CSI	NFA	SCDHEC ltr 11/03/01	IV-4.4	Blasting Operation	Building 2556	K
SWMU 165	NFA	NFA		IV-4.5	Painting Operation, MOMAG 11	Building 2556, Naval Annex	K
SWMU 166	RFI	CMI	SCDHEC 11/06/07	N/A	Automobile Service Shop	Basewide, Naval Annex	K
SWMU 167	NFA	NFA		IV-4.7	MOMAG 11	South of Building 2522, Naval Annex	K
SWMU 168	NFA	NFA		IV-4.8	Building 2A Metal Storage Area	Building 2A, Between Buildings 2 and 59	E

All Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 169	NFA	NFA		IV - 4.9	Building 57, Painting Operations	Building 57	E
SWMU 170	CSI	NFA	SCDHEC ltr 05/29/02	IV - 4.10	Drydock #1, PCB removal area	Drydock #1 area	E
SWMU 171	CSI	NFA	SCDHEC ltr 05/29/02	IV - 4.11	Drydock #2, PCB removal area	Drydock #2 area	E
SWMU 172	CSI	CMI	USEPA ltr 09/30/03	IV - 4.12	Building 80, Steam Cleaning Operations	Building 80	E
SWMU 173	CSI	NFA	SCDHEC ltr 09/05/02	IV - 4.13	Building 1297 Storage Area	Building 1297	E
SWMU 174	NFA	NFA		IV - 4.14	Oil Blowdown Area, Building 97	Building 97	F
SWMU 175	RFI	NFA	USEPA ltr 05/07/03	IV - 4.15	Crane Painting Area	South of Building 1277	F
SWMU 176	NFA	NFA		IV - 4.16	Transformer Oil Leak, Near Building 657	Building 657	H
SWMU 177	CSI	NFA	SCDHEC ltr 10/22/02	IV - 4.17	RTC-4 Oil Spill	Building RTC-4	I
SWMU 178	CSI	Subtile I	SCDHEC ltr 9/04/88	IV - 4.18	Site of Apparent Transformer Fire (Site ID 01822)	Building NS-53 Area	H
SWMU 179	CSI	CMI		IV - 4.19	SAA, Building 222	Building 222	E
SWMU 180	NFA	NFA		IV - 4.20	Building 222, SAA	Building 222	E
SWMU 181	CSI	NFA	SCDHEC ltr 09/13/02	V - 4.1	SAA, Metal Trades	Pier C	E
SWMU 182	NFA	NFA		V - 4.2	Pier C, SAA	Pier C	E
SWMU 183	NFA	NFA		V - 4.3	Building 79A, SAA	Building 79A High Bay	E
SWMU 184	NFA	NFA		V - 4.4	Building 79A, SAA	Building 79A High Bay	E
SWMU 185	CSI	NFA	SCDHEC ltr 06/28/01	IV - 4.6	Sewer System		E
SWMU 186	NFA	NFA		V - 4.5	Building 58, SAA	Building 58, Outside	C
SWMU 187	NFA	NFA		V - 4.6	Paint Waste, SAA	Head of Drydock #5, North Side	E
SWMU 188	RFI	NFA	SCDHEC ltr 09/13/01	V - 4.7	SAA, Paint Waste	South Side of Drydock #5, Midway	E
SWMU 189	NFA	NFA		V - 4.8	Building 222 Fenced in Area, SAA	Building 222, Outside West End	E
SWMU 190	NFA	NFA		V - 4.9	Pier J, SAA	Pier J	E
SWMU 191	NFA	NFA		V - 4.10	Pier G, SAA	Pier G	E
SWMU 192	NFA	NFA		V - 4.11	Building 222, SAA	Building 222	E
SWMU 193	NFA	NFA		V - 4.12	Building 79A, SAA	Building 79A, Fenced in Area	E
SWMU 194	NFA	NFA		V - 4.13	Building 197, Paint Storage	Building 197, Short Slay	K
SWMU 195	NFA	NFA		V - 4.14	Building 207, Flammable Storage	Building 207, Short Slay	K
SWMU 196	RFI	CMI	SCDHEC ltr 10/21/04	None	Building 1838	Area behind Building 1838	H
SWMU 197	CSI	NFA	SCDHEC ltr 7/20/06	None	Paint Storage Shed	Building 2532	K
SWMU 198	CSI	NFA	SCDHEC ltr 7/20/06	None	SAA	South of 6th Str across from BLDG 2532	K
SWMU 199	CSI	NFA	SCDHEC ltr 2/2/05	None	Building 189	Building 189	F
AOC 500	CSI	CMI		I - 5.1	UXO Site Between Piers S and T	Between Piers S and T	J
AOC 501	CSI	CMI		I - 5.2	UXO Site East of X-54	In Cooper River, East of X-54	J
AOC 502	CSI	CMI		I - 5.3	UXO Site Between Piers G and H	Between Piers G and H	J
AOC 503	CSI	NFA		I - 5.4	UXO Site South of Building 665	South of Bldg. 665	H
AOC 504	RFI	NFA	SCDHEC ltr 7/20/01	II - 5.1	Railroad System	Basewide	L
AOC 505	RFI	NFA	SCDHEC ltr 02/27/03	II - 5.2	Creosote Cross Tie/Ballast Storage Area	Building 1803 Area	A
AOC 506	CSI	NFA	SCDHEC ltr 6/18/99	II - 5.3	Flammable Storage Shelter	North of Bldg. 1603	A
AOC 507	CSI	NFA	SCDHEC ltr 4/15/97	II - 5.4	Oil Storehouse	Golf Course Area (1410)	B
AOC 508	CSI	NFA	SCDHEC ltr 05/13/02	II - 5.5	Former Incinerator	North of Avenue D	C
AOC 509	NFA	NFA		II - 5.6	Hazardous/Flammable Storage	Building 1079	C
AOC 510	CSI	NFA	SCDHEC ltr 5/05/98	II - 5.7	Laboratory	Avenue H	C

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 511	CSI	NFA	SCDHEC ltr 05/13/02	II - 5.8	Oil House	North of Bldg. 672	C
AOC 512	CSI	NFA	SCDHEC ltr 3/17/99	II - 5.9	Former Incinerator	Building 1079	C
AOC 513	CSI	NFA	SCDHEC ltr 5/05/98	II - 5.10	Former Morgue	SE of Bldg. NH-45	C
AOC 514	NFA	NFA		II - 5.11	Flammable Storage	South of NH-55	C
AOC 515	CSI	NFA	SCDHEC ltr 5/05/98	II - 5.12	Former Incinerator and Paint Shop	Area West of Bldg. 233	C
AOC 516	RFI	NFA	SCDHEC ltr 5/25/01	I - 5.5	Building 233 Wash Area	Building 233	C
AOC 517	CSI	CMI	SCDHEC ltr 5/05/98	II - 5.13	Indoor Firing Range	Building M-192	C
AOC 518	CSI	NFA	SCDHEC ltr 7/17/01	II - 5.14	Coal Storage Bins	Bldg. M-1257 Area	C
AOC 519	CSI	NFA	SCDHEC ltr 5/05/98	II - 5.15	Former Boilerhouse	East of Bldg. NH-55	C
AOC 520	CSI	NFA	SCDHEC ltr 5/05/98	II - 5.16	Former Garbage House	Building M-17 Area	C
AOC 521	NFA	NFA		II - 5.17	Former Oil Storehouse	Building M-1262 Area	C
AOC 522	CSI	NFA	SCDHEC ltr 5/05/98	II - 5.18	Grease and Wash Building	SW of Bldg. 198	C
AOC 523	CSI	CMS		II - 5.19	Gas Station Storage	Building 198	C
AOC 524	NFA	NFA		II - 5.20	Substation, Building 415A	Building 198	C
AOC 525	RFI	CMI	SCDHEC ltr 04/21/04	I - 5.6	Paint Shop, Building 223	Building 223	E
AOC 526	RFI	CMI	SCDHEC ltr 08/05/03	I - 5.7	Building 212 Paint Area	Building 212	E
AOC 527	NFA	NFA		II - 5.21	Transformer House	Building 2 Area	E
AOC 528	CSI	CMI	SCDHEC ltr 02/13/03	II - 5.22	Steam Cleaning Shop	Building 59	E
AOC 529	NFA	NFA		I - 5.8	Building 2A Coating and Spray Systems	Building 2A	E
AOC 530	CSI	CMI	SCDHEC ltr 10/24/02	II - 5.23	Paint and Oil Storage	Building 35	E
AOC 531	CSI	CMI	SCDHEC ltr 10/24/02	II - 5.24	Substation and Storage	Building 459	E
AOC 532	NFA	NFA		II - 5.25	Sump Collection Vats	Building 2	E
AOC 533	NFA	NFA		II - 5.26	Switching Substation	SE Corner of Building 2	E
AOC 534	NFA	NFA		II - 5.27	Latrine	East of Building 2	E
AOC 535	NFA	NFA		II - 5.28	Latrine	East of Building 2	E
AOC 536	NFA	NFA		II - 5.29	Switching Substation	North of Building 74	E
AOC 537	CSI	NFA	SCDHEC ltr 09/24/02	II - 5.30	Substation	Building 342	E
AOC 538	RFI	NFA	SCDHEC ltr 05/22/03	I - 5.9	Building 6 Forge Shop	Building 6	E
AOC 539	RFI	NFA	SCDHEC ltr 05/22/03	II - 5.31	Propeller Shop	Building 6	E
AOC 540	CSI	CMI	SCDHEC ltr 08/06/03	II - 5.32	Plating Plant, Building 226	NE Corner of Building 3	E
AOC 541	CSI	CMI	SCDHEC ltr 08/06/03	II - 5.33	Oil Storage Shops	Between Bldgs. 6 and 226	E
AOC 542	CSI	CMI	SCDHEC ltr 08/06/03	II - 5.34	Old OxyAcetylene Plant and Paint Shop	Building 226 Area	E
AOC 543	CSI	CMI	SCDHEC ltr 08/06/03	II - 5.35	Former Building 1026	Building 3 Area	E
AOC 544	RFI	CMI	SCDHEC ltr 03/27/04	I - 5.10	Building 221 Pickling Plant	Building 221	E
AOC 545	NFA	NFA		I - 5.11	Building 3 Surface Coating	Building 3	E
AOC 546	CSI	CMI	SCDHEC ltr 03/27/04	II - 5.36	Galvanizing Shop	Between Bldgs. 56 and 74	E
AOC 547	NFA	NFA		II - 5.37	Fiberglass Shop	Building 5	E
AOC 548	CSI	CMI	USEPA ltr 09/30/03	II - 5.38	Building 5 Elevator	Building 5	E
AOC 549	RFI	CMI	USEPA ltr 09/30/03	II - 5.39	Scrap Yard 1054	Building 5 Area	E
AOC 550	CSI	CMI	SCDHEC ltr 10/23/03	II - 5.40	Boilerhouse	SW of Building 62	E
AOC 551	CSI	CMI	SCDHEC ltr 10/23/03	II - 5.41	Boilerhouse	Pier 314	E
AOC 552	CSI	CMI	SCDHEC ltr 10/23/03	II - 5.42	Former Galvanizing Shop	NE Corner of Dry Dock #1	E

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AOC 553					Not Assigned		
AOC 554	CSI	CMI	USEPA Itr 09/30/03	II - 5.44	Former Paint Shop	Between Bldgs. 5 and 44	E
AOC 555	CSI	NFA	SCDHEC Itr 6/7/13	II - 5.45	Former Latrine and Substation	SE Side of Bldg. 1119	E
AOC 556	RFI	NFA	SCDHEC Itr 6/7/13	I - 5.12	Dry Dock Discharges	Drydocks Discharge Areas	E
AOC 557	CSI	NFA	SCDHEC Itr 6/7/13	II - 5.46	Former Latrine	South of Drydock #1	E
AOC 558	RFI	NFA	SCDHEC Itr 07/25/02	II - 5.47	Substation	Building 77	E
AOC 559	RFI	CMI	USEPA Itr 04/02/03	II - 5.48	Central Power Station	Building 32	E
AOC 560	CSI	NFA	USEPA Itr 10/24/02	II - 5.49	Disinfecter	South of Bldg. 32	E
AOC 561	RFI	CMI	USEPA Itr 05/07/03	II - 5.50	Substation, Building 451B	Building 451B	E
AOC 562	CSI	CMI	SCDHEC Itr 02/13/03	II - 5.51	Substation	Building 84	E
AOC 563	CSI	CMI	SCDHEC Itr 08/21/03	II - 5.52	Former Locomotive House	Building 177 Area	E
AOC 564	CSI	CMI	USEPA Itr 09/30/03	II - 5.53	Oil/Water Separator	North Side Building 80	E
AOC 565	NFA	NFA		II - 5.54	Temporary Coal Bin	End of Dry Dock #5	E
AOC 566	CSI	NFA	SCDHEC Itr 07/25/02	II - 5.55	Paint Shop Storage	Building 184	E
AOC 567	CSI	CMI	SCDHEC Itr 10/25/02	II - 5.56	Substation	East of Building 195	E
AOC 568	NFA	NFA		II - 5.57	Latrine, Pier 317	Besides Building 75	E
AOC 569	RFI	CMI	SCDHEC Itr 05/26/04	II - 5.58	Gasoline Station and Oil Storage	SW Corner of Building 30	E
AOC 570	RFI	CMI	SCDHEC Itr 07/29/04	II - 5.59	Former Coal Storage Area	Building 1199 Area	E
AOC 571	RFI	NFA	SCDHEC Itr 05/20/03	I - 5.13	Building 177 Paint Booths	Building 177	E
AOC 572	RFI	CMI	SCDHEC Itr 10/17/02	I - 5.14	Building 177 Motor Area	Building 177	E
AOC 573	CSI	CMI	SCDHEC Itr 04/24/03	II - 5.60	Anodizing Process Area	Building 177	E
AOC 574	RFI	CMI	USEPA Itr 01/22/04	I - 5.15	Building 9 Fuel Tank (Site ID 17684)	Building 9	E
AOC 575	CSI	CMI	SCDHEC Itr 08/26/02	II - 5.61	Substation, Building 454	Building 454	E
AOC 576	CSI	CMI	SCDHEC 07/17/02	II - 5.61	Oil and Paint Storehouse/Print Office	Building 80 Area	E
AOC 577	NFA	NFA		I - 5.16	Building 25 Paint Booth	Building 25	E
AOC 578	RFI	CMI	SCDHEC Itr 07/29/04	II - 5.63	Transportation Shop and Garage	Building 25	E
AOC 579	CSI	NFA	USEPA Itr 05/10/02	II - 5.64	Former Paint Shop	Building 1035	E
AOC 580	CSI	NFA	USEPA Itr 10/17/02	II - 5.65	Former Pattern and Electric Shop	South of Building 10	E
AOC 581	NFA	NFA		II - 5.66	Waterfront Substation and Radio Lab	Building 236 Area	E
AOC 582	NFA	NFA		II - 5.67	Substation	North of Building 236	E
AOC 583	RFI	NFA	SCDHEC Itr 09/05/02	II - 5.68	Northeast Corner of Building 236 (Site ID 16459)	Building 236	E
AOC 584	NFA	NFA		II - 5.69	Substation	South of Dry Dock #5	E
AOC 585	NFA	NFA		II - 5.70	Latrine	End of 5th Street and End of Pier 317-D	E
AOC 586	CSI	CMI	SCDHEC Itr 03/17/03	II - 5.71	Temporary Powerhouse	SE of Building 11	E
AOC 587	NFA	NFA		II - 5.72	Former Aviation Gas Storage	Building 21	E
AOC 588	NFA	NFA		I - 5.17	Building 218 Paint Booth	Building 218	E
AOC 589	NFA	NFA		II - 5.73	Substation	By River Road	E
AOC 590	CSI	CMI	USEPA Itr 08/05/03	II - 5.74	Alley Between Bldgs. 79 and 1760	Between Bldgs. 79 & 1760	E
AOC 591					Not Assigned		
AOC 592	CSI	NFA	SCDHEC Itr 10/03/02	II - 5.76	Former Asbestos Shredding Shelter	South of Building 1760	E
AOC 593					Not Assigned		
AOC 594	NFA	NFA		II - 5.78	Radcon Training & Offices	South of 317-E	E

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 595	NFA	NFA		II - 5.79	Oil & Paint Storehouse	SW of Building 101	E
AOC 596	CSI	CMI	SCDHEC ltr 06/30/03	II - 5.80	Former Torpedo Storage	Building 101 Area	E
AOC 597	CSI	CMI	SCDHEC ltr 03/21/03	II - 5.81	Substation	Building 91	E
AOC 598	RFI	CMI	SCDHEC ltr 06/16/03	II - 5.82	Sonar Dome Area	End of Pier J	E
AOC 599	CSI	CMI	SCDHEC ltr 06/16/03	I - 5.18	Pier J Pump House	Pier J	E
AOC 600	NFA	NFA		II - 5.83	Coal and Oil Pier	North of Drydock #3	E
AOC 601	NFA	NFA		II - 5.84	Oil Pier(319)	End of 317-F	E
AOC 602	CSI	NFA	SCDHEC ltr 05/09/02	II - 5.85	Substation and Storage	Building 95	E
AOC 603	CSI	NFA	SCDHEC ltr 05/09/02	II - 5.86	Burning Dump	Drydock #3 Area	E
AOC 604	CSI	NFA	SCDHEC ltr 05/09/02	II - 5.87	Substation and Storage	Building 96	E
AOC 605	RFI	CMI	SCDHEC ltr 01/16/04	II - 5.88	Waste Paint Storage Pad	Drydock #4 Area	E
AOC 606	NFA	NFA		I - 5.19	Building 187 Paint Booth	Building 187	E
AOC 607	RFI	CMI		I - 5.20	Building 1189 Dry Cleaning	Building 1189	F
AOC 608	NFA	NFA		II - 5.89	Naval Exchange Storage Shed	Building 1263	F
AOC 609	RFI	NFA	SCDHEC ltr 11/20/01	I - 5.21	Building 1346 Gas Station	Building 1346	F
AOC 610	NFA	NFA		I - 5.22	Building 241 Paint Booth	Building 241	F
AOC 611	CSI	NFA	SCDHEC ltr 01/10/02	II - 5.90	Grease Rack and Hobby Shop	9th St. and Enterprise Ave	F
AOC 612	NFA	NFA		II - 5.91	Substation	SE on Building 1172	F
AOC 613	RFI	CMI	USEPA ltr 05/07/03	II - 5.92	Old Locomotive Repair Shop	Building 242 Area	F
AOC 614	NFA	NFA		I - 5.23	Building 242 Paint Booth	Building 242	F
AOC 615	CSI	NFA	USEPA ltr 05/07/03	II - 5.93	Paint Shop	Building 255 Area	F
AOC 616	CSI	NFA	SCDHEC ltr 12/31/98	II - 5.94	Old Chain Locker	Building 69 Parking Lot	F
AOC 617	CSI	CMI	USEPA ltr 09/30/03	II - 5.95	Galvanizing Plant	Building 69A Area	F
AOC 618	NFA	NFA		II - 5.96	Switching Substation	Building 466	F
AOC 619	CSI	NFA	SCDHEC ltr 9/18/01	II - 5.97	Oil Storage Yard	Bldgs. 1824 Area	F
AOC 620	RFI	CMI	SCDHEC ltr 09/19/03	II - 5.98	Battery Shop	Building 68	F
AOC 621	RFI	CMI	SCDHEC ltr 01/16/04	II - 5.99	Battery Cracking Area	Building 68 Area	F
AOC 622	CSI	Sublette I	SCDHEC ltr 3/06/98	II - 5.100	Ballast Water Treatment Facility	NSC Fuel Farm	G
AOC 623	CSI	Sublette I	SCDHEC ltr 3/06/98	II - 5.101	Stripper Concrete Tank	Building 96	G
AOC 624	RFI	Sublette I	SCDHEC ltr 3/06/98	II - 5.102	Fuel Oil Booster Pumphouse	Building 98	G
AOC 625	CSI	Sublette I	SCDHEC ltr 3/06/98	II - 5.103	Sludge Pumphouse	Building 3901B	G
AOC 626	RFI	Sublette I	SCDHEC ltr 3/06/98	I - 5.24	NSC Fuel Farm	Fuel Farm Area	G
AOC 627	RFI	Sublette I	SCDHEC ltr 3/06/98	II - 5.104	Oil Spill Area	Hobson and Viaduct Roads	G
AOC 628	CSI	NFA	SCDHEC ltr 01/16/02	II - 5.105	Sandblasting Area	SE of Building 68	G
AOC 629	CSI	Sublette I	SCDHEC ltr 3/06/98	II - 5.106	Unloading Facility	Building 3913	G
AOC 630	NFA	NFA		II - 5.107	POL Sampling/Test Building	Building 3913	G
AOC 631	RFI	Sublette I	SCDHEC ltr 7/20/01	II - 5.108	Fueling pier Kilo	Pier Kilo	G
AOC 632	NFA	NFA		II - 5.109	Substation	Building 124	G
AOC 633	CSI	CMI	SCDHEC ltr 07/30/04	II - 5.110	Substation	Building 451C	G
AOC 634	CSI	NFA	SCDHEC ltr 07/16/01	II - 5.111	Flammable Material Storage	SW of Building 224	G
AOC 635	RFI	CMI		II - 5.112	Paint and Oil Storehouse	Building 3902	G
AOC 636	CSI	CMI	SCDHEC ltr 08/14/03	II - 5.113	Torpedo Magazine	Building 161	G

