



**State of Georgia**  
**Department of Natural Resources**  
**ENVIRONMENTAL PROTECTION DIVISION**



**HAZARDOUS WASTE FACILITY PERMIT**

Permit No.     **HW-014(S&T)-4**                      Facility I.D. No.     **GA4170090001**

In accordance with the provisions of the Georgia Hazardous Waste Management Act and the Rules, Chapter 391-3-11, (as amended through **August 7, 2012** ), adopted pursuant to that Act,

**Naval Submarine Base Kings Bay**

is issued a Permit for the following:

- Storage of 59,840 gallons of hazardous waste in containers;
- Treatment of 0.5 short tons Net Explosive Weight per day of waste munitions and explosives by open burning;
- Treatment of 0.6 short tons Net Explosive Weight per day of waste munitions and explosives by open detonation;
- Investigation and corrective action (if necessary) of Solid Waste Management Units and Areas of Concern; and
- Corrective Action of contaminated groundwater at the Old Camden County Landfill (Site 11)

at the following location:

**1063 USS Tennessee Avenue  
Kings Bay, Georgia 31547**

This Permit is conditioned upon compliance with all provisions of the Georgia Hazardous Waste Management Act, the Rules, Chapter 391-3-11 (as amended through **August 7, 2012** ) adopted pursuant to that Act, and any other condition of this Permit.

This Permit is subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in the application(s) dated **July 23, 2012** supporting data entered therein or attached thereto, or any subsequent submittals or supporting data; or for failure to disclose fully all relevant facts; or when the facility poses a threat to the environment or the health of humans.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **28** page(s), which page(s) are a part of this Permit.

Permit Issuance Date: **September 28, 2012**  
Permit Termination Date: **September 28, 2022**

  
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Director  
Environmental Protection Division



## **SECTION I. GENERAL PERMIT CONDITIONS**

### **I.A. Scope and Effect of Permit**

1. The Permittee is allowed to store and treat hazardous waste in accordance with the conditions of this Permit. The Permittee is also required to investigate releases of hazardous constituents from Solid Waste Management Units (SWMUs), and perform corrective action to remediate releases in accordance with the conditions of this permit. Any hazardous waste treatment, storage or disposal not authorized in this Permit is prohibited, unless such treatment, storage, or disposal is specifically authorized by the Director. The Permittee must comply with the Georgia Hazardous Waste Management Act and the Georgia Rules for Hazardous Waste Management, Chapter 391-3-11, which Rules include certain portions of the Federal Hazardous Waste Regulations (found in 40 CFR Parts 260-266, 268, 270, 273, 279, and 124). Where a citation to the Federal Regulations is made in this Permit, it refers to the specific regulations adopted by the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources.
2. The issuance of this Permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
3. Compliance with this Permit does not constitute a defense to any action brought by the Director under Section §12-8-75, "Powers of Director in situations involving imminent and substantial endangerment to the environment or to public health," of the Georgia Hazardous Waste Management Act, as amended.
4. Nothing in this Permit shall be construed to preclude the institution of any legal action under Section 3008 of the Federal Resource Conservation and Recovery Act (RCRA) or under the Georgia Hazardous Waste Management Act, O.C.G.A. §§12-8-81 through 12-8-82, as amended.
5. This Permit may be modified, revoked and reissued, or terminated for cause as specified in Rule 391-3-11-.11(7) and §§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 of any permit condition.
6. 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.B. Management Requirements**

1. Unless otherwise specifically authorized by the Director, the Permittee may not treat, store, or dispose of hazardous waste on any portion of the facility, not specifically authorized by this Permit, until the Permittee has submitted to the Director by certified mail or hand delivery an application for a permit modification to do so and the Director has modified the Permit for that activity. Any corrective action activity performed that is not specifically authorized by this permit is done at risk, and may constitute violations of this permit or other environmental laws or regulations, and/or may result in the need for additional actions through this permit, including, but not limited to soil borings, well installation, sampling and analysis, additional or different corrective actions.