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 637	CSI	CMI	SCDHEC Itr 03/10/04	II - 5.114	Dump Area	Building 161 Area	G
AOC 638	CSI	NFA	SCDHEC Itr 04/16/02	II - 5.115	Torpedo Workshop	Building 132	G
AOC 639	NFA	NFA		II - 5.116	Alcohol Storage	South of Building 132	G
AOC 640	NFA	NFA		II - 5.117	Fuel Oil Pier, Former Pier 322	Pier 336	G
AOC 641	CSI	Subtile I	SCDHEC Itr 3/06/98	II - 5.118	Stripper Pumphouse	Base of Building 336	G
AOC 642	CSI	NFA	USEPA Itr 03/05/02	II - 5.119	Former Pistol Range	Parking Lot, Building X-10	G
AOC 643	CSI	NFA	USEPA Itr 07/31/02	II - 5.120	Substation	Building 125	G
AOC 644	NFA	NFA		II - 5.121	Substation	Building 1793	G
AOC 645	NFA	NFA		II - 5.122	Transformer Vault	Building 3906S	G
AOC 646	CSI	Subtile I	SCDHEC Itr 03/02/01	II - 5.123	Operational Storage	Building 3906Q, Chicora	G
AOC 647	NFA	NFA		II - 5.124	Transformer Vault	Building 3906R	G
AOC 648	NFA	NFA		II - 5.125	Transformer Vault	West of Building 672	H
AOC 649	CSI	CMI	SCDHEC Itr 03/10/04	II - 5.126	Braswell Shipyards Storage Area	East of Building 672	H
AOC 650	CSI	CMI	SCDHEC Itr 03/10/04	II - 5.127	Metal Trades Storage Area	East of Building 672	H
AOC 651	CSI	CMI	SCDHEC Itr 03/10/04	II - 5.128	Sandblasters Storage Area	East of Building 672	H
AOC 652	NFA	NFA		I - 5.25	Paint Booth,	Building 636	H
AOC 653	RFI	NFA	SCDHEC Itr 9/18/01	I - 5.26	Hobby Shop	Building 1508	H
AOC 654	CSI	NFA	SCDHEC Itr 08/28/97	II - 5.129	Septic Tank and Drain Field (Site ID 14437)	Building 661 Area	H
AOC 655	CSI	NFA	SCDHEC Itr 06/21/99	II - 5.130	Oil Spill Area (Site ID 00942)	Building 656	H
AOC 656	CSI	NFA	SCDHEC Itr 09/04/98	II - 5.131	Petroleum Spill (Site ID 01166)	Between Bldgs 602 and NS-71	H
AOC 657	NFA	NFA		II - 5.132	Engine Overhaul Facility	Building 645	H
AOC 658	NFA	NFA		II - 5.133	Gas Storage	East of Bldg. 1303	H
AOC 659	CSI	Subtile I	SCDHEC Itr 9/28/97	II - 5.134	Diesel Storage	Building 14	H
AOC 660	CSI	NFA	SCDHEC Itr 08/28/97	II - 5.135	Mosquito Control Facility	NW of Building NS-6	H
AOC 661	CSI	NFA	SCDHEC Itr 11/24/97	II - 5.136	Former Explosives Storage	South of Building 601	H
AOC 662	RFI	Subtile I	SCDHEC Itr 9/28/97	I - 5.27	Former Gasoline Station	Building NS-54	H
AOC 663	CSI	NFA	SCDHEC Itr 06/20/02	II - 5.137	Gas/Diesel Pumping Station	Building 851	H
AOC 664	NFA	NFA		II - 5.138	Transformer Vault (X 33A)	Building X 33A	H
AOC 665	CSI	NFA	SCDHEC Itr 11/24/97	II - 5.139	Pyrotechnic Storage	Building 1889 and NS-46 Area	H
AOC 666	CSI	NFA	SCDHEC Itr 06/20/02	II - 5.140	Fuel Storage	Building NS-45	H
AOC 667	RFI	NFA	SCDHEC Itr 01/16/04	I - 5.28	CBU Vehicle Maintenance Area	Building 1776	H
AOC 668	NFA	NFA		II - 5.141	Hazardous Material Storage	Building 1899	H
AOC 669	NFA	NFA		II - 5.142	Indoor Pistol Range	Building 1888	H
AOC 670	RFI	NFA	SCDHEC Itr 04/25/02	II - 5.143	Former Steel Range	Field South of Bldg. 1897	H
AOC 671	CSI	NFA	USEPA Itr 03/28/02	II - 5.144	Metering House	Hobson and Holland St.	I
AOC 672	RFI	NFA	USEPA Itr 03/28/02	II - 5.146	Paint and Oil Storehouse	Building 169	I
AOC 673	CSI	NFA	USEPA Itr 03/28/02	II - 5.146	Paint and Oil Storehouse	Building 169	I
AOC 674	NFA	NFA		II - 5.147	Paint Storage	Building 169	I
AOC 675	CSI	NFA	USEPA Itr 03/28/02	II - 5.148	Fuel Oil Storage (Site ID 02099)	Building RTC-4	I
AOC 676	CSI	NFA	USEPA Itr 03/28/02	II - 5.149	Former Incinerator	Building NS-4	I
AOC 677	RFI	NFA	USEPA Itr 03/28/02	I - 5.29	Building NS-2 Grounds (Site ID 17595)	Building NS-2 Area	I
AOC 678	CSI	NFA	USEPA Itr 03/28/02	II - 5.150	Fire Fighting School	Building NS-1 Area	I

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 679	CSI	NFA	USEPA Itr 03/28/02	II - 5.151	Former Wash Rack	Building NS-1 Area	I
AOC 680	CSI	CMI	SCDHEC Itr 05/09/03	II - 5.152	Brake Repair and Welding Area	Building NS-26 Area	I
AOC 681	RFI	NFA	USEPA Itr 04/25/03	I - 5.30	Blast Booth Building 681	Building 681	I
AOC 682	NFA	NFA		I - 5.31	Spray Booth	Building 681	I
AOC 683	NFA	NFA		II - 5.153	Transformer Vault	Building 678 Area	I
AOC 684	RFI	NFA	SCDHEC Itr 04/25/03	II - 5.154	Former Outdoor Pistol Range	Building 1888	I
AOC 685	CSI	NFA	USEPA Itr 03/28/02	II - 5.155	Former Smoke Drum	West of Juneau Ave	I
AOC 686	NFA	NFA		II - 5.156	High Explosive Storage	Building X-54	I
AOC 687	CSI	NFA	USEPA Itr 03/28/02	II - 5.157	Ammunition Storage	Building X-55	I
AOC 688	CSI	NFA	USEPA Itr 03/28/02	II - 5.158	Ammunition Storage	Building X-56	I
AOC 689	RFI	CMS	Schedule of Compliance 2011 Permit	II - 5.159	Southern Tip of Base (Marina Parking Area)	Southern Tip of Base	I
AOC 690	CSI	CMS	Schedule of Compliance 2011 Permit	II - 5.160	Dredge Materials Area	South End of Base	I
AOC 691	RFI	NFA	SCDHEC Itr 6/7/13	II - 5.161	Waterfront	Waterfront	J
AOC 692	RFI	NFA	SCDHEC Itr 6/7/13	II - 5.162	Free Product Along Cooper River	Waterfront	J
AOC 693	CSI	CMI	SCDHEC Itr 5/21/14	II - 5.163	Fuse and Primer House	Clouter Island	K
AOC 694	CSI	CMI	SCDHEC Itr 5/21/14	II - 5.164	Former Naval Ammunition Depot	Clouter Island	K
AOC 695	CSI	NFA	SCDHEC Itr 6/7/13	II - 5.165	Electric Locomotive Shed	Clouter Island	K
AOC 696	CSI	NFA	SCDHEC Itr 11/21/01	IV - 5.1	Transformer Area	Building 2509, Naval Annex	K
AOC 697	NFA	NFA		IV - 5.2	Transformer Area, MOMAG-11	Near Bldg. 2554	K
AOC 698	RFI	NFA	SCDHEC Itr 04/20/02	IV - 5.3	Boiler House, Naval Annex	Building 2508, Naval Annex	K
AOC 699	RFI	NFA	SCDHEC Itr 7/20/01	V - 5.1	Storm Sewer System	Basewide	L
AOC 700	NFA	NFA	SCDHEC Itr 05/10/02	V - 5.2	Golf Maintenance Building	Building 1646	C
AOC 701	CSI	NFA	SCDHEC Itr 11/18/02	V - 5.3	Former Gas Station	Building 1141	E
AOC 702	CSI	NFA	SCDHEC Itr 10/30/01	V - 5.4	Paint Accumulation Area	Pier D	E
AOC 703	CSI	NFA	SCDHEC Itr 10/30/01	V - 5.5	Paint Accumulation Area	Pier F	E
AOC 704	CSI	NFA	SCDHEC Itr 05/20/03	V - 5.6	Paint Accumulation Area	West of Building 301B	E
AOC 705	NFA	NFA		V - Add I	Building 58 Spills	Building 58	C
AOC 706	RFI	CMI	SCDHEC Itr 03/10/04	Vol V, Add II	Area behind Building 246	Building 246 Area	G
AOC 707	CSI	NFA	SCDHEC Itr 06/14/02	V/Add III A.1	Diesel Fuel Oil Spill	North of Building 1795	I
AOC 708	CSI	NFA	SCDHEC Itr 2/28/99	V/Add III A.2	Petroleum Release	Transformer Pad Near Bldg. NS-688	H
AOC 709* F**	RFI	NFA	SCDHEC Itr 8/8/07	None	Area Identified during FDS Investigation	Intersection of Ninth and Hobson	F
AOC 709* H	RFI	NFA	SCDHEC Itr 05/22/01	None	Other Impacted Area (G38 and G07)	Parking Lot next to Building 196	H
AOC 710	CSI	NFA	SCDHEC Itr 04/30/03	None	FDS As Site	Site located at FDS wells 14A and 14B	F
AOC 711	CSI	NFA	SCDHEC Itr 03/24/04	VI	Oil Water Separators at Facility 200	Facility 200	I
AOC 712	CSI	NFA	SCDHEC Itr 09/24/04	VI	Oil Water Separator and Waste Oil Tank	Facility 240	F
AOC 713	CSI	NFA	SCDHEC Itr 09/24/04	VI	Oil Water Separators at Facility 241	Facility 241	F
AOC 714	CSI	NFA	SCDHEC Itr 09/24/04	VI	Oil Water Separators at Facility 242	Facility 242	F
AOC 715	CSI	NFA	SCDHEC Itr 09/24/04	VI	Oil Water Separators at Facility 681	Facility 681	I
AOC 716	CSI	NFA	SCDHEC Itr 03/24/04	VI	Oil Water Separators at Facility 1024	Facility 1024	E
AOC 717	CSI	NFA	SCDHEC Itr 09/24/04	VI	Oil Water Separators at Facility 242	Facility 242	F
AOC 718	CSI	NFA	SCDHEC Itr 03/24/04	VI	Oil Water Separators at Facility 681	Facility 681	I
AOC 719	CSI	NFA	SCDHEC Itr 03/24/04	VI	Not Assigned		I

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 720	CSI	NFA	SCDHEC ltr 09/03/03	VI	Oil Water Separators at Building X-12	Building X-12	G
AOC 721	RFI	RFI		None	Coal Storage Area Runoff	Area next to Noisette Creek in Zone C	C
AOC 722	CSI	CMI		None	Grid Well L 11	West of Bldg 28	I
AOC 723	CSI	CMI		None	Paint Booth and Related Operations	Southwestern corner of Bldg 177	I
AOC 724	CSI	CMI	SCDHEC ltr 03/10/04	None	Utility Corridor	Between Bldg 650 and Bainbridge Ave.	H
AOC 725	CSI	CMI	SCDHEC ltr 4/23/07	None	Building 97	Building 97	E
AOC 726	CSI	NFA	SCDHEC ltr 5/5/09	None	Suspected Contamination	Sewer Line near SWMU 9	H
AOC 727	CSI	CSI	4/12/2010 permit application	None	UST Site 30, NH 46-5 (Site ID 01206)	Located on East side of Bldg NH 46-5	C
AOC 728	CSI	CSI	4/12/2010 permit application	None	UST Site 25, 1346-H (Site ID 14087)	Near Bldg. 1346	F
AOC 729	CSI	CSI	4/12/2010 permit application	None	UST NS 28A (Site ID 00944)	Adjacent to Bldg NS 26	I
AOC 730	NFA	NFA	4/12/2010 permit application	None	AST 601, Site ID#01537	Associated with Bldg. NS 69	H
AOC 731	CSI	CSI	4/12/2010 permit application	None	UST 6A-B (Site ID 17826)	Near Bldg 6	E
AOC 732	CSI	CSI	4/12/2010 permit application	None	FDS 22 (Site ID 02401)	Near Bldg 451 C	G
AOC 733	CSI	LUC	4/12/2010 permit application	None	Chicora ASTs (Site ID 13350)	Chicora Tank Farm	G
AOC 734	NFA	NFA	4/12/2010 permit application	None	UST - Building 1279 (Site ID 15368)	Near Bldg. 1279	E
AOC 735	CSI	CSI	SCDHEC ltr 10/2/09	None	Newly Identified Release at NH68 (Site ID 02359)	Near Bldg. NH68	A
AOC 736 **	CSI	CMI	Navy 9/16/2011 letter	None	FDS Site 7A	Veteran's Terminal	E
AOC 737 **	CSI	CMI	DHEC 8/1/12 letter	None	FDS Site near Building 69A	Along Hobson Ave. near Building 69A	F
AOC 738	CSI	NFA	SCDHEC letter 12/13/02	None	Site 16 (Site ID 01251)	Building 224	G
AOC 739 **	CSI	NFA	SCDHEC letter 9/6/07	None	T 3909 (Site ID 01093), FDS Area 1 (Site ID 01180), 45	Area of AST 3909	G
AOC 740	CSI	NFA	SCDHEC letter 9/6/07	None	Site 4, Building 640 (Site ID 00955)	Building 640	H
AOC 741	CSI	NFA	SCDHEC letter 3/3/08	None	Building 661 (Site ID 14437)	Building 661	H
AOC 742 **	CSI	NFA	SCDHEC letter 11/9/2001	None	FDS Areas 2-6 (Site ID 01181)	FDS Areas 2-6	G
AOC 743 **	CSI	NFA	SCDHEC letter 11/19/1999	None	FDS Area 7 (Site ID 01182)	FDS Area 7	G
AOC 744 **	CSI	NFA	SCDHEC letter 11/1/2001	None	FDS Area 8 (Site ID 01183)	FDS Area 8	G
AOC 745 **	CSI	NFA	SCDHEC letter 11/14/2001	None	FDS Areas 9-10 (Site ID 01184)	FDS Area 9 and 10	G
AOC 746 **	CSI	NFA	SCDHEC letter 11/16/1998	None	FDS Area 11 (Site ID 01185)	FDS Area 11	G
AOC 747 **	CSI	NFA	SCDHEC letter 11/14/2001	None	FDS Area 12, 13, 14 (Site ID 01186)	FDS Area 12, 13, 14	G
AOC 748 **	CSI	NFA	SCDHEC letter 4/11/2000	None	FDS Area 15 (Site ID 01187)	FDS Area 15	G
AOC 749 **	CSI	NFA	SCDHEC letter 4/13/2004	None	FDS Area 17 (Site ID 02207)	FDS Area 17	F
AOC 750 **	CSI	NFA	SCDHEC letter 11/19/1999	None	FDS Area 18 (Site ID 01188)	FDS Area 18	G
AOC 751 **	CSI	NFA	SCDHEC letter 10/28/2002	None	FDS Area 19 (Site ID 01189)	FDS Area 19	G
AOC 752 **	CSI	NFA	SCDHEC letter 9/30/2002	None	FDS Area 20 (Site ID 01190)	FDS Area 20	G
AOC 753 **	CSI	NFA	SCDHEC letter 11/19/2001	None	FDS Area 21 (Site ID 01144)	FDS Area 21	G
AOC 754	CSI	NFA	SCDHEC letter 5/27/2009	None	NS-3 (Site ID 00981)	Building NS-3	I
AOC 755	CSI	Investigation	9/20/2002 MOA	None	UST NS-44A (Site ID 17779)	Building NS-44	I
LUC Zone		CMI	SCDHEC ltr 8/13/07	None	All areas within LUC Zone	All areas within LUC Zone	Multiple Zones
Zone J		NFA	SCDHEC ltr 6/7/13	None	Waterbodies surrounding CNC	Waterbodies surrounding CNC	Multiple Zones

*AOC 709 is listed twice because it is located over two zones and the two sections were investigated separately

Charleston Naval Complex

Appendix A-2
 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
 Requiring a RCRA Facility Investigation

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone

Appendix A-3
Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
Requiring Confirmatin Sampling Investigation

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone

SWMU/AOC Number	Initial Status	Current Status	Documentation	Permit Effectiveness Date	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 1	RFI	NFA	SCDHEC Itr 02/02/02		1991 RFA	DRMO Storage Area	DRMO	A
SWMU 2	RFI	NFA	SCDHEC Itr 02/02/02		1991 RFA	Lead Contaminated Area	DRMO	A
SWMU 4	RFI	NFA	SCDHEC Itr 9/18/01		1991 RFA	Pesticide Storage Building	Building 381	F
SWMU 11	RFI	NFA	SCDHEC Itr 7/19/06		1991 RFA	Caustic Pond	SE of Bldg. 190	G
SWMU 12	RFI	NFA	SCDHEC Itr 11/20/01		1991 RFA	Old Fire Fighter Training Area	Southern Tip of Base	I
SWMU 13	RFI	NFA	SCDHEC Itr B/23/00		1991 RFA	Building 1303 Area		H
SWMU 14	RFI	NFA	SCDHEC Itr 04/25/03		1991 RFA	Chemical Disposal Area	South of Building 1897	H
SWMU 15	RFI	NFA	SCDHEC Itr 04/25/03		1991 RFA	Incinerator	South of Building 1843	I
SWMU 16	RFI	NFA	USEPA Itr 03/28/02		1991 RFA	Paint Storage Bunker	West of Building X-55	E
SWMU 26	NFA	NFA			1991 RFA	Waste Storage Area	Building 64-40, Pier C	E
SWMU 27	NFA	NFA			1991 RFA	Waste Storage Area	East End Pier C	E
SWMU 28	NFA	NFA			1991 RFA	Waste Storage Area	West End Pier C	E
SWMU 29	NFA	NFA			1991 RFA	Building X-10	Building X-10	E
SWMU 30	NFA	NFA			1991 RFA	Building 13 SAA	Building 13	E
SWMU 31	NFA	NFA			1991 RFA	Waste Paint Storage Area	Drydock #5	E
SWMU 32	NFA	NFA			1991 RFA	Waste Paint Storage Area	Building 195	E
SWMU 33	NFA	NFA			1991 RFA	Waste Paint Storage Area	Drydock #2	G
SWMU 34	NFA	NFA			1991 RFA	Morale, Welfare and Recreation Area	SE of Building X-10	G
SWMU 35	NFA	NFA			1991 RFA	Building X-12	Building X-12	L
SWMU 37	RFI	NFA	SCDHEC Itr 7/20/01		I-4.1	Sanitary Sewer System	Basewide	A
SWMU 38	RFI	NFA	SCDHEC Itr 03/25/03		II-4.1	Miscellaneous Storage	North of Bldg. 1605	A
SWMU 41	NFA	NFA			II-4.2	Battery Charging Station	Building 1624	A
SWMU 42	RFI	NFA	SCDHEC Itr 02/27/03		II-4.3	Former Asphalt Plant and Tanks	NW of Bldg. 1803	A
SWMU 43	RFI	NFA	SCDHEC Itr 12/05/00		II-4.4	Publications and Printing Plant	Building 1628	C
SWMU 44	RFI	NFA	SCDHEC Itr 05/13/02		I-4.4	Coal Storage Yard	South Side of Noisette Creek	C
SWMU 45	NFA	NFA			I-4.5	Building NH-51 SAA	Building NH-51	C
SWMU 46	NFA	NFA			I-4.6	NH-21 SAA	Building NH-21	C
SWMU 47	RFI	NFA	SCDHEC Itr 5/14/01		II-4.5	Burning Dump	Building NSC 66 Area	C
SWMU 48	NFA	NFA			I-4.7	Building 234 SAA	Building 234	C
SWMU 49	NFA	NFA			II-4.6	Forklift Battery Changing Station	Building 219	D
SWMU 50	NFA	NFA			I-4.8	Building NH-1 SAA	Building NH-1	D
SWMU 51	NFA	NFA			I-4.9	Building NH-1 SAA	Building NH-1	D
SWMU 52	NFA	NFA			I-4.10	Building NH-1 SAA	Building NH-1	D
SWMU 55	NFA	NFA			I-4.13	Building 59 SAA	Building 59	E
SWMU 56	NFA	NFA			I-4.14	Building 2A, SAA	Building 2A	E
SWMU 57	NFA	NFA			I-4.15	Building 35 SAA	Building 35	E
SWMU 58	NFA	NFA			I-4.16	Building 35 SAA	Building 35	E
SWMU 59	NFA	NFA			I-4.17	Building 35 SAA	Building 35	E
SWMU 60	NFA	NFA			I-4.18	Less than 90 Day Accumulation Area	Building 35	E
SWMU 61	NFA	NFA			I-4.19	Less than 90 Day Accumulation Area	Building 2	E
SWMU 62	NFA	NFA			I-4.20	Building 226 SAA	Building 226	E
SWMU 64	NFA	NFA			I-4.21	Building 56 SAA	Building 56	E
SWMU 66	NFA	NFA			I-4.23	Pier C SAA	Pier C	E

SWMU/AOC Number	Initial Status	Current Status	Documentation	Permit Effectiveness Date	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 68	NFA	NFA			I - 4.24	Building 5 SAA	Building 5	E
SWMU 69	NFA	NFA			I - 4.25	Building 5 SAA	Building 5	E
SWMU 70	NFA	NFA			I - 4.26	Building 44 SAA	Building 44	E
SWMU 71	NFA	NFA			II - 4.10	Building 44, SAA	Building 44	E
SWMU 72	NFA	NFA			I - 4.10	Building 43 SAA	Building 43	E
SWMU 73	NFA	NFA			I - 4.27	Building 57 SAA	Building 57	E
SWMU 74	NFA	NFA			I - 4.28	Drydock #1 SAA	Drydock #1	E
SWMU 75	NFA	NFA			I - 4.29	Building 32 SAA	Building 32	E
SWMU 76	NFA	NFA			I - 4.30	Drydock #2 SAA	Drydock #2	E
SWMU 77	NFA	NFA			I - 4.31	Drydock #2 SAA	Drydock #2	E
SWMU 78	NFA	NFA			I - 4.32	Drydock #2 SAA	Drydock #2	E
SWMU 79	NFA	NFA			I - 4.33	Building 250, SAA	Building 250	E
SWMU 80	CSI	NFA	SCDHEC Itr 08/19/02		II - 4.11	Paint Shop Storage	Building 194	E
SWMU 81	CSI	NFA	SCDHEC Itr 09/09/02		I - 4.34	Less than 90 Day Accumulation Area	Building 1245	E
SWMU 82	NFA	NFA			I - 4.35	Building 177 SAA	Building 177	E
SWMU 83	NFA	NFA			I - 4.38	Building 9 SAA	Building 9	E
SWMU 84	NFA	NFA			I - 4.39	Less than 90 Day Accumulation Area	Building 9	E
SWMU 85	NFA	NFA			I - 4.41	Building 25 SAA	Building 25	E
SWMU 86	NFA	NFA			I - 4.41	Building 13 SAA	Building 13	E
SWMU 87	NFA	NFA			I - 4.42	Building 13 SAA	Building 13	E
SWMU 88	NFA	NFA			I - 4.43	Building 13, SAA	Building 13	E
SWMU 89	NFA	NFA			I - 4.44	Building 13, SAA	Building 13	E
SWMU 90	NFA	NFA			I - 4.45	Building 13 SAA	Building 13	E
SWMU 91	NFA	NFA			I - 4.46	Building 13 SAA	Building 13	E
SWMU 92	NFA	NFA			I - 4.47	Building 13 SAA	Building 13	E
SWMU 93	NFA	NFA			I - 4.48	Building 13 SAA	Building 13	E
SWMU 94	NFA	NFA			I - 4.49	Less than 90 Day Accumulation Area (Site ID 16459)	Building 236	E
SWMU 95	NFA	NFA			I - 4.50	Less than 90 Day Accumulation Area (Site ID 16459)	Building 236	E
SWMU 96	NFA	NFA	SCDHEC Itr 07/25/02		I - 4.51	Pier G SAA	Building 236	E
SWMU 97	CSI	NFA			I - 4.52	Pier G SAA	Pier G	E
SWMU 98	NFA	NFA			I - 4.53	Pier G SAA	Pier G	E
SWMU 99	NFA	NFA			I - 4.54	Building 218 SAA	Building 218	E
SWMU 100	RFI	NFA	SCDHEC Itr 05/29/02		I - 4.54	Building 1173, SAA	Building 1173	E
SWMU 101	NFA	NFA			I - 4.55	Pier H SAA	Pier H	E
SWMU 102	NFA	NFA			I - 4.55	Building 1518 SAA	Building 1518	E
SWMU 103	NFA	NFA			I - 4.56	Blast Area Dry Dock #3	Drydock #3	E
SWMU 104	NFA	NFA	SCDHEC Itr 05/09/02		I - 4.57	Chapel CBU-412 SAA	Chapel CBU-412	F
SWMU 105	NFA	NFA			I - 4.58	Building 187 SAA	Building 187	F
SWMU 106	RFI	NFA			I - 4.59	Abrasive Blast Media Storage Area	Structures 1364, 1365	F
SWMU 107	NFA	NFA	USEPA Itr 01/15/02		I - 4.60	Building 1346 SAA	Building 1346	F
SWMU 108	NFA	NFA			I - 4.61	Building 241 SAA	Building 241	F
SWMU 109	CSI	NFA			I - 4.62	Building 241 SAA	Building 241	F
SWMU 110	NFA	NFA			I - 4.63	Building 241 SAA	Building 241	F
SWMU 111	NFA	NFA			I - 4.64	Building 241 SAA	Building 241	F
SWMU 112	NFA	NFA			I - 4.65	Building 241 SAA	Building 241	F
SWMU 113	NFA	NFA			I - 4.66	Building 242 SAA	Building 242	F
SWMU 114	NFA	NFA			I - 4.67	Building 1175 SAA	Building 1175	F
SWMU 115	NFA	NFA						F
SWMU 116	NFA	NFA						G

Appendix A-4
 Solid Waste management Units (SWMUs) and Areas of Concern (AOCs)
 Requiring No Further Action

SWMU/AOC Number	Initial Status	Current Status	Documentation	Permit Effectiveness Date	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 117	NFA	NFA			I-4.68	Building 249, SAA	Building 249	G
SWMU 118	NFA	NFA			II-4.14	Pier Z SAA	Pier Z	G
SWMU 119	NFA	NFA			II-4.15	Garbage Handling Facility 1271	End of Building 336	G
SWMU 120	RFI	NFA	SCDHEC Itr 05/06/02		I-4.69	Pier M Laydown	Pier M	H
SWMU 123	NFA	NFA			I-4.71	Building 636 SAA	Building 636	H
SWMU 124	NFA	NFA			I-4.72	Building 636 SAA	Building 636	H
SWMU 125	NFA	NFA			I-4.73	Building 1508, SAA	Building 1508	H
SWMU 126	NFA	NFA			I-4.74	Building 202 SAA	Building 202	H
SWMU 127	NFA	NFA			I-4.75	Building 202 SAA	Building 202	H
SWMU 128	NFA	NFA			I-4.76	Building 202 SAA	Building 202	H
SWMU 129	NFA	NFA			I-4.77	Building 202 SAA	Building 202	H
SWMU 130	NFA	NFA			I-4.78	Building 202 SAA	Building 202	H
SWMU 131	NFA	NFA			I-4.79	Building 202 SAA	Building 202	H
SWMU 132	NFA	NFA			I-4.80	Building NS-67 SAA	Building NS-67	H
SWMU 133	NFA	NFA			I-4.81	Building 61 SAA	Building 61	H
SWMU 134	NFA	NFA			I-4.82	Building 61 SAA	Building 61	H
SWMU 135	NFA	NFA			I-4.83	Building 61 SAA	Building 61	H
SWMU 136	CSI	NFA	SCDHEC Itr 06/20/03		I-4.84	Building 61 SAA	Building 61	H
SWMU 137	NFA	NFA			I-4.85	Building NS-53 SAA	Building NS-53	H
SWMU 138	CSI	NFA	SCDHEC Itr 01/16/04		I-4.86	Building 675 SAA	Building 657	H
SWMU 139	NFA	NFA			I-4.87	Building 1776 SAA	Building 1776	I
SWMU 140	NFA	NFA			II-4.16	Pier P SAA	Pier P	I
SWMU 141	NFA	NFA			II-4.17	Pier P SAA	Pier P	I
SWMU 142	NFA	NFA			I-4.88	Pier Q SAA	Pier Q	I
SWMU 143	NFA	NFA			I-4.89	Building 681 SAA	Building 681	E
SWMU 144	NFA	NFA			III-4.1	Building 222	Building 222	E
SWMU 145	CSI	NFA	SCDHEC Itr 01/29/02		III-4.2	Building 222 SAA	Building 222	E
SWMU 146	NFA	NFA			III-4.3	Mercury Spill Area	Under Building 13A	E
SWMU 147	NFA	NFA			III-4.4	Building 13A, SAA	Building 13A	E
SWMU 148	NFA	NFA			III-4.5	Pier C, SAA	Pier C	E
SWMU 149	NFA	NFA			III-4.6	Building 194, SAA	Building 194	E
SWMU 150	NFA	NFA			III-4.7	Drydock #5, SAA	Drydock #5 Area	G
SWMU 151	NFA	NFA			III-4.8	Pier Z, SAA	Pier Z	E
SWMU 152	NFA	NFA			III-4.9	Building 79A	Building 79A	E
SWMU 153	NFA	NFA			III-4.10	Building 79A, SAA	Building 79A	E
SWMU 154	NFA	NFA			III-4.11	Pier H, SAA	Pier H	E
SWMU 155	NFA	NFA			III-4.12	Pier H, SAA	Pier H	E
SWMU 156	NFA	NFA			III-4.13	Building 101	Building 101	E
SWMU 157	NFA	NFA			III-4.14	Drydock #4	Drydock #4 Area	E
SWMU 158	NFA	NFA			III-4.15	Building 1278	Building 1278	G
SWMU 159	RFI	NFA	SCDHEC Itr 09/18/01		III-4.16	Pier M Quaywall, SAA	Pier M Quaywall	H
SWMU 160	NFA	NFA			III-4.17	SAA, Building 665, SAA	Building 665	I
					III-4.18	Port Services, SAA	Pier S Quaywall	K

SWMU/AOC Number	Initial Status	Current Status	Documentation	Permit Effectiveness Date	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 161	CSI	NFA	SCDHEC Itr 11/20/01		IV - 4.1	Vehicle Maintenance Shop	Building 2505	K
SWMU 162	CSI	NFA	SCDHEC Itr 9/18/01		IV - 4.2	Sludge Drying Field	South of Building 2509	K
SWMU 164	CSI	NFA	SCDHEC Itr 11/03/01		IV - 4.4	Blasting Operation	Building 2556	K
SWMU 165	NFA	NFA			IV - 4.5	Painting Operation, MOMAG 11	Building 2556, Naval Annex	K
SWMU 167	NFA	NFA			IV - 4.7	MOMAG 11	South of Building 2522, Naval Annex	E
SWMU 168	NFA	NFA			IV - 4.8	Building 2A, Metal Storage Area	Building 2A, Between Buildings 2 and 59	E
SWMU 169	NFA	NFA			IV - 4.9	Building 57, Painting Operations	Building 57	E
SWMU 170	CSI	NFA	SCDHEC Itr 05/29/02		IV - 4.10	Drydock #1, PCB removal area	Drydock #1 area	E
SWMU 171	CSI	NFA	SCDHEC Itr 05/29/02		IV - 4.11	Drydock #2, PCB removal area	Drydock #2 area	E
SWMU 173	CSI	NFA	SCDHEC Itr 08/05/02		IV - 4.13	Building 1297, Storage Area	Building 1297	F
SWMU 174	NFA	NFA			IV - 4.14	Oil Blowdown Area, Building 97	Building 97	F
SWMU 175	RFI	NFA	USEPA Itr 05/07/03		IV - 4.15	Crane Painting Area	South of Building 1277	H
SWMU 176	NFA	NFA			IV - 4.16	Transformer Oil Leak, Near Building 657	Building 657	I
SWMU 177	CSI	NFA	SCDHEC Itr 10/22/02		IV - 4.17	RTC-4 Oil Spill	Building RTC-4	E
SWMU 178	CSI	NFA	SCDHEC Itr 12/20/2001		IV - 4.18	Site of Apparent Transformer Fire (Site ID 01822)	Building NS-53 Area	H
SWMU 180	NFA	NFA			IV - 4.20	Building 222, SAA	Building 222	E
SWMU 181	CSI	NFA	SCDHEC Itr 09/13/02		V - 4.1	SAA, Metal Trades	Pier C	E
SWMU 182	NFA	NFA			V - 4.2	Pier C, SAA	Pier C	E
SWMU 183	NFA	NFA			V - 4.3	Building 79A, SAA	Building 79A High Bay	E
SWMU 184	NFA	NFA			V - 4.4	Building 79A, SAA	Building 79A High Bay	E
SWMU 185	CSI	NFA			IV - 4.6	Sewer System		C
SWMU 186	NFA	NFA	SCDHEC Itr 06/28/01		V - 4.5	Building 58, SAA	Building 58, Outside	E
SWMU 187	NFA	NFA			V - 4.6	Paint Waste, SAA	Head of Drydock #5, North Side	E
SWMU 188	RFI	NFA			V - 4.7	SAA, Paint Waste	South Side of Drydock #5, Midway	E
SWMU 189	NFA	NFA	SCDHEC Itr 09/13/01		V - 4.8	Building 222 Fenced in Area, SAA	Building 222, Outside West End	E
SWMU 190	NFA	NFA			V - 4.9	Pier J, SAA	Pier J	E
SWMU 191	NFA	NFA			V - 4.10	Pier G, SAA	Pier G	E
SWMU 192	NFA	NFA			V - 4.11	Building 222, SAA	Building 222	E
SWMU 193	NFA	NFA			V - 4.12	Building 79A, SAA	Building 79A, Fenced in Area	K
SWMU 194	NFA	NFA			V - 4.13	Building 197, Paint Storage	Building 197, Short Stay	K
SWMU 195	NFA	NFA			V - 4.14	Building 207, Flammable Storage	Building 207, Short Stay	K
SWMU 197	CSI	NFA	SCDHEC Itr 7/20/06		None	Paint Storage Shed	Building 2532	K
SWMU 198	CSI	NFA	SCDHEC Itr 7/20/06		None	SAA	South of 6th Str across from BLDG 2532	F
SWMU 199	CSI	NFA	SCDHEC Itr 2/2/05		None	Building 189	Building 189	L
AOC 503		NFA	SCDHEC Itr 7/2/13		None	UXO Site South of Building 665	Building 189	L
AOC 504	RFI	NFA	SCDHEC Itr 7/20/01		II - 5.1	Railroad System	South of Bldg. 665	H
AOC 505	RFI	NFA	SCDHEC Itr 02/27/03		II - 5.2	Creosote Cross Tie/Ballast Storage Area	Basewide	A
AOC 506	CSI	NFA	SCDHEC Itr 6/18/99		II - 5.3	Flammable Storage Shelter	Building 1603 Area	A
AOC 507	CSI	NFA	SCDHEC Itr 4/15/97		II - 5.4	Oil Storehouse	North of Bldg. 1603	B
AOC 508	CSI	NFA	SCDHEC Itr 05/13/02		II - 5.5	Former Incinerator	Golf Course Area (1410)	B
AOC 509	NFA	NFA			II - 5.5	Hazardous/Flammable Storage	North of Avenue D	C
AOC 510	CSI	NFA	SCDHEC Itr 5/05/98		II - 5.6	Laboratory	Building 1079	C
AOC 511	CSI	NFA	SCDHEC Itr 05/13/02		II - 5.8	Oil House	Avenue H	C
							North of Bldg. 672	C

Appendix A-4
 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
 Requiring No Further Action

SWMU/AOC Number	Initial Status	Current Status	Documentation	Permit Effectiveness Date	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 512	CSI	NFA	SCDHEC Itr 3/17/99		II - 5.9	Former Incinerator	Building 1079	C
AOC 513	CSI	NFA	SCDHEC Itr 5/05/98		II - 5.10	Former Morgue	SE of Bldg. NH-45	C
AOC 514	NFA	NFA			II - 5.11	Flammable Storage	South of NH-55	C
AOC 515	CSI	NFA	SCDHEC Itr 5/05/98		II - 5.12	Former Incinerator and Paint Shop	Area West of Bldg. 233	C
AOC 516	RFI	NFA	SCDHEC Itr 5/25/01		I - 5.5	Building 233 Wash Area	Building 233	C
AOC 518	CSI	NFA	SCDHEC Itr 7/17/01		II - 5.14	Coal Storage Bins	Bldg. M-1257 Area	C
AOC 519	CSI	NFA	SCDHEC Itr 5/05/98		II - 5.15	Former Boilerhouse	East of Bldg. NH-55	C
AOC 520	CSI	NFA	SCDHEC Itr 5/05/98		II - 5.16	Former Garbage House	Building M-17 Area	C
AOC 521	NFA	NFA			II - 5.17	Former Oil Storehouse	Building M-1262 Area	C
AOC 522	CSI	NFA	SCDHEC Itr 5/05/98		II - 5.18	Grease and Wash Building	SW of Bldg. 198	C
AOC 524	NFA	NFA			II - 5.20	Substation, Building 415A	Building 198	E
AOC 527	NFA	NFA			II - 5.21	Transformer House	Building 2 Area	E
AOC 529	NFA	NFA			I - 5.8	Building 2A Coating and Spray Systems	Building 2A	E
AOC 532	NFA	NFA			II - 5.25	Sump Collection Vats	Building 2	E
AOC 533	NFA	NFA			II - 5.26	Switching Substation	SE Corner of Building 2	E
AOC 534	NFA	NFA			II - 5.27	Latrine	East of Building 2	E
AOC 535	NFA	NFA			II - 5.28	Latrine	East of Building 2	E
AOC 536	NFA	NFA			II - 5.29	Switching Substation	North of Building 74	E
AOC 537	CSI	NFA	SCDHEC Itr 09/24/02		II - 5.30	Substation	Building 342	E
AOC 538	RFI	NFA	SCDHEC Itr 05/22/03		I - 5.9	Building 6 Forge Shop	Building 6	E
AOC 539	RFI	NFA	SCDHEC Itr 05/22/03		II - 5.31	Propeller Shop	Building 6	E
AOC 545	NFA	NFA			I - 5.11	Building 3 Surface Coating	Building 3	E
AOC 547	NFA	NFA			II - 5.37	Fiberglass Shop	Building 5	E
AOC 555	CSI	NFA	SCDHEC Itr 6/7/13		II - 5.45	Former Latrine and Substation	SE Side of Bldg. 1119	E
AOC 556	RFI	NFA	SCDHEC Itr 6/7/13		I - 5.12	Dry Dock Discharges	Drydocks Discharge Areas	E
AOC 557	CSI	NFA	SCDHEC Itr 6/7/13		II - 5.46	Former Latrine	South of Drydock #1	E
AOC 558	CSI	NFA	SCDHEC Itr 07/25/02		II - 5.47	Substation	Building 77	E
AOC 560	CSI	NFA	USEPA Itr 10/24/02		II - 5.49	Disinfecter	South of Bldg. 32	E
AOC 565	NFA	NFA			II - 5.54	Temporary Coal Bin	End of Dry Dock #5	E
AOC 566	CSI	NFA	SCDHEC Itr 07/25/02		II - 5.55	Paint Shop Storage	Building 194	E
AOC 568	NFA	NFA			II - 5.57	Latrine, Pier 317	Besides Building 75	E
AOC 571	RFI	NFA	SCDHEC Itr 05/20/03		I - 5.13	Building 177 Paint Booths	Building 177	E
AOC 577	NFA	NFA			I - 5.16	Building 25 Paint Booth	Building 25	E
AOC 579	CSI	NFA	USEPA Itr 05/10/02		II - 5.64	Former Paint Shop	Building 1035	E
AOC 580	CSI	NFA	USEPA Itr 10/17/02		II - 5.65	Former Pattern and Electric Shop	South of Building 10	E
AOC 581	NFA	NFA			II - 5.66	Waterfront Substation and Radio Lab	Building 236 Area	E
AOC 582	NFA	NFA			II - 5.67	Substation	North of Building 236	E
AOC 583	RFI	NFA	SCDHEC Itr 09/05/02		II - 5.68	Northeast Corner of Building 236 (Site ID 16459)	Building 236	E
AOC 584	NFA	NFA			II - 5.69	Substation	South of Dry Dock #5	E
AOC 585	NFA	NFA			II - 5.70	Latrine	End of 5th Street and End of Pier 317-D	E
AOC 587	NFA	NFA			II - 5.72	Former Aviation Gas Storage	Building 21	E
AOC 588	NFA	NFA			I - 5.17	Building 218 Paint Booth	Building 218	E
AOC 589	NFA	NFA			II - 5.73	Substation	By River Road	E

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AOC 582	CSI	NFA	SCDHEC ltr 10/03/02		II - 5.76	Former Asbestos Shredding Shelter	South of Building 1760	E
AOC 584	NFA	NFA			II - 5.78	Radon Training & Offices	South of 317-E	E
AOC 595	NFA	NFA			II - 5.79	Oil & Paint Storehouse	SW of Building 101	E
AOC 600	NFA	NFA			II - 5.83	Coal and Oil Pier	North of Drydock #3	E
AOC 601	NFA	NFA			II - 5.84	Oil Pier(319)	End of 317-F	E
AOC 602	CSI	NFA	SCDHEC ltr 05/09/02		II - 5.85	Substation and Storage	Building 95	F
AOC 603	CSI	NFA	SCDHEC ltr 05/09/02		II - 5.86	Burning Dump	Drydock #3 Area	F
AOC 604	CSI	NFA	SCDHEC ltr 05/09/02		II - 5.87	Substation and Storage	Building 96	F
AOC 606	NFA	NFA			I - 5.19	Building 187 Paint Booth	Building 187	F
AOC 608	NFA	NFA			II - 5.89	Naval Exchange Storage Shed	Building 1263	F
AOC 609	RFI	NFA			I - 5.21	Building 1346 Gas Station	Building 1346	F
AOC 610	NFA	NFA	SCDHEC ltr 11/20/01		I - 5.22	Building 241 Paint Booth	Building 241	F
AOC 611	CSI	NFA	SCDHEC ltr 01/10/02		II - 5.90	Grease Rack and Hobby Shop	8th St. and Enterprise Ave	F
AOC 612	NFA	NFA			II - 5.91	Substation	SE on Building 1172	F
AOC 614	NFA	NFA			I - 5.23	Building 242 Paint Booth	Building 242	F
AOC 615	CSI	NFA	USEPA ltr 05/07/03		II - 5.93	Old Chain Locker	Building 255 Area	F
AOC 616	CSI	NFA	SCDHEC ltr 12/31/98		II - 5.94	Paint Shop	Building 69 Parking Lot	G
AOC 618	NFA	NFA			II - 5.98	Switching Substation	Building 466	G
AOC 619	CSI	NFA	SCDHEC ltr 9/18/01		II - 5.97	Oil Storage Yard	Bldgs. 1824 Area	G
AOC 628	CSI	NFA	SCDHEC ltr 01/16/02		II - 5.105	Sandblasting Area	SE of Building 68	G
AOC 630	NFA	NFA			II - 5.107	POL. Sampling/Test Building	Building 3913	G
AOC 632	NFA	NFA			II - 5.109	Substation	Building 124	G
AOC 634	CSI	NFA	SCDHEC ltr 07/16/01		II - 5.111	Flammable Material Storage	SW of Building 224	G
AOC 638	CSI	NFA	SCDHEC ltr 04/16/02		II - 5.115	Torpedo Workshop	Building 132	G
AOC 640	NFA	NFA			II - 5.116	Alcohol Storage	South of Building 132	G
AOC 642	CSI	NFA	USEPA ltr 03/05/02		II - 5.117	Fuel Oil Pier, Former Pier 322	Pier 336	G
AOC 643	CSI	NFA	USEPA ltr 07/31/02		II - 5.119	Former Pistol Range	Parking Lot, Building X-10	G
AOC 644	NFA	NFA			II - 5.120	Substation	Building 125	G
AOC 645	NFA	NFA			II - 5.121	Substation	Building 1793	H
AOC 647	NFA	NFA			II - 5.122	Transformer Vault	Building 3906S	H
AOC 648	NFA	NFA			II - 5.124	Transformer Vault	Building 3906R	H
AOC 649	NFA	NFA			II - 5.125	Transformer Vault	West of Building 672	H
AOC 652	NFA	NFA			I - 5.25	Paint Booth	Building 636	I
AOC 653	RFI	NFA	SCDHEC ltr 9/18/01			Hobby Shop	Building 1508	H
AOC 654	CSI	NFA	SCDHEC ltr 08/29/97			Septic Tank and Drain Field	Building 661 Area	H
AOC 655	CSI	NFA	SCDHEC ltr 06/21/99			Oil Spill Area	Building 656	H
AOC 656	CSI	NFA	SCDHEC ltr 09/04/98			Petroleum Spill	Between Bldgs 602 and NS-71	H
AOC 658	NFA	NFA			II - 5.132	Engine Overhaul Facility	Building 645	I
AOC 660	CSI	NFA			II - 5.133	Gas Storage	East of Bldg 1303	I
AOC 661	CSI	NFA	SCDHEC ltr 08/28/97		II - 5.135	Mosquito Control Facility	NW of Building NS-6	I
AOC 662	RFI	NFA	SCDHEC ltr 11/24/97		II - 5.136	Former Explosives Storage	South of Building 601	I
AOC 663	CSI	NFA	Sublette I. 6/24/2002		I - 5.27	Former Gasoline Station	Building NS-54	I
AOC 663	CSI	NFA	SCDHEC ltr 06/20/02		II - 5.137	Gas/Diesel Pumping Station	Building 851	I

Appendix A-4
 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
 Requiring No Further Action

SWMU/AOC Number	Initial Status	Current Status	Documentation	Permit Effectiveness Date	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 664	NFA	NFA			II - 5.138	Transformer Vault (X-33A)	Building X-33A	I
AOC 665	CSI	NFA	SCDHEC Itr 11/24/97		II - 5.139	Pyrotechnic Storage	Building 1889 and NS-46 Area	I
AOC 666	CSI	NFA	SCDHEC Itr 06/20/02		II - 5.140	Fuel Storage (Site ID 17787)	Building NS-45	H
AOC 667	RFI	NFA	SCDHEC Itr 01/16/04		I - 5.28	CBU Vehicle Maintenance Area	Building 1776	I
AOC 668	NFA	NFA			II - 5.141	Hazardous Material Storage	Building 1899	I
AOC 669	NFA	NFA			II - 5.142	Indoor Pistol Range	Building 1888	I
AOC 670	RFI	NFA	SCDHEC Itr 04/25/02		II - 5.143	Former Pistol Range	Field South of Bldg. 1897	I
AOC 671	CSI	NFA	USEPA Itr 03/28/02		II - 5.144	Former Skeet Range	Hobson and Holland St.	I
AOC 672	RFI	NFA	USEPA Itr 03/28/02		II - 5.145	Melting House	Building 169	I
AOC 673	CSI	NFA	USEPA Itr 03/28/02		II - 5.146	Paint and Oil Storehouse	Building 169	I
AOC 674	NFA	NFA			II - 5.147	Paint and Oil Storehouse	Building 169	I
AOC 675	CSI	NFA	USEPA Itr 03/28/02; SCDHEC 7/29/05		II - 5.148	Fuel Oil Storage (Site ID 02099)	Building RTC-4	K
AOC 676	CSI	NFA			II - 5.149	Former incinerator	Building NS-4	I
AOC 678	CSI	NFA	USEPA Itr 03/28/02		II - 5.150	Fire Fighting School	Building NS-2 Area	I
AOC 679	CSI	NFA	USEPA Itr 03/28/02		II - 5.151	Former Wash Rack	Building NS-1 Area	C
AOC 681	RFI	NFA	USEPA Itr 04/25/03		I - 5.30	Blast Booth Building 681	Building 681	E
AOC 682	NFA	NFA			I - 5.31	Spray Booth	Building 681	E
AOC 683	NFA	NFA			II - 5.153	Transformer Vault	Building 676 Area	E
AOC 684	RFI	NFA	SCDHEC Itr 04/25/03		II - 5.154	Former Outdoor Pistol Range	Building 1888	C
AOC 685	CSI	NFA	USEPA Itr 03/28/02		II - 5.155	Former Smoke Drum	West of Juneau Ave	I
AOC 686	NFA	NFA			II - 5.156	High Explosive Storage	Building X-54	H
AOC 687	CSI	NFA	USEPA Itr 03/28/02		II - 5.157	Ammunition Storage	Building X-55	H
AOC 688	CSI	NFA	USEPA Itr 03/28/02		II - 5.158	Ammunition Storage	Building X-56	F
AOC 691	RFI	NFA	SCDHEC Itr 6/7/13		II - 5.161	Waterfront	Waterfront	I
AOC 692	RFI	NFA	SCDHEC Itr 6/7/13		II - 5.162	Free Product Along Cooper River	Waterfront	F
AOC 695	CSI	NFA	SCDHEC Itr 6/7/13		II - 5.165	Electric locomotive Shed	Clouter Island	F
AOC 696	CSI	NFA	SCDHEC Itr 11/21/01		IV - 5.1	Transformer Area	Building 2509, Naval Annex	F
AOC 697	NFA	NFA			IV - 5.2	Transformer Area, MDMAG-11	Near Bldg. 2554	I
AOC 698	RFI	NFA	SCDHEC Itr 04/20/02		IV - 5.3	Boiler House, Naval Annex	Building 2508, Naval Annex	E
AOC 699	RFI	NFA	SCDHEC Itr 7/20/01		V - 5.1	Storm Sewer System	Basewide	F
AOC 700	RFI	NFA	SCDHEC Itr 05/10/02		V - 5.2	Golf Maintenance Building	Building 1646	I
AOC 701	CSI	NFA	SCDHEC Itr 11/18/02		V - 5.3	Former Gas Station	Building 1141	G
AOC 702	CSI	NFA	SCDHEC Itr 10/30/01		V - 5.4	Paint Accumulation Area	Pier D	H
AOC 703	CSI	NFA	SCDHEC Itr 10/30/01		V - 5.5	Paint Accumulation Area	Pier F	I
AOC 704	CSI	NFA	SCDHEC Itr 05/20/03		V - 5.6	Paint Accumulation Area	West of Building 301B	H
AOC 705	NFA	NFA			V - Add 1	Building 58 Spills	Building 58	
AOC 707	CSI	NFA	SCDHEC Itr 06/14/02		VI/Add III A.1	Diesel Fuel Oil Spill	North of Building 1795	
AOC 708	CSI	NFA	SCDHEC Itr 2/26/99		VI/Add III A.2	Petroleum Release	Transformer Pad Near Bldg. NS-668	
AOC 709 F**	CSI	NFA	SCDHEC letter 8/9/07		None	a identified during FDS Investigation, FDS Area 16 (Site ID 026)	Intersection of Ninth and Hobson	F
AOC 709 H	RFI	NFA	SCDHEC Itr 05/22/01		None	Other Impacted Area (G38 and G07)	Parking Lot next to Building 186	
AOC 710	CSI	NFA	SCDHEC Itr 04/30/03		None	FDS As Site	Site located at FDS wells 14A and 14B	
AOC 711	CSI	NFA	SCDHEC Itr 03/24/04		VI	Oil Water Separators at Facility 200	Facility 200	
AOC 712	CSI	NFA	SCDHEC Itr 09/24/04		VI	Oil Water Separator and Waste Oil Tank	Facility 240	

Appendix A-4
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SWMU/AOC Number	Initial Status	Current Status	Documentation	Permit Effectiveness Date	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 713	CSI	NFA	SCDHEC ltr 09/24/04		VI	Oil Water Separators at Facility 241	Facility 241	G
AOC 714	CSI	NFA	SCDHEC ltr 09/24/04		VI	Oil Water Separators at Facility 242	Facility 242	G
AOC 715	CSI	NFA	SCDHEC ltr 03/24/04		VI	Oil Water Separators at Facility 681	Facility 681	G
AOC 716	CSI	NFA	SCDHEC ltr 09/24/04		VI	Oil Water Separators at Facility 1024	Facility 1024	G
AOC 717	CSI	NFA	SCDHEC ltr 09/24/04		VI	Oil Water Separators at Facility 242	Facility 242	G
AOC 718	CSI	NFA	SCDHEC ltr 03/24/04		VI	Oil Water Separators at Facility 681	Facility 681	G
AOC 720	CSI	NFA	SCDHEC ltr 09/03/03		VI	Oil Water Separators at Building X-12	Building X-12	G
AOC 726	CSI	NFA	SCDHEC ltr 5/5/09			Suspected Contamination	Sewer Line near SWMU 9	
AOC 730	CSI	NFA	SCDHEC ltr 5/7/12		None	AST 601 (Site ID 01537)	Associated with Bldg NS 69	H
AOC 734	CSI	NFA	SCDHEC ltr 9/10/13		None	UST -Building 1279 (Site ID 15368)	Near Bldg 1279	E
AOC 736	CSI	NFA	SCDHEC ltr 2/13/02		None	Site 16 (Site ID 01251)	Building 224	G
AOC 739 **	CSI	NFA	SCDHEC ltr 9/6/07		None	AST 3909 (Site ID 01093), FDS Area 1 (Site ID 01180), 451-K	Area of AST 3909	G
AOC 740	CSI	NFA	SCDHEC ltr 9/6/07		None	Site 4, Building 640 (Site ID 00955)	Building 640	H
AOC 741	CSI	NFA	SCDHEC ltr 3/3/08		None	Building 661 (Site ID 14437)	Building 661	H
AOC 742 **	CSI	NFA	SCDHEC ltr 11/9/2001			FDS Areas 2-5 (Site ID 01181)	FDS Areas 2-6	H
AOC 743 **	CSI	NFA	SCDHEC ltr 11/19/1999			FDS Area 7 (Site ID 01182)	FDS Area 7	G
AOC 744 **	CSI	NFA	SCDHEC ltr 11/12/2001			FDS Area 8 (Site ID 01183)	FDS Area 8	G
AOC 745 **	CSI	NFA	SCDHEC ltr 11/14/2001			FDS Areas 9-10 (Site ID 01184)	FDS Area 9 and 10	G
AOC 746 **	CSI	NFA	SCDHEC ltr 11/16/1998			FDS Area 11 (Site ID 01185)	FDS Area 11	G
AOC 747 **	CSI	NFA	SCDHEC ltr 11/14/2001			FDS Area 12, 13, 14 (Site ID 01186)	FDS Area 12, 13, 14	G
AOC 748 **	CSI	NFA	SCDHEC ltr 4/11/2000			FDS Area 15 (Site ID 01187)	FDS Area 15	G
AOC 749 **	CSI	NFA	SCDHEC ltr 4/13/2004			FDS Area 17 (Site ID 02207)	FDS Area 17	F
AOC 750 **	CSI	NFA	SCDHEC ltr 11/19/1999			FDS Area 18 (Site ID 01188)	FDS Area 18	F
AOC 751 **	CSI	NFA	SCDHEC ltr 10/28/2002			FDS Area 19 (Site ID 01189)	FDS Area 19	G
AOC 752 **	CSI	NFA	SCDHEC ltr 9/30/2002			FDS Area 20 (Site ID 01190)	FDS Area 20	G
AOC 753 **	CSI	NFA	SCDHEC ltr 11/19/2001			FDS Area 21 (Site ID 01144)	FDS Area 21	G
AOC 754	CSI	NFA	SCDHEC ltr 5/27/2009		None	NS-3 (Site ID 00961)	FDS Area 21	G
Zone J		NFA	SCDHEC ltr 6/7/13			Waterbodies surrounding CNC	Waterbodies surrounding CNC	I

*AOC 709 is listed twice because it is located over two zones and the two sections were investigated separately

Appendix A-5
 Solid waste Management Units (SWMUs) and Areas of Concern (AOCs)
 Closed as Regulated Units

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
SWMU 10	RU	Clean CLOSED		1991 RFA	Hazardous Waste Storage	Building 246	G
SWMU 40	RU	Clean CLOSED		1 - 4.3	Hazardous Waste Storage	Building 1640	A

Appendix A-6
Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
Addressed as Petroleum Sites

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone	Restriction
AOC 178	CSI	A-4	SCDHEC tr 12/20/2001	IV - 4 18	Site of Apparent Transformer Fire (Site ID 01822)	Building NS-53 Area	H	
AOC 622	CSI	A-4	SCDHEC tr 3/20/98	II - 5 100	Ballast Water Treatment Facility	NSC Fuel Farm	G	
AOC 623	CSI	A-4	SCDHEC tr 3/20/98	II - 5 101	Storage Concrete Tank	Building 96	G	
AOC 624	RFI	A-4	SCDHEC tr 3/20/98	II - 5 102	Fuel Oil Booster Pumphouse	Building 98	G	
AOC 625	CSI	A-4	SCDHEC tr 3/20/98	II - 5 103	Sledge Pumphouse	Building 3901B	G	
AOC 626	RFI	A-4	SCDHEC tr 3/20/98	I - 5 24	NSC Fuel Farm	Fuel Farm Area	G	
AOC 627	RFI	A-4	SCDHEC tr 3/20/98	II - 5 104	Oil Spill Area	Hobson and Viaduct Roads	G	
AOC 629	CSI	A-4	SCDHEC tr 3/20/98	II - 5 106	Unloading Facility	Building 3913	G	
AOC 631	RFI	A-4	SCDHEC tr 7/20/01	II - 5 108	Fueling per Kilo	Per Kilo	G	
AOC 641	CSI	A-4	SCDHEC tr 3/20/98	II - 5 116	Stripper Pumphouse	Base of Building 336	G	
AOC 643	CSI	A-4	USEPA tr 07/31/02	II - 5 120	Substation	Building 125	G	
AOC 646	CSI	A-4	SCDHEC tr 03/20/01	II - 5 123	Operational Storage	Building 3906Q, Chicago	G	
AOC 653	RFI	A-4	SCDHEC tr 9/18/01	II - 5 123	Hobby Shop	Building 1508	H	
AOC 654	CSI	A-4	SCDHEC tr 08/29/97	II - 5 123	Septic Tank and Drain Field	Building 661 Area	H	
AOC 655	CSI	A-4	SCDHEC tr 06/21/99	II - 5 123	Oil Spill Area	Building 659	H	
AOC 656	CSI	A-4	SCDHEC tr 09/04/98	II - 5 123	Operational Storage	Between Bldgs 602 and NS-71	H	
AOC 659	CSI	LTM	SCDHEC tr 9/28/97	II - 5 134	Petroleum Spill	Building 14	H	
AOC 662	RFI	A-4	tr 02/4/2002	II - 5 134	Operational Storage	Building 14	H	
AOC 666	CSI	A-4	SCDHEC tr 06/20/02	I - 5 27	Desal Storage (Site ID 01311)	Building 14	H	
AOC 675	CSI	A-4	USEPA tr 03/28/02, SCDHEC 7/29/05	II - 5 140	Former Gasoline Station	Building NS-54	H	
AOC 678	CSI	A-4	USEPA tr 03/28/02	II - 5 140	Fuel Storage (Site ID 17787)	Building NS-45	H	
AOC 679	CSI	A-4	USEPA tr 03/28/02	II - 5 148	Fuel Oil Storage (Site ID 02099)	Building NS-4	I	
AOC 679	RFI	A-4	5/27/09 SCDHEC letter	II - 5 149	Former Incinerator	Building NS-2 Area	I	
AOC 709**	CSI	A-4	4/12/2010 permit application	I - 5 20	Building NS-2 Grounds (Site ID 17595)	Building NS-2	I	
AOC 727	CSI	LTM	4/12/2010 permit application	None	Area identified during FDS Investigation, FDS Area 18 (Site ID 02088)	Intersection of Ninch and Hobson	F	
AOC 728	CSI	LTM	4/12/2010 permit application	None	UST Site 30, NH 46-5 (Site ID 01206)	Chocora Tank Farm	C	
AOC 729	CSI	LTM	4/12/2010 permit application	None	UST Site 25, 1346-H (Site ID 14087)	Near Bldg. 1346	F	
AOC 730	CSI	NFA 5/7/12	4/12/2010 permit application	None	UST NS 26A (Site ID 06944)	Adjacent to Bldg NS 26	I	
AOC 731	CSI	Investigation	4/12/2010 permit application	None	UST 601 (Site ID 01537)	Associated with Bldg NS 69	H	
AOC 732**	CSI	LTM	4/12/2010 permit application	None	UST 6A-B (Site ID 17620)	Near Bldg 6	E	
AOC 733	CSI	A-6	4/12/2010 permit application	None	FDS Z2 (Site ID 02401)	Near Bldg 451 C	G	
AOC 734	CSI	A-4	NFA 9/10/13 letter	None	Chocora AS1s (Site ID 13350)	Chocora Tank Farm	G	
AOC 735**	CSI	Investigation	DHEC 4/25/14 letter	None	UST Building 1279 (Site ID 15358)	Near Bldg. 1279	E	
AOC 736**	CSI	A-8	DHEC 4/25/14 letter	None	Newly Identified Release at Bldg NH68 (Site ID 02359)	Near Bldg NH68	A	
AOC 737**	CSI	A-8	DHEC 8/23/13 letter	None	FDS Site 7A	Veteran's Terminal	E	
AOC 738	CSI	A-4	SCDHEC letter 12/13/02	None	FDS Site near Building 83A	Along Hobson Ave. near Building 68A	F	
AOC 739**	CSI	A-4	SCDHEC letter 8/6/07	None	Site 16 (Site ID 01231)	Building 224	G	
AOC 740	CSI	A-4	SCDHEC letter 8/6/07	None	AST 3909 (Site ID 01893), FDS Area 1 (Site ID 01190), 451-K	Area of AST 3909	G	
AOC 741**	CSI	A-4	SCDHEC letter 3/3/08	None	Site 4, Building 640 (Site ID 00955)	Building 640	H	
AOC 742**	CSI	A-4	SCDHEC letter 11/6/2001	None	Building 661 (Site ID 14437)	Building 661	H	
AOC 743**	CSI	A-4	SCDHEC letter 11/19/1999	None	FDS Areas 2-6 (Site ID 01181)	FDS Areas 2-6	G	
AOC 744**	CSI	A-4	SCDHEC letter 11/17/2001	None	FDS Area 7 (Site ID 01182)	FDS Area 7	G	
AOC 745**	CSI	A-4	SCDHEC letter 11/14/2001	None	FDS Area 8 (Site ID 01183)	FDS Area 8	G	
AOC 746**	CSI	A-4	SCDHEC letter 11/16/1998	None	FDS Areas 9-10 (Site ID 01184)	FDS Area 9 and 10	G	
AOC 747**	CSI	A-4	SCDHEC letter 11/14/2001	None	FDS Area 11 (Site ID 01185)	FDS Area 11	G	
AOC 748**	CSI	A-4	SCDHEC letter 4/17/2000	None	FDS Area 12, 13, 14 (Site ID 01186)	FDS Area 12, 13, 14	G	
AOC 749**	CSI	A-4	SCDHEC letter 4/17/2000	None	FDS Area 15 (Site ID 01187)	FDS Area 15	G	
AOC 750**	CSI	A-4	SCDHEC letter 4/17/2000	None	FDS Area 17 (Site ID 02207)	FDS Area 17	F	
AOC 751**	CSI	A-4	SCDHEC letter 11/19/1999	None	FDS Area 18 (Site ID 01188)	FDS Area 18	G	
AOC 752**	CSI	A-4	SCDHEC letter 10/28/2002	None	FDS Area 19 (Site ID 01189)	FDS Area 19	G	
AOC 753**	CSI	A-4	SCDHEC letter 9/30/2002	None	FDS Area 20 (Site ID 01190)	FDS Area 20	G	
AOC 754	CSI	A-4	SCDHEC letter 11/18/2001	None	FDS Area 21 (Site ID 01144)	FDS Area 21	G	
AOC 755	CSI	Investigation	SCDHEC letter 5/27/2009	None	NS-3 (Site ID 00961)	Building NS-3	I	
AOC 755	CSI	Investigation	9/20/2002 MCA	None	UST NS-4A (Site ID 17778)	Building NS-4A	I	

**AOC 709 is listed twice because it is located over two zones and the two sections were investigated separately

***While individual spills of the FDS have been cleaned up and NF-Aed, the lines are still in place. Property Owners should be notified as appropriate

Appendix A-7
 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
 Requiring Corrective Measures Study (CMS)

SWMU/AOC Number	Initial Status	Current Status	Documentation	RFA Volume / Section Number	SWMU/AOC Name	Location	Study Zone
AOC 523	CSI	CMS		II - 5.19	Gas Station Storage	Building 198	C
AOC 721*	RFI	CMS		None	Coal Storage Area Runoff	Area next to Noisette Creek in Zone C	C
AOC 689	RFI	CMS		II - 5.159	Southern Tip of Base (Marina Parking Area)	Southern Tip of Base	J
AOC 690	CSI	CMS		II - 5.160	Dredge Materials Area	South End of Base	J

*Subject to Interim Land Use Controls

Appendix A-8
Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
Requiring Land Use Controls (LUCs)

SWMU/AOC Number	Initial Status	Current Status	Reference	Permit Effectiveness Date	SWMU/AOC Name	Location	Study Zone	Restriction
SWMU 3	RFI	CHI	Corrective Measures Study Report (03/02/04), Statement of Basis (06/05)		Periscope Mazing Area	Building 249	G	D,U,W
SWMU 5	RFI	CHI	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		Battery Electrolyte Treatment Area	Building 1787 Area	E	D,U,W
SWMU 6	RFI	CHI	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		Public Works Storage Yard (Old Corral)	Old Corral SW of Bldg 380	G	W
SWMU 7	RFI	CHI	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		PCB Transformation Storage Yard	Old Corral SW of Bldg 380	G	W
SWMU 8	RFI	CHI	Corrective Measures Study Report (08/14/03), Statement of Basis (06/05)		Oil Storage Pad	Parking Area SW of Bldg. 161	G	D,U,W
SWMU 9	RFI	CHI	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Closed Landfill	Open Area Between Barbours and West Road	H	D,U,W
SWMU 17	RFI	CHI	Corrective Measures Study Report (05/11/06), Statement of Basis (06/05)		Oil Spill Area	North Side of Building 61	H	D,U,W
SWMU 18	RFI	CHI	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		PCB Spill Area	Building 1278	E	D,U,W
SWMU 19	RFI	CHI	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Solid Waste Transfer Station	West of Least Tern Lane	H	D,U,W
SWMU 20	RFI	CHI	Corrective Measures Study Report (03/05/04), Statement of Basis (06/05)		Waste Disposal Area	NE of Building 903	H	D,U,W
SWMU 21	RFI	CHI	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Waste Part Storage Pad	Facility 1275 Area	E	D,U,W
SWMU 22	RFI	CHI	Corrective Measures Study Report (08/06/03), Statement of Basis (06/05)		Old Plating Shop Wastewater Treatment System	Alley Between Bldgs. 5 and 44	E	D,U,W
SWMU 23	RFI	CHI	Corrective Measures Study Report (07/03/03), Statement of Basis (06/05)		New Plating Shop Wastewater Treatment System	Building 226	E	D,U,W
SWMU 24	RFI	CHI	Corrective Measures Study Report (07/03/03), Statement of Basis (06/05)		Waste Oil Reclamation Facility	Fuel Farm Area	E	D,U,W
SWMU 25	RFI	CHI	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Building 44, Old Plating Operation	Building 44	G	D,U,W
SWMU 36	RFI	CHI	Corrective Measures Study Report (09/19/03), Statement of Basis (06/05)		PCB Down Storage	Building 68	F	D,U,W
SWMU 39	RFI	CHI	Corrective Measures Study Report (06/25/03), Statement of Basis (06/05)		Former Abrasive Blast Area	North of Bldg. 1604	A	D,U,W
SWMU 53	RFI	CHI	Corrective Measures Study Report (09/05/03), Statement of Basis (06/05)		Battery Charging Station	Building 212	E	D,U,W
SWMU 54	RFI	CHI	Corrective Measures Study Report (01/06/04), Statement of Basis (06/05)		Lead Storage Area	Building 1275 Area	E	D,U,W
SWMU 63	CSI	CHI	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Mercury Gauge Room	Building 226 Area	E	D,U,W
SWMU 65	RFI	CHI	Corrective Measures Study Report (07/03/03), Statement of Basis (06/05)		De Tank Area	Building 221	E	D,U,W
SWMU 67	CSI	CHI	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Foundry	Building 3	E	D,U,W
SWMU 70	RFI	CHI	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Lead Storage	Building 9	E	D,U,W
SWMU 83	RFI	CHI	Corrective Measures Study Report (01/22/04), Statement of Basis (06/05)		Less than 90 Dgt Accumulation Area	Building 9	E	D,U,W
SWMU 84	RFI	CHI	Corrective Measures Study Report (01/22/04), Statement of Basis (06/05)		Mercury Spill Area	Building 80	E	D,U,W
SWMU 87	CSI	CHI	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Mercury Spill Area	Building 79	E	D,U,W
SWMU 102	CSI	CHI	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Concrete PM	Building 801	H	D,U,W
SWMU 121	RFI	CHI	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Automobile Services Shop	North of Building 2513	K	U,W
SWMU 163	CSI	CHI	Corrective Measures Study Report (11/06/07), Statement of Basis (10/10)		SA, Building 222	Blairside, Naval Annex	K	U,W
SWMU 166	RFI	CHI	Corrective Measures Study Report (11/06/07), Statement of Basis (10/10)		Building 80, Steam Cleaning Operations	Building 80	E	D,U,W
SWMU 172	CSI	CHI	No Further Investigation Request (01/15/12), Statement of Basis (02/01/16)		Building 1838	Area behind Building 1838	E	E
SWMU 179	CSI	CHI	Corrective Measures Study Report (10/21/04), Statement of Basis (06/05)		UXO Site Between Piers S and T	Between Piers S and T	J	D
SWMU 196	RFI	CHI	Statement of Basis (10/10)		UXO Site East of X-54	In Cooper River, East of X-54	J	D
AOC 500	CHI	CHI	Statement of Basis (10/10)		UXO Site Between Piers G and H	Between Piers G and H	J	D
AOC 501	CHI	CHI	Statement of Basis (10/10)		Indoor Firing Range	Building 14, 192	C	E
AOC 502	CHI	CHI	Statement of Basis (10/10)		Paint Shop, Building 223	Building 223	E	D,U,W
AOC 517	CSI	CHI	Corrective Measure Study Work Plan (6/11/13), Statement of Basis (9/20/16)		Building 212 Paint Area	Building 212	E	D,U,W
AOC 525	RFI	CHI	Corrective Measures Study Report (04/21/04), Statement of Basis (06/05)		Steam Cleaning Shop	Building 59	E	D,U,W
AOC 526	RFI	CHI	Corrective Measures Study Report (09/05/03), Statement of Basis (06/05)		Part and Oil Storage	Building 35	E	D,U,W
AOC 528	CSI	CHI	Corrective Measures Study Report (02/13/03), Statement of Basis (06/05)		Substation and Storage	Building 459	E	D,U,W
AOC 530	CSI	CHI	Corrective Measures Study Report (10/24/02), Statement of Basis (06/05)		Oil Storage Shops	NE Corner of Building 3	E	D,U,W
AOC 531	CSI	CHI	Corrective Measures Study Report (10/24/02), Statement of Basis (06/05)		Old DryAcetylene Plant and Plant Shop	Between Bldgs. 6 and 226	E	D,U,W
AOC 540	CSI	CHI	Corrective Measures Study Report (09/05/03), Statement of Basis (06/05)		Former Building 1026	Building 226 Area	E	D,U,W
AOC 541	CSI	CHI	Corrective Measures Study Report (09/05/03), Statement of Basis (06/05)		Building 221 Preating Plant	Building 221	E	D,U,W
AOC 542	CSI	CHI	Corrective Measures Study Report (09/05/03), Statement of Basis (06/05)				E	D,U,W
AOC 543	CSI	CHI	Corrective Measures Study Report (09/05/03), Statement of Basis (06/05)				E	D,U,W
AOC 544	RFI	CHI	Corrective Measures Study Report (14/27/04), Statement of Basis (06/05)				E	D,U,W

Appendix A-8
Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)
Requiring Land Use Controls (LUCs)

SWMU/AOC Number	Initial Status	Current Status	Reference	Permit Effluent/Date	SWMU/AOC Name	Location	Study Zone	Restriction
AOC 546	CSI	CMH	Corrective Measures Study Report (4/27/04), Statement of Basis (8/06)		Galvanizing Shop	Between Bldgs. 56 and 74	E	DEUW
AOC 548	CSI	CMH	Corrective Measures Study Report (09/20/03), Statement of Basis (06/05)		Building 5 Elevator	Building 5	E	DEUW
AOC 549	RFI	CMH	Corrective Measures Study Report (09/20/03), Statement of Basis (06/05)		Scrap Yard 1054	Building 5 Area	E	DEUW
AOC 550	CSI	CMH	Corrective Measures Study Report (10/23/03), Statement of Basis (06/05)		Boilerhouse	SW of Building 52	E	DEUW
AOC 551	CSI	CMH	Corrective Measures Study Report (10/23/03), Statement of Basis (06/05)		Boilerhouse	Pier 314	E	DEUW
AOC 552	CSI	CMH	Corrective Measures Study Report (10/23/03), Statement of Basis (06/05)		Former Galvanizing Shop	NE Corner of Dry Dock #1	E	DEUW
AOC 553	CSI	CMH	Corrective Measures Study Report (09/20/03), Statement of Basis (06/05)		Former Paint Shop	Between Bldgs. 5 and 44	E	DEUW
AOC 554	RFI	CMH	Corrective Measures Study Report (04/02/03), Statement of Basis (06/05)		Central Power Station	Building 32	E	DEUW
AOC 555	RFI	CMH	Corrective Measures Study Report (05/07/03), Statement of Basis (06/05)		Substation, Building 451B	Building 451B	E	DEUW
AOC 556	CSI	CMH	Corrective Measures Study Report (02/13/03), Statement of Basis (06/05)		Substation	Building 84	E	DEUW
AOC 557	CSI	CMH	Corrective Measures Study Report (06/21/03), Statement of Basis (06/05)		Former Locomotive House	Building 177 Area	E	DEUW
AOC 558	CSI	CMH	Corrective Measures Study Report (09/20/03), Statement of Basis (06/05)		Oil/Water Separator	North Side Building 80	E	DEUW
AOC 559	RFI	CMH	Corrective Measures Study Report (10/25/02), Statement of Basis (06/05)		Substation	East of Building 195	E	DEUW
AOC 560	RFI	CMH	Corrective Measures Study Report (05/26/04), Statement of Basis (06/05)		Gasoline Station and Oil Storage	SW Corner of Building 30	E	DEUW
AOC 561	RFI	CMH	Corrective Measures Study Report (07/29/04), Statement of Basis (06/05)		Former Coal Storage Area	Building 1198 Area	E	DEUW
AOC 562	RFI	CMH	Corrective Measures Study Report (10/17/02), Statement of Basis (06/05)		Building 177 Motor Area	Building 177	E	DEUW
AOC 563	RFI	CMH	Corrective Measures Study Report (01/22/04), Statement of Basis (06/05)		Anodizing Process Area	Building 177	E	DEUW
AOC 564	RFI	CMH	Corrective Measures Study Report (09/26/02), Statement of Basis (06/05)		Building 9 Fuel Tank (Site ID 17654)	Building 9	E	DEUW
AOC 565	RFI	CMH	Corrective Measures Study Report (07/17/02), Statement of Basis (06/05)		Substation, Building 454	Building 9	E	DEUW
AOC 566	RFI	CMH	Corrective Measures Study Report (07/29/04), Statement of Basis (06/05)		Oil and Paint Storehouse/Paint Office	Building 60 Area	E	DEUW
AOC 567	RFI	CMH	Corrective Measures Study Report (03/17/03), Statement of Basis (06/05)		Transportation Shop and Garage	Building 25	E	DEUW
AOC 568	RFI	CMH	Corrective Measures Study Report (08/05/03), Statement of Basis (06/05)		Temporary Powerhouses	SE of Building 11	E	DEUW
AOC 569	RFI	CMH	Corrective Measures Study Report (06/30/03), Statement of Basis (06/05)		Alley Between Bldgs 79 & 1760	Between Bldgs. 79 & 1760	E	DEUW
AOC 570	RFI	CMH	Corrective Measures Study Report (08/05/03), Statement of Basis (06/05)		Former Torpedo Storage	Building 101 Area	E	DEUW
AOC 571	RFI	CMH	Corrective Measures Study Report (06/16/03), Statement of Basis (06/05)		Substation	Building 91	E	DEUW
AOC 572	RFI	CMH	Corrective Measures Study Report (08/16/03), Statement of Basis (06/05)		Sonar Dome Area	End of Pier J	E	DEUW
AOC 573	RFI	CMH	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		Pier J Pump House	Pier J	E	DEUW
AOC 574	RFI	CMH	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		Waste Part Storage Pad	Drydock #4 Area	E	WUD
AOC 575	RFI	CMH	Corrective Measures Study Report (11/14/03), Statement of Basis (06/05)		Building 1189 Dry Cleaning	Building 1189	F	DEUW
AOC 576	RFI	CMH	Corrective Measures Study Report (03/07/03), Statement of Basis (06/05)		Old Locomotive Repair Shop	Building 242 Area	F	DEUW
AOC 577	RFI	CMH	Corrective Measures Study Report (09/30/03), Statement of Basis (06/05)		Galvanizing Plant	Building 68A Area	F	DEUW
AOC 578	RFI	CMH	Corrective Measures Study Report (09/19/03), Statement of Basis (06/05)		Battery Shop	Building 68	F	DEUW
AOC 579	RFI	CMH	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		Battery Cracking Area	Building 68 Area	F	DEUW
AOC 580	RFI	CMH	Corrective Measures Study Report (07/30/04), Statement of Basis (06/05)		Substation	Building 451C	F	W
AOC 581	RFI	CMH	Corrective Measures Study Report (01/16/04), Statement of Basis (06/05)		Paint and Oil Storehouses	Building 3902	G	DEUW
AOC 582	RFI	CMH	Corrective Measures Study Report (08/14/03), Statement of Basis (06/05)		Torpedo Magazine	Building 161	G	DEUW
AOC 583	RFI	CMH	Corrective Measures Study Report (09/14/03), Statement of Basis (06/05)		Dump Area	Building 161 Area	G	DEUW
AOC 584	RFI	CMH	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Brasswell Shipyard Storage Area	East of Building 672	H	DEUW
AOC 585	RFI	CMH	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Metal Trades Storage Area	East of Building 672	H	DEUW
AOC 586	RFI	CMH	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Sandblasters Storage Area	East of Building 672	H	DEUW
AOC 587	RFI	CMH	Corrective Measures Study Report (05/09/03), Statement of Basis (06/05)		Brake Repair and Welding Area	Building NS-26 Area	I	DEUW
AOC 588	RFI	CMH	Corrective Measure Study Report (10/20/13 and 5/20/14), Statement of Basis (9/20/16)		Fuse and Primer House	Couster Island	K	DW
AOC 589	RFI	CMH	Corrective Measure Study Report (10/20/13 and 5/20/14), Statement of Basis (9/20/16)		Former Naval Ammunition Depot	Couster Island	K	DW
AOC 590	RFI	CMH	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Area behind Building 246	Building 246 Area	K	WU
AOC 591	RFI	CMH	2010 Base-wide GW Monitoring Report (07/26/2011), Statement of Basis (9/20/16)		Grid West L11	West of Building 28	I	D.U
AOC 592	RFI	CMH	Corrective Measures Study Report (10/10/05), Statement of Basis (8/06)		None	Pier Booths and Related Operations	I	DEUW
AOC 593	RFI	CMH	Corrective Measures Study Report (03/05/04), Statement of Basis (05/14/04)		Utility Corridor	Between Bldg 650 and Balmainbridge Ave.	H	DEUW
AOC 594	RFI	CMH	SCDHEC license (NFA 423107) within Zone E, Statement of Basis (08/07)		Building 97	Building 97	E	DEUW
AOC 595	RFI	LUC	4/12/2010 permit application		Chocoma A51s (Site ID 13350)	Chocoma Tank Farm	G	W
AOC 596	RFI	LUC	DHEC 4/28/14 letter, Statement of Basis (9/20/16)		FDS Site 7A	Veterian's Terminal	E	D.UW
AOC 597	RFI	LUC	DHEC 8/23/13 letter, Statement of Basis (9/20/16)		FDS Site near Building 69A	Along Hobson Ave. near Building 69A	F	D.UW
AOC 598	RFI	LUC	Corrective Measures Implementation Plan (8/13/2007), Statement of Basis (10/10)		All areas within LUC Zone E	All areas within LUC Zone E	E	DEUW

APPENDIX B - RCRA FACILITY INVESTIGATION (RFI) WORKPLAN OUTLINE

IV. RFI WORKPLAN REQUIREMENTS

The Permittee shall prepare a RCRA Facility Investigation (RFI) Workplan that meets the requirements of Part II of this appendix and the RFI Guidance, EPA-530/SW-89-031. This workplan shall also include the development of the following plans, which shall be prepared concurrently:

a. Project Management Plan

Permittee shall prepare a Project Management Plan that will include a discussion of the technical approach, schedules and personnel. The Project Management Plan will also include a description of qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RCRA Facility Investigation.

b. Sampling and Analysis Plan(s)

The Permittee shall prepare a plan to document all monitoring procedures: field sampling, sampling procedures and sample analysis performed during the investigation to characterize the environmental setting, source, and releases of hazardous constituents, so as to ensure that all information and data are valid and properly documented. The Sampling Strategy and Procedures shall be in accordance with EPA Region 4 Environmental Compliance Branch's Standard Operating Procedure and Quality Assurance Manual (SOP) (most recent version). Any deviations from this reference must be requested by the applicant and approved by the Department. The Sampling and Analysis Plan must specifically discuss the following unless the SOP procedures are specifically referenced.

i. Sampling Strategy

1. Selecting appropriate sampling locations, depths, etc.;
2. Obtaining all necessary ancillary data;
3. Determining conditions under which sampling should be conducted;
4. Determining which media are to be sampled (e.g., groundwater, air, soil, sediment, subsurface gas);
5. Determining which parameters are to be measured and where;
6. Selecting the frequency of sampling and length of sampling period;
7. Selecting the types of samples (e.g., composites vs. grabs) and number of samples to be collected.

ii. Sampling Procedures

1. Documenting field sampling operations and procedures, including;

- a. Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, preservatives, and absorbing reagents);
 - b. Procedures and forms for recording the exact location and specific considerations associated with sample acquisition;
 - c. Documentation of specific sample preservation method;
 - d. Calibration of field instruments;
 - e. Submission of field-biased blanks, where appropriate;
 - f. Potential interferences present at the facility;
 - g. Construction materials and techniques, associated with monitoring wells and piezometers;
 - h. Field equipment listing and sampling containers;
 - i. Sampling order; and
 - j. Decontamination procedures.
2. Selecting appropriate sample containers;
 3. Sampling preservation; and
 4. Chain-of-custody, including:
 - a. Standardized field tracking reporting forms to establish sample custody in the field prior to shipment; and
 - b. Pre-prepared sample labels containing all information necessary for effective sample tracking.

iii. Sample Analysis

Sample analysis shall be conducted in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) (most recent version). The sample analysis section of the Sampling and Analysis Plan shall specify the following:

1. Chain-of-custody procedures, including:
 - a. Identification of a responsible party to act as sampling custodian at the laboratory facility authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
 - b. Provision for a laboratory sample custody log consisting of serially numbered standard lab tracking report sheets; and

- c. Specification of laboratory sample custody procedures for sample handling, storage, and dispersement for analysis.
2. Sample storage;
3. Sample preparation methods;
4. Analytical Procedures, including:
 - a. Scope and application of the procedure;
 - b. Sample matrix;
 - c. Potential interferences;
 - d. Precision and accuracy of the methodology; and
 - e. Method detection limits.
5. Calibration procedures and frequency;
6. Data reduction, validation and reporting;
7. Internal quality control checks, laboratory performance and systems audits and frequency, including:
 - a. Method blank(s);
 - b. Laboratory control sample(s);
 - c. Calibration check sample(s);
 - d. Replicate sample(s);
 - e. Matrix-spiked sample(s);
 - f. "Blind" quality control sample(s);
 - g. Control charts;
 - h. Surrogate samples;
 - i. Zero and span gases; and
 - j. Reagent quality control checks.
8. External quality control checks by the Department, including:
 - a. Spikes and blanks at sampling events for which the Department or its technical representative provides oversight; and
 - b. The equivalent of a CLP data package for samples split with the Department or for which the Department specifically requests the package.
9. Preventive maintenance procedures and schedules;
10. Corrective action (for laboratory problems); and
11. Turnaround time.

c. Data Management Plan

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This plan shall identify and set up data documentation materials and procedures, project file requirements, and project related progress reporting procedures and documents. The plan shall also provide the format to be used to present the raw data and conclusions of the investigation.

- i. 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 number;
 - e. Property or component measures; and
 - f. Result of analysis (e.g. concentration).
- ii. Tabular Displays - The following data shall be presented in tabular displays:
 1. Unsorted (raw) data;
 2. Results for each medium, or for each constituent monitored;
 3. Data reduction for statistical analysis, as appropriate;
 4. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and
 5. Summary data
- iii. 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 transits, three dimensional graphs, etc.):
 1. Display sampling location and sampling grid;
 2. Indicate boundaries of sampling area, and area where more data are required;
 3. Display geographical extent of contamination;
 4. Illustrate changes in concentration in relation to distances from the source, time, depth or other parameters; and
 5. Indicate features affecting inter media transport and show potential receptors.

V. RCRA Facility Investigation (RFI) Requirements

RCRA Facility Investigation:

The Permittee shall conduct those investigations necessary to: characterize the facility (Environmental Setting); define the source (Source Characterization); define the degree and extent of release of hazardous constituents (Contamination Characterization); and identify actual or potential receptors.

The investigations should result in data of adequate technical content and quality to support the development and evaluation of the corrective action plan if necessary. The information contained in previously developed documents such as a RCRA Part B permit application and/or RCRA Section 3019 Exposure Information Report may be referenced as appropriate, but must be summarized in both the RFI Workplan and RFI Report.

All sampling and analyses shall be conducted in accordance with the Sampling and Analysis Plan. All sampling locations shall be documented in a log and identified on a detailed site map.

a. Environmental Setting

The Permittee shall collect information to supplement and/or verify Part B information on the environmental setting at the facility. The Permittee shall characterize the following as they relate to identified sources, pathways and areas of releases of hazardous constituents from Solid Waste Management Units.

i. Hydrogeology

The Permittee shall conduct a program to evaluate hydrogeologic conditions at the facility. This program shall provide the following information:

1. A description of the regional and facility specific geologic and hydrogeologic characteristics affecting ground-water flow beneath the facility, including:
 - a. Regional and facility specific stratigraphy: description of strata including strike and dip, identification of stratigraphic contacts;
 - b. Structural geology: description of local and regional structural features (e. g., folding, faulting, tilting, jointing, etc.);
 - c. Depositional history;
 - d. Regional and facility specific ground-water flow patterns; and
 - e. Identification and characterization of areas and amounts of recharge and discharge.
2. An analysis of any topographic features that might influence the ground-water 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 (i. e., the aquifers and any intervening saturated and unsaturated units), including:

- a. Hydraulic conductivity and porosity (total and effective);
 - b. Lithology, grain size, sorting, degree of cementation;
 - c. An interpretation of hydraulic interconnections between saturated zones; and
 - d. The attenuation capacity and mechanisms of the natural earth materials (e. g., ion exchange capacity, organic carbon content, mineral content etc.).
4. Based on data obtained from groundwater monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source, 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, for example, due to tidal or seasonal influences.
5. A description of man-made influences that may affect the hydrology of the site, identifying:
- a. Local water-supply and production wells with an approximate schedule of pumping; and
 - b. Man-made hydraulic structures (pipelines, french drains, ditches, etc.).

ii. Soils

The Permittee shall conduct a program to characterize the soil and rock units above the water table in the vicinity of contaminant release(s). Such characterization may include, but not be limited to, the following types of information as appropriate:

1. Surface soil distribution;
2. Soil profile, including ASTM classification of soils;
3. Transects of soil stratigraphy;
4. Hydraulic conductivity (saturated and unsaturated);
5. Relative permeability;
6. Bulk density;
7. Porosity;

8. Soil sorption capacity;
9. Cation exchange capacity (CEC);
10. Soil organic content;
11. Soil pH;
12. Particle size distribution;
13. Depth of water table;
14. Moisture content;
15. Effect of stratification on unsaturated flow;
16. Infiltration;
17. Evapotranspiration;
18. Storage capacity;
19. Vertical flow rate; and
20. Mineral content.

iii. Surface Water and Sediment

The Permittee shall conduct a program to characterize the surface water bodies in the vicinity of the facility. Such characterization may include, but not be limited to, the following activities and information:

1. Description of the temporal and permanent surface water bodies including:
 - a. For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth, temperature stratification, and volume;
 - b. For impoundments: location, elevation, surface area, depth, volume, freeboard, and construction and purpose;
 - c. For streams, ditches, and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, flooding tendencies (i. e., 100 year event), discharge point(s), and general contents.
 - d. Drainage patterns; and
 - e. Evapotranspiration.
2. Description of the chemistry of the natural surface water and sediments. This includes determining the 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, etc.

3. Description of sediment characteristics including:
 - a. Deposition area;
 - b. Thickness profile; and
 - c. Physical and chemical parameters (e. g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.)

iv. Air

The Permittee shall provide information characterizing the climate in the vicinity of the facility. Such information may include, but not be limited to:

1. A description of the following parameters:
 - a. Annual and monthly rainfall averages;
 - b. Monthly temperature averages and extremes;
 - c. Wind speed and direction;
 - d. Relative humidity/dew point;
 - e. Atmospheric pressure;
 - f. Evaporation data;
 - g. Development of inversions; and
 - h. Climate extremes that have been known to occur in the vicinity of the facility, including frequency of occurrence. (i.e. Hurricanes)
2. A description of topographic and man-made features which affect air flow and emission patterns, including:
 - a. Ridges, hills or mountain areas;
 - b. Canyons or valleys;
 - c. Surface water bodies (e. g. rivers, lakes, bays, etc.); and
 - d. Buildings.

b. Source Characterization

For those sources from which releases of hazardous constituents have been detected, the Permittee shall collect analytical data to completely characterize the wastes and the areas where wastes have been placed, to the degree that is possible without undue safety risks, including: type, quantity; physical form; disposition (containment or nature of deposits); and facility characteristics affecting release (e. g., facility security, and engineering barriers). This shall include quantification of the following specific characteristics, at each source area:

i. 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; and
8. Method used to close the unit/disposal area.

ii. Waste Characteristics:

1. Type of wastes placed in the unit;
 - a. Hazardous classification (e. g., flammable, reactive, corrosive, oxidizing or reducing agent);
 - b. Quantity; and
 - c. Chemical composition.
2. Physical and chemical characteristics such as;
 - a. Physical form (solid, liquid, gas);
 - b. Physical description (e. g., powder, oily sludge);
 - c. Temperature;
 - d. pH;
 - e. General chemical class (e. g., acid, base, solvent);
 - f. Molecular weight;
 - g. Density;
 - h. Boiling point;
 - i. Viscosity;
 - j. Solubility in water;
 - k. Cohesiveness of the waste; and
 - l. Vapor pressure.
3. Migration and dispersal characteristics of the waste such as:
 - a. Sorption capability;
 - b. Biodegradability, bioconcentration, biotransformation;
 - c. Photodegradation rates;
 - d. Hydrolysis rates; and
 - e. Chemical transformations.

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

c. Characterization of Releases of Hazardous Constituents

The Permittee shall collect analytical data on groundwater, soils, surface water, sediment, and subsurface gas contamination in the vicinity of the facility in accordance with the sampling and analysis plan as required above. These data shall be sufficient to define the extent, origin, direction, and rate of movement of contamination. Data shall include time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individuals performing the sampling and analysis. The Permittee shall address the following types of contamination at the facility:

i. Groundwater Contamination

The Permittee shall conduct a groundwater investigation to characterize any plumes of contamination detected at the facility. This investigation shall at a minimum provide the following information:

1. A description of the horizontal and vertical extent of any plume(s) of hazardous constituents originating from within the facility;
2. The horizontal and vertical direction of contamination movement;
3. The velocity of contaminant movement;
4. The horizontal and vertical concentration profiles of hazardous constituents in the plume(s);
5. An evaluation of factors influencing the plume movement; and
6. An extrapolation of future contaminant movement.

The Permittee shall document the procedures used in making the above determinations (e. g., well design, well construction, geophysics, modeling, etc.).

ii. Soil Contamination

The Permittee shall conduct an investigation to characterize the contamination of the soil and rock units above the saturated zone in the vicinity of any contaminant release. The investigation may include the following information:

1. A description of the vertical and horizontal extent of contamination;
2. A description of appropriate contaminant and soil chemical properties within the contaminant source area and plume. This may include contaminant solubility, speciation, absorption, leachability, exchange capacity, biodegradability, hydrolysis, photolysis, oxidation and other factors 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 Permittee shall document the procedures used in making the above determinations.

iii. Surface Water and Sediment Contamination

The Permittee shall conduct a surface water investigation to characterize contamination in surface water bodies resulting from releases of hazardous constituents at the facility. The investigation may include, but not be limited to, the following information:

1. A description of the horizontal and vertical extent of any plume(s) originating from the facility, and the extent of contamination in underlying sediments;
2. The horizontal and vertical direction of contaminant movement;
3. The contaminant velocity;
4. An evaluation of the physical, biological and chemical factors influencing contaminant movement;
5. An extrapolation of future contaminant, movement; and
6. A description of the chemistry of the contaminated surface waters and sediments. This includes determining the pH, total dissolved solids, specific contaminant concentrations, etc.

iv. Air Contamination

The Permittee shall conduct an investigation to characterize gaseous releases of hazardous constituents into the atmosphere or any structures or buildings. This investigation may provide the following information:

1. A description of the horizontal and vertical direction and velocity of contaminant movement;
2. The rate and amount of the release; and
3. The chemical and physical composition of the contaminant(s) released, including horizontal and vertical concentration profiles.

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

d. Potential Receptors

The Permittee shall collect data describing the human populations and environmental systems that are susceptible to contaminant exposure from the facility. Chemical analysis of biological samples and/or data on observable effects in ecosystems may also be obtained as appropriate. The following characteristics shall be identified:

- i. Current local uses and planned future uses of groundwater:

1. Type of use (e. g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial); and
2. Location of ground water users, to include withdrawal and discharge wells, within one mile of the impacted area.

The above information should also indicate the aquifer or hydrogeologic unit used and/or impacted for each item.

- ii. Current local uses and planned future uses of surface waters directly impacted by the facility:
 1. Domestic and municipal (e. g., potable and lawn/gardening watering);
 2. Recreational (e. g. swimming, fishing);
 3. Agricultural;
 4. Industrial; and
 5. Environmental (e. g., fish and wildlife propagation).
- iii. Human use of or access to the facility and adjacent lands, including but not limited to:
 1. Recreation;
 2. Hunting;
 3. Residential;
 4. Commercial; and
 5. Relationship between population locations and prevailing wind direction.
- iv. A general description of the biota in surface water bodies on, adjacent to, or affected by the facility.
- v. A general description of the ecology within the area adjacent to the facility.
- vi. A general demographic profile of the people who use have access to the facility and adjacent land, including, but not limited to: age; sex; and sensitive subgroups.
- vii. A description of any known or documented endangered or threatened species near the facility.

APPENDIX C - CORRECTIVE MEASURE STUDY (CMS) OUTLINE

The purpose of the CMS portion of the RCRA corrective action process is to identify and evaluate potential remedial alternatives for the releases of hazardous constituents that have been identified at the facility through the RFI or other investigations to need further evaluation. The scope and requirements of the CMS are balanced with the expeditious initiation of remedies and rapid restoration of contaminated media. The scope and requirements of the CMS should be focused to fit the complexity of the site-specific situation. It is anticipated that Permittee's with sites with complex environmental problems may need to evaluate a number of technologies and corrective measure alternatives. For other facilities, however, the evaluation of a single corrective measure alternative may be adequate. Therefore, a streamlined or focused approach to the CMS may be initiated. Information gathered during any stabilization or interim measures will be used to augment the CMS and in cases where corrective action goals are met, may be a substitute for the final CMS.

Regardless of whether a streamlined/focused or a detailed CMS is required, a CMS Workplan and CMS Report are generally required elements. The requirements for a full, detailed CMS are listed below. The Department has the flexibility not to require sections of the plan and/or report, where site-specific situations indicate that all requirements are not necessary. Additionally, the Department may require additional studies besides these discussed in order to support the CMS.

I. Corrective Measures Study (CMS) Workplan

e. Elements of the CMS Workplan

The Corrective Measures Study (CMS) Workplan shall include at a minimum the following elements:

- i. A site-specific description of the overall purpose of the CMS;
- ii. A description of the corrective measure objectives, including proposed target media cleanup standards (e.g., promulgated federal and state standards) and preliminary points of compliance or a description of how a risk assessment will be performed (e.g. guidance documents);
- iii. A description of the specific corrective measure technologies and/or corrective measure alternatives which will be studied;
- iv. A description of the general approach to investigating and evaluating potential corrective measures;
- v. A detailed description of any proposed pilot, laboratory and/or bench scale studies;
- vi. A proposed outline for the CMS Report including a description of how information will be presented;
- vii. A description of overall project management including overall approach, levels of authority (include organization chart), lines of communication, project schedules, budget and personnel. Include a

description of qualifications for personnel directing or performing the work;

viii. A project schedule that specifies all significant steps in the process and when key documents (e.g., CMS Progress Reports, draft CMS Report) are to be submitted to the Department;

ix. A detailed Public Involvement Plan.

VI. Corrective Measures Study (CMS) Report

The detail of a CMS may vary based upon the complexity of the site, on-going Interim Measures, etc. However, the CMS Report may include the following elements:

a. Introduction/Purpose

The Permittee shall describe the purpose of the CMS Report and provide a summary description of the project.

b. Description of Current Situation

The Permittee shall submit a summary and an update to the information describing the current situation at the facility and the known nature and extent of the contamination as documented by the RCRA Facility Investigation (RFI) Report. This discussion should concentrate on those issues which could significantly affect the evaluation and selection of the corrective measures alternative(s). The Permittee shall provide an update to information presented in the RFI regarding previous response activities and interim measures that have or are being implemented at the facility. The Permittee shall also make a facility-specific statement of the purpose for the response, based on the results of the RFI. The statement of purpose should identify the actual or potential exposure pathways that should be addressed by corrective measures.

c. Establishment of Proposed Media Specific Cleanup Standards

The Permittee shall describe the proposed media cleanup standards and point of compliance. The standards must be background, promulgated federal and state standards or risk-derived standards. If media clean-up standards are not proposed, then the Department will unilaterally propose setting media clean-up standards to either background, promulgated federal and state standards or the most conservative risk-derived standards.

d. Identification, Screening and Development of Corrective Measure Technologies

i. Identification: List and briefly describe potentially applicable technologies for each affected media that may be used to achieve the corrective action objectives. Include a table that summarizes the available technologies.

The Permittee should consider innovative treatment technologies, especially in situations where there are a limited number of applicable corrective measure technologies.

ii. Screening: The Permittee shall screen the corrective measure technologies to eliminate those that may prove infeasible to

implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective measure objective within a reasonable time period. This screening process focuses on eliminating those technologies that have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technology limitations.

Site, waste, and technology characteristics that are used to screen inapplicable technologies are described in more detail below:

1. **Site Characteristics:** Site data should be reviewed to identify conditions that may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration.
 2. **Waste Characteristics:** Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by these waste characteristics should be eliminated from consideration. Waste characteristics particularly affect the feasibility of in-situ methods, direct treatment methods, and land disposal (on/off-site).
 3. **Technology Limitations:** During the screening process, the level of technology development, performance record, and inherent construction, 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. For example, certain treatment methods have been developed to a point where they can be implemented in the field without extensive technology transfer or development.
- iii. **Corrective Measure Development:** The Permittee shall assemble the technologies that pass the screening step into specific alternatives that have the potential to meet the corrective action objectives for each media. Options for addressing less complex sites could be relatively straightforward and may only require evaluation of a single or limited number of alternatives. Each alternative may consist of an individual technology or a combination used in sequence (i.e., treatment train). Different alternatives may be considered for separate areas of the facility, as appropriate. List and briefly describe each corrective measure alternative.

e. **Evaluation of a Final Corrective Measure Alternative**

For each remedy which warrants a more detailed evaluation (i.e., those that passed through the screening step), including those situations when only one remedy is being proposed, the Permittee shall provide detailed documentation of how the potential

remedy will comply with each of the standards listed below. These standards reflect the major technical components of remedies including cleanup of releases, source control and management of wastes that are generated by remedial activities. The specific standards are as follows:

- i. Protect human health and the environment.
- ii. Attain media cleanup standards set by the Department.
- iii. Control the source of releases to reduce or eliminate, to the extent practicable, further releases that may pose a threat to human health and the environment.
- iv. Comply with applicable standards for management of wastes.
- v. Other factors.

In evaluating the selected alternative or alternatives, the Permittee shall prepare and submit information that documents that the specific remedy will meet the standards listed above. The following guidance should be used in completing this evaluation.

vi. Protect Human Health and the Environment

Corrective action remedies must be protective of human health and the environment. Remedies may include those measures that are needed to be protective, but are not directly related to media cleanup, source control or management of wastes. An example would be a requirement to provide alternative drinking water supplies in order to prevent exposures to releases from an aquifer used for drinking water purposes. Therefore, the Permittee shall provide a discussion of any short term remedies necessary to meet this standard, as well as discuss how the corrective measures alternative(s) meet this standard.

vii. Attain Media Cleanup Standards

Remedies will be required to attain media cleanup standards. As part of the necessary information for satisfying this requirement, the Permittee shall address whether the potential remedy will achieve the remediation objectives. An estimate of the time frame necessary to achieve the goals shall be included. Contingent remedies may be proposed if there is doubt if the initial remedy will be successful (e.g., contingent remedies to innovative technologies).

viii. Control of Sources of Releases

The Permittee shall address the issue of whether source control measures are necessary, and if so, the type of actions that would be appropriate. Any source control measure proposed should include a discussion on how well the method is anticipated to work given the particular situation at the facility and the known track record of the specific technology.

ix. Comply With any Applicable Standards for Management of Wastes

The Permittee shall include a discussion of how the specific waste management activities will be conducted in compliance with all applicable state and federal regulations (e.g., closure requirements, LDRs)

x. Other Factors

Five general factors will be considered as appropriate by the Department in selecting/approving a remedy that meets the four standards listed above. These five decision factors include:

1. Long-term reliability and effectiveness;
2. Reduction in the toxicity, mobility or volume of wastes;
3. Short-term effectiveness;
4. Implementability; and
5. Cost.

Examples of the type of information to include are provided below:

6. Long-term reliability and effectiveness: The Permittee may consider whether the technology, or combination of technologies, have been used effectively under analogous site conditions, whether failure of any one technology in the alternative would have any immediate impact on receptors, and whether the alternative would have the flexibility to deal with uncontrollable changes at the site. Operation and maintenance requirements include the frequency and complexity of necessary operation and maintenance. In addition, each corrective measure alternative should be evaluated in terms of the projected useful life of the overall alternative and of its component technologies. Useful life is defined as the length of time the level of effectiveness can be maintained.
7. Reduction in the toxicity, mobility or volume of wastes: As a general goal, remedies will be preferred that employ techniques that are capable of eliminating or substantially reducing the potential for the wastes in SWMUs and/or contaminated media at the facility to cause future environmental releases. Estimates of how the corrective measure alternative will reduce toxicity, mobility and or volume of the waste is required and may be accomplished through a comparison of initial site conditions to expected post-corrective measures conditions.
8. Short-term effectiveness: The Permittee shall evaluate each corrective measure alternative for short-term effectiveness. Possible factors to consider are fire, explosion, exposure to hazardous constituents and potential threats associated with the treatment, excavation, transportation and re-disposal or containment of the waste material.
9. Implementability: Information to consider when assessing implementability include:

- a. The administrative activities needed to implement the corrective measure alternative [*e.g. permits, rights of way, etc.*] and the length of time these activities will take;
- b. The constructability, time for implementation, and time for beneficial results;
- c. The availability of adequate off-site treatment, storage capacity, disposal services, needed technical services and materials; and
- d. The availability of prospective technologies for each corrective measure alternative.
- e. Cost: The Permittee shall develop an estimate of the cost of each corrective measure alternative (and for each phase or segment of the alternative). The cost estimate shall include both capital and operation and maintenance costs. The capital costs shall include, but are not limited to, costs for: engineering, site preparation, construction, materials, labor, sampling/analysis, waste management/disposal, permitting, health and safety measures, etc. The operation and maintenance costs shall include labor, training, sampling and analysis, maintenance materials, utilities, waste disposal and/or treatment, etc. Costs shall be calculated as the net present value of the capital and operation and maintenance costs.

f. Justification and Recommendation of the Corrective Measure or Measures

The Permittee shall justify and recommend in the CMS Report a corrective measure alternative for consideration by the Department. Such a recommendation should include a description and supporting rationale for the preferred alternative that is consistent with the corrective action standards and remedy selection decision factors discussed above. In addition, this recommendation shall include summary tables that allow the alternative or alternatives to be understood easily. Trade-offs among health risks, environmental effects, and other pertinent factors shall be highlighted. The Department will select the corrective measure alternative or alternatives to be implemented based on the results presented in the CMS Report.

Appendix D
Schedule of Compliance

Schedule of Compliance	Due Date
Notification of Noncompliance. Condition I.F.13.	Within fourteen (14) calendar days of noncompliance with the schedule date.
Noncompliance/Imminent Hazard Report. Condition I.F.14.	Orally within twenty four (24) hours and written within fifteen (15) calendar days of becoming aware of the circumstances.
Notification of any Newly Identified SWMUs or AOCs. Condition II.B.1.	Within fifteen (15) calendar days of discovery.
Assessment Report (AR). Condition II.B.2.	Within ninety (90) calendar days of notification.
Notification for Newly Discovered Releases at Previously Identified SWMUs of AOCs. Condition II.C.1.	Within fifteen (15) calendar days of discovery.
RFI Workplan for the Investigation of Newly Discovered Releases at previously identified SWMUs or AOCs. Condition II.C.2.	Within ninety (90) calendar days of notification.
Confirmatory Sampling (CS) Workplan. Condition II.D.1.	Within forty five (45) calendar days of notification.
Confirmatory Sampling (CS) Report. Condition II.D.4.	In accordance with the approved schedule in the CS Workplan.
RFI Workplan for Newly Identified SWMU(s)/AOC(s) or Releases, under Conditions II.B.3., II.C.2., or II.D.5.	Within ninety (90) calendar days receipt of notification by the Department or 120 calendar days if a time frame is not provided.
RFI Progress Reports. Condition II.E.5.	Quarterly, beginning ninety(90) calendar days from the start date specified in the RFI Workplan approval letter by the Department. *
RFI Report. Condition II.E.6.	In accordance with the schedule approved in the RFI Workplan.
Revised RFI Report. Condition II.E.6.	Within thirty (30) calendar days after receipt of the Department's comments.
Interim Measures Workplan. Condition II.F.1(a).	Within thirty (30) calendar days of receipt of the Department's letter that calls for an IM Workplan.
Interim Measures Progress Reports. Condition II.F.3(a).	In accordance with the schedule approved in the Interim Measures Workplan. **
Interim Measures Report. Condition II.F.3(b).	Within ninety (90) calendar days of completion of fieldwork, in accordance with the schedule approved in the IM Workplan.

Charleston Naval Complex
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Schedule of Compliance	Due Date
CMS Workplan. Condition II.G.1.	Within ninety (90) calendar days of notification by the Department that a CMS is required.
Implementation of CMS Workplan. Condition II.G.2.	Within fifteen (15) calendar days after receipt of the Department's approval of the CMS Workplan.
CMS Report. Condition II.G.3(a).	In accordance with the schedule in the approved CMS Workplan.
Revised CMS Report. Condition II.G.3(a).	Within thirty (30) calendar days of the Department's comments.
Corrective Measure Implementation (CMI) Workplan. Condition II.I.1.	Within sixty (60) calendar days of the effective date of the Permit modification for the remedy selection.
Operation and Maintenance Plan. Condition II.I.2.	In accordance with the schedule in the approved CMI Workplan. ***
Construction Completion Report. Condition II.I.4.	In accordance with the schedule in the approved CMI Workplan.
Remedy Completion Report. Condition II.I.7(a).	Within ninety (90) calendar days of completion of the CMI phase.
Corrective Measures Implementation (CMI) Progress Reports. Conditions II.I.6.	Biannually, starting 180 calendar days from the date the CMI Workplan is approved.
Waste Minimization Certification. Module III.	If Condition III.A. is applicable, annually for the effective date of Permit.
Based on information provided by the South Carolina State Ports Authority about debris found during construction of the new port terminal, the Department moved AOCs 689 and 690 from Appendix A-4 (NFA) to Appendix A-7 (CMS). The Navy should submit a Corrective Measures Study Report per Permit Condition II.G.3.	Within sixty (60) days of effectiveness of the Permit.
<p>The above reports must be signed and certified in accordance with 40 CFR 270.11.</p> <p>*This applies to Workplan execution that requires more than one hundred eighty (180) calendar days.</p> <p>**This applies to Workplan execution that requires more than one year.</p> <p>***Applies only if the Operation and Maintenance Plan is not part of the CMI Workplan.</p>	

Appendix E
Waste Minimization Objectives

Appendix E

Waste Minimization Certification Objectives

The Waste Minimization Program should include the following element:

1. Top Management Support

- Dated and signed policy describing management support for waste minimization and for implementation of a waste minimization plan.
- Description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible.
- Description of how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to product design, capital planning, production operations, and maintenance.

2. Characterization of Waste Generation

- Identification of types, amounts, and hazardous constituents of waste streams, with the source and date of generation.

3. Periodic Waste Minimization Assessments

- Identification of all points in a process where materials can be prevented from becoming a waste, or can be recycled.
- Identification of potential waste reduction and recycling techniques applicable to each waste, with a cost estimate for capital investment and implementation.
- Description of technically and economically practical waste reduction/recycling options to be implemented, and a planned schedule for implementation.
- Specific performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the generator.

4. Cost Allocation System

- Identification of waste management costs for each waste, factoring in liability, transportation, record keeping, personnel, pollution control, treatment, disposal, compliance and oversight costs to the extent feasible.
- Description of how departments are held accountable for the wastes they generate.
- Comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste.

5. Technology Transfer

- Description of efforts to seek and exchange technical information on waste minimization from other parts of the company, other firms, trade association, technical assistance programs, and professional consultants.

6. Program Evaluation

- Description of types and amounts of hazardous waste reduces or recycled.
- Analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented.
- Amendments to waste minimization plan and explanation.
- Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan.
- Explanation and documentation regarding impediments to hazardous waste reduction specific to the individual facility.

References:

“Draft Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program”, 54 FR 250256, June 12, 1989.

“Waste Minimization Opportunity Assessment Manual”, EPA/625/7-88/003, July 1988.

APPENDIX F - LAND USE CONTROL MANAGEMENT PLAN

DEFINITION

As used herein, the term "land use control" or "LUC" with regard to real property, means any restriction or control that limits the use of and/or exposure to any portion of that property, including water resources, arising from the need to protect human health and the environment. The term encompasses "institutional controls", such as those involved in real estate interests, governmental permitting, zoning, public advisories, deed notices, and other "legal" restrictions. The term also includes restrictions on access, whether achieved by means of engineered barriers (e.g., fence or concrete pad) or by human means (e.g., the presence of security guards). Additionally, the term includes both affirmative measures to achieve the desired restrictions (e.g., night lighting of an area) and prohibitive directives (e.g., no drilling of drinking water wells for the duration of the corrective action). Considered altogether, the LUCs for a facility will provide a tool for how the property should be used in order to maintain the level of protectiveness that one or more corrective actions were designed to achieve.

PURPOSE

When land use controls (LUCs) are necessary to assure the reliability of land use assumptions, the Permittee must put appropriate procedures in place to ensure that such controls will be maintained for as long as necessary to keep the chosen remedy fully protective of human health and the environment. This Land Use Control Management Plan (LUCMP) was developed to assure the effectiveness and reliability of the required LUCs for as long as any LUCs continue to be required in order for the corrective action to remain protective and to serve as an enforceable document for any noncompliance. The requirements described herein are only applicable to those SWMUs, AOCs, and/or LUC Zone for which LUCs were selected as part of the final corrective action. The conceptual outline for the LUC should be developed as part of the final corrective action. The specific details, as outlined in module II, for the implementation of the LUC should be outlined in the CMI Workplan (or other Corrective Action document approved by the Department). Appendix A-8 provides a list of SWMUs, AOCs, and/or LUC Zone for which LUCs are selected as part of the corrective action, a summary of the corrective action requiring LUC, and a reference to the document selecting the final corrective action.

The purpose of the LUCMP is to accomplish the following specific objectives for SWMUs, AOCs, and/or LUC Zone listed in Appendix A-8:

To implement a process for the Permittee to periodically advise the Department of the continued maintenance of any LUCs and of any planned changes in land use which might impact these LUCs.

To implement procedures for integrating all SWMUs, AOCs, and/or LUC Zone into the Property Conveyance Process as applicable.

To implement a process to inform current and future property users of environmental conditions at SWMUs, AOCs, and/or LUC Zone.

I. LUC INSPECTION - REVIEW - CERTIFICATION

The Permittee shall initiate the following specific actions:

- A. Conduct inspections/review, at the frequency specified in the CMI Workplan or other Corrective Action document approved by the Department, of all SWMUs, AOCs, and/or LUC Zone identified in Appendix A-8. These inspections shall be for the purposes of verifying that all necessary LUCs have been implemented and are being properly maintained. The Permittee will be responsible for the following:
 1. Ensuring that all required inspections are performed.
 2. Ensuring that the Department is provided with thirty (30) days advance notice of, and opportunity to observe facility personnel as they conduct at least one of the quarterly inspections each year.
 3. Ensuring that the Department is notified in writing within thirty (30) days of any deficiencies noted.
 4. Ensuring that all appropriate measures are undertaken within thirty (30) days to correct any deficiencies and timely notification in writing to the Department detailing measures taken. If thirty (30) days is not sufficient time to correct the deficiencies, the Navy must submit to the Department a written request for an extension. The written request must provide the rationale for the extension and a projected timeframe for rectifying the deficiencies.
- B. Prepare and forward an annual report to the Department signed by the Permittee certifying the continued maintenance of all LUCs associated with those SWMUs, AOCs, and/or LUC Zone identified in Appendix A-8.

II. CHANGE IN LAND USE

The following shall constitute a change in land use:

- A. Any change in land that would be inconsistent with those specific exposure assumptions in the human health and/or ecological risk assessments or other criteria that served as the basis for selecting the LUCs as part of the final corrective action.
- B. Any activity that may disrupt the effectiveness of the LUC. Including but not limited to: excavation at a SWMU, AOC and/or LUC Zone; groundwater pumping that may impact a groundwater mixing zone or groundwater corrective action or monitoring program; a construction project that may impact ecological habitat protected by the corrective action; removal of access control; removal of warning signs; or rezoning.
- C. Any activity that may alter or negate the need for the specific LUCs.

III. REQUEST FOR PERMIT MODIFICATION FOR LAND USE CHANGE

- A. The Permittee will provide written notification to the Department at least sixty days (60) (except in emergency situations- where notice should be given as soon as practicable) prior to implementation of any change in land use at the SWMUs, AOCs, and/or LUC Zone identified in Appendix A-8. A request for a permit modification will be provided for the purpose of obtaining the Department's concurrence with the Permittee's determination as to whether the contemplated change will or will not necessitate re-evaluation of the selected corrective action or implementation of specific measures to

ensure continued protection of human health and the environment. The Navy must also notify the affected property owner(s) of the request for permit modification and the outcome of the request.

- B. No land use change should be implemented until the permit modification is effective. The request for modification will include the following at a minimum:
1. An evaluation of whether the anticipated land use change will pose unacceptable risks to human health and the environment or negatively impact the effectiveness of the selected corrective action;
 2. An evaluation of the need for any additional corrective action or LUCs resulting from implementation of the anticipated land use change; and,
 3. A proposal for any necessary changes in the selected corrective action.

IV. FUNDING COMMITMENT

The Permittee agrees to use its best efforts to obtain all necessary funding through the appropriate authorities or source(s) to ensure the continued maintenance of all LUCs associated with SWMUs, AOCs, and/or LUC Zone identified Appendix A-8 and, where necessary, the timely re-implementation of any LUCs and/or completion of corrective action necessitated by any inappropriate change to a LUC.

V. REQUEST FOR PERMIT MODIFICATION FOR PROPERTY CONVEYANCE

Should the decision be made to transfer to any other agency, private person, or entity, either title to, or some lesser form of property interest (e.g., an easement, or right of way, etc.) SWMUs, AOCs, and/or LUC Zone identified in Appendix A-8, then the Permittee will ensure that at a minimum in accordance with R.61-79.270.42:

- A. The Navy must put forth its best efforts to provide the Department with written notification at least ninety (90) days prior the initiation of the property conveyance process. Such notice shall indicate the following:
1. The type of property conveyance (e.g., an easement, or right of way, etc.)
 2. The anticipated final date for the conveyance
 3. Future property owners
 4. A list of SWMUs, AOCs, and/or LUC Zone affected by the conveyance
 5. Mechanism(s) that will be used to maintain any LUCs which may need to remain in place after the property conveyance.
- B. All LUCs for SWMUs, AOCs, and/or LUC Zone identified in Appendix A-8 must be incorporated into the property conveyance documents so that the transferee(s) is given adequate notice of existing site condition(s). The details of the LUC provided in the property conveyance documents must be consistent with the details in the document where the final corrective action was selected
- C. It is understood that for the planned conveyance of any SWMUs, AOCs, and/or LUC Zone identified in Appendix A-8, the Department will re-evaluate the continued appropriateness of any previously agreed upon LUC(s) based upon the level of assurance provided, to ensure that necessary LUCs will be maintained and enforced.

VI. IMPLEMENTATION OF LAND USE CONTROLS

For every SWMU, AOC, and/or LUC Zone identified in Appendix A-8, the Permittee must provide the information listed below prior to implementing any LUC. This information should be presented in the CMI Workplan (or other Corrective Action document approved by the Department).

- A. SWMU, AOC, and/or LUC Zone Description: (e.g., provide survey plat map certified by a professional land surveyor)
- B. Location/Area Under Restriction: (e.g., northeast corner of the facility between buildings 250 and 260 as reflected on BMP page ___ / GIS index under IR Site ___).
- C. LUC(s) Implemented and Corresponding Objective(s): (e.g., installation of a fence to restrict public access, etc.)
- D. Corrective Action Selection Document: (e.g., CMS dated _____).
- E. Field Implementation Methods with Appropriate Figures: (e.g., engineering design drawings, etc.).
- F. Inspection Methods and Maintenance Procedures: (e.g., Monitoring well plan to include analytical suite, well identification, reporting format, etc.)
- G. Schedule for Submitting a Contingency Plan to be Implemented in the Case that Corrective Action and LUCs are no Longer Effective: (e.g. procedure for notification and implementation corrective action in the event that pump and treat system is not achieving modeled goals, etc.)
- H. Corrective Action Completion – LUC Termination Process: (e.g. Pump and treat system has achieved goals and prohibition of drilling of drinking water wells is no longer needed, etc.)
- I. Other Pertinent Information:

Appendix G

Facility Map



Legend

- Petroleum Sites - Active
 - Petroleum Sites - Land Use Controls
 - Petroleum Sites - NFA
 - Petroleum Sites - NFA Historical
 - AOCs and SWMUs - Active
 - AOCs and SWMUs - NFA
 - Temporary Groundwater Use Restrictions per the 2002 Memorandum of Agreement
 - RCRA Land Use Controls
 - Original Facility Boundary
- * FACILITY = CROSSHATCHED AREAS

FIGURE 1
SITE MAP
CHARLESTON NAVAL COMPLEX, SC

DATE: 12/15/10
SCALE: 1" = 100'

Guide to Board Review
Pursuant to S.C. Code Ann. § 44-1-60
Effective May 8, 2014

The decision of the South Carolina Department of Health and Environmental Control (Department) becomes the final agency decision fifteen (15) calendar days after notice of the decision has been mailed to the applicant, permittee, licensee and affected persons who have requested in writing to be notified, unless a written request for final review accompanied by a filing fee in the amount of \$100 is filed with Department by the applicant, permittee, licensee or affected person.

Applicants, permittees, licensees, and affected parties are encouraged to engage in mediation or settlement discussions during the final review process.

If the Board declines in writing to schedule a final review conference, the Department's decision becomes the final agency decision and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court within thirty (30) calendar days after notice is mailed that the Board declined to hold a final review conference. In matters pertaining to decisions under the South Carolina Mining Act, appeals should be made to the South Carolina Mining Council.

I. Filing of Request for Final Review

1. A written Request for Final Review (RFR) and the required filing fee of one hundred dollars (\$100) must be received by Clerk of the Board within fifteen (15) calendar days after notice of the staff decision has been mailed to the applicant, permittee, licensee, or affected persons. If the 15th day occurs on a weekend or State holiday, the RFR must be received by the Clerk on the next working day. RFRs will not be accepted after 5:00 p.m.
2. RFRs shall be in writing and should include, at a minimum, the following information:
 - o The grounds for amending, modifying, or rescinding the staff decision;
 - o a statement of any significant issues or factors the Board should consider in deciding how to handle the matter;
 - o the relief requested;
 - o a copy of the decision for which review is requested; and
 - o mailing address, email address, if applicable, and phone number(s) at which the requestor can be contacted.
3. RFRs should be filed in person or by mail at the following address: South Carolina Board of Health and Environmental Control Attention: Clerk of the Board

2600 Bull Street
Columbia, South Carolina 29201

Alternatively, RFR's may be filed with the Clerk by facsimile (803-898-3393) or by electronic mail (boardclerk@dhec.sc.gov).

4. The filing fee may be paid by cash, check or credit card and must be received by the 15th day.
5. If there is any perceived discrepancy in compliance with this RFR filing procedure, the Clerk should consult with the Chairman or, if the Chairman is unavailable, the Vice-Chairman. The Chairman or the Vice-Chairman will determine whether the RFR is timely and properly filed and direct the Clerk to (1) process the RFR for consideration by the Board or

(2) return the RFR and filing fee to the requestor with a cover letter explaining why the RFR was not timely or properly filed. Processing an RFR for consideration by the Board shall not be interpreted as a waiver of any claim or defense by the agency in subsequent proceedings concerning the RFR.
6. If the RFR will be processed for Board consideration, the Clerk will send an Acknowledgement of RFR to the Requestor and the applicant, permittee, or licensee, if other than the Requestor. All personal and financial identifying information will be redacted from the RFR and accompanying documentation before the RFR is released to the Board, Department staff or the public.
7. If an RFR pertains to an emergency order, the Clerk will, upon receipt, immediately provide a copy of the RFR to all Board members. The Chairman, or in his or her absence, the Vice-Chairman shall based on the circumstances, decide whether to refer the RFR to the RFR Committee for expedited review or to decline in writing to schedule a Final Review Conference. If the Chairman or Vice-Chairman determines review by the RFR Committee is appropriate, the Clerk will forward a copy of the RFR to Department staff and Office of General Counsel. A Department response and RFR Committee review will be provided on an expedited schedule defined by the Chairman or Vice-Chairman.
8. The Clerk will email the RFR to staff and Office of General Counsel and request a Department Response within eight (8) working days. Upon receipt of the Department Response, the Clerk will forward the RFR and Department Response to all Board members for review, and all Board members will confirm receipt of the RFR to the Clerk by email. If a Board member does not confirm receipt of the RFR within a twenty-four (24) hour period, the Clerk will contact the Board member and confirm receipt. If a Board member believes the RFR should be considered by the RFR Committee, he or she will respond to the Clerk's email within forty-eight (48) hours and will request further review. If no Board member requests further review of the RFR within the forty-eight (48) hour period, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Final Review Conference. Contested case guidance will be included within the letter.

NOTE: If the time periods described above end on a weekend or State holiday, the time is automatically extended to 5:00 p.m. on the next business day.

9. If the RFR is to be considered by the RFR Committee, the Clerk will notify the Presiding Member of the RFR Committee and the Chairman that further review is requested by the Board. RFR Committee meetings are open to the public and will be public noticed at least 24 hours in advance.
10. Following RFR Committee or Board consideration of the RFR, if it is determined no Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Conference. Contested case guidance will be included within the letter.

II. Final Review Conference Scheduling

1. If a Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, informing the Requestor of the determination.
2. The Clerk will request Department staff provide the Administrative Record.
3. The Clerk will send Notice of Final Review Conference to the parties at least ten (10) days before the Conference. The Conference will be publically noticed and should:
 - include the place, date and time of the Conference;
 - state the presentation times allowed in the Conference;
 - state evidence may be presented at the Conference;
 - if the conference will be held by committee, include a copy of the Chairman's order appointing the committee; and
 - inform the Requestor of his or her right to request a transcript of the proceedings of the Conference prepared at Requestor's expense.
4. If a party requests a transcript of the proceedings of the Conference and agrees to pay all related costs in writing, including costs for the transcript, the Clerk will schedule a court reporter for the Conference.

III. Final Review Conference and Decision

1. The order of presentation in the Conference will, subject to the presiding officer's discretion, be as follows:
 - Department staff will provide an overview of the staff decision and the applicable law to include [10 minutes]:
 - Type of decision (permit, enforcement, etc.) and description of the program.

- Parties
 - Description of facility/site
 - Applicable statutes and regulations
 - Decision and materials relied upon in the administrative record to support the staff decision.
- Requestor(s) will state the reasons for protesting the staff decision and may provide evidence to support amending, modifying, or rescinding the staff decision. [15 minutes] NOTE: The burden of proof is on the Requestor(s)
 - Rebuttal by Department staff [15 minutes]
 - Rebuttal by Requestor(s) [10 minutes]

Note: Times noted in brackets are for information only and are superseded by times stated in the Notice of Final Review Conference or by the presiding officer.

2. Parties may present evidence during the conference; however, the rules of evidence do not apply.
3. At any time during the conference, the officers conducting the Conference may request additional information and may question the Requestor, the staff, and anyone else providing information at the Conference.
4. The presiding officer, in his or her sole discretion, may allow additional time for presentations and may impose time limits on the Conference.
5. All Conferences are open to the public.
6. The officers may deliberate in closed session.
7. The officers may announce the decision at the conclusion of the Conference or it may be reserved for consideration.
8. The Clerk will mail the written final agency decision (FAD) to parties within 30 days after the Conference. The written decision must explain the basis for the decision and inform the parties of their right to request a contested case hearing before the Administrative Law Court or in matters pertaining to decisions under the South Carolina Mining Act, to request a hearing before the South Carolina Mining Council.. The FAD will be sent by certified mail, return receipt requested.
9. Communications may also be sent by electronic mail, in addition to the forms stated herein, when electronic mail addresses are provided to the Clerk.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.