2. The Permittee shall maintain at the facility until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, and revisions and modifications to these documents:
  - a. Complete copy of this Permit and Permit Application;
  - b. Waste Analysis Plan;
  - c. Personnel training documents and records;
  - d. Inspection schedule and log;
  - e. Contingency plan;
  - f. Closure Plan;
  - g. Operating record as required by §264.73.
3. The Permittee shall maintain at the facility, until permit termination (unless otherwise noted), the following documents and amendments, revisions, and modifications to these documents associated with investigative and corrective action activities:
  - a. Inspection Schedule and Log;
  - b. Operating Log, in accordance with 40 CFR 264.73(a), to include, but not limited to the following:
    - i. The records and results of inspections of groundwater monitoring wells, and remedial treatment systems (except that these records need only be kept three years),
    - ii. The certification required by §264.73(b)(9), and
    - iii. Any records required under §264.1(j)(13).
  - c. Institutional and/or Engineering Control Instruments/Plans that includes measures to prevent human exposure to contamination, damage to corrective action treatment units and facility related groundwater monitoring and remediation wells; and vandalism thereof;
  - d. Contingency Plan;
  - e. Corrective Action Plan;
  - f. Groundwater Sampling and Analysis Plan;
  - g. Records and data from all groundwater monitoring wells and associated groundwater surface elevations.
4. All amendments, revisions and modifications to any plan or cost estimates required by this Permit shall be submitted to the Director for approval and permit modification as necessary.
5. The Permittee may not commence treatment or storage or disposal of hazardous waste at any new or modified portion of the facility until the Permittee has submitted to the Director by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the Permit where appropriate; and
  - a. The Director has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the Permit; or
  - b. The Director has either waived the inspection or has not within fifteen (15) days notified the Permittee of his or her intent to inspect.
6. The Director may require the Permittee to establish and maintain an information repository at any time, based on factors set forth in 40 CFR 124.33(b). The information repository will be governed by the provisions in 40 CFR 124.33(c) through (f).

I.C. Monitoring and Reporting

1. 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 to be analyzed must be the appropriate method from 40 CFR Part 261 Appendix I. Laboratory methods must be those specified in the most recent editions of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW 846; or Standard Methods for the Examination of Water and Wastewater; (or an equivalent method as specified in the Waste Analysis Plan, Section C.2 of the Permit Application dated July 23, 2012, as amended).
2. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports, records, and certifications required by this Permit and records of all data used to complete the application for this Permit including the certification required by §264.73(b)(9) for a period of at least three (3) years from the date of the sample, measurement, report or record. These periods are automatically extended during the course of any unresolved enforcement action regarding this facility and also may be extended at any time at the Director's discretion.
3. Records of monitoring information shall include:
  - a. The date, exact place and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used, the method of sample preservation, and quality assurance methods including method blanks; and
  - f. The results of such analyses and measurements.
4. Twenty-Four Hour Reporting. The Permittee shall report to the Director or his representative orally within twenty-four (24) hours from the time the Permittee becomes aware of any circumstances resulting from the operations or conditions at the hazardous waste management facility, which may endanger human health or the environment, and any unauthorized releases or discharge of hazardous waste, hazardous waste constituent, hazardous constituent from the operation of the facility (including those that may cause an endangerment to public or private drinking water supplies), and/or a fire or explosion (including periods of noncompliance).

The description of the occurrence shall include:

- a. Name, address and telephone number of the owner or operator;
  - b. Name, address and telephone number of the facility;
  - c. Date, time and type of incident;
  - d. Name and quantity of materials involved;
  - e. The extent of injuries, if any;
  - f. An assessment of actual or potential hazards to the environment and human health inside and outside the facility, where this is applicable; and
  - g. Estimated quantity and disposition of recovered material that resulted from the incident.
5. Within fifteen (15) days of becoming aware of any reportable incident as in Permit Condition I.C.4 above, the Permittee shall submit a written report of the incident covering the following:

- a. Description of occurrence as in Permit Condition I.C.4 above;
  - b. Cause of occurrence;
  - c. Period of occurrence, including exact dates and times;
  - d. Actions taken in response to the occurrence;
  - e. Time to which the occurrence is expected to continue (if not already corrected);
  - f. Additional measures planned to correct the occurrence (if not already corrected), and a schedule of those actions; and
  - g. Steps taken or planned to reduce, eliminate, and prevent recurrence, with a schedule of any planned actions.
6. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than fourteen (14) days following each schedule date.
7. Other Non-Compliance. The Permittee shall report instances of non-compliance, other than those described in Permit Conditions I.C.4 and I.C.6, semi-annually on July 15 (covering January 1 - June 30) and January 15 (covering July 1 - December 31). The report shall cover the information requested in Permit Condition I.C.4 for each incident.
8. Manifest Discrepancy Report. If a significant discrepancy in a manifest [as defined in §264.72(b)], is discovered, the Permittee must attempt to reconcile the discrepancy. If not resolved within fifteen (15) days, the Permittee must submit a letter report, including a copy of the manifest, to the Director in accordance with 40 CFR §264.72.
9. Unmanifested Waste Report. This report must be submitted to the Director within fifteen (15) days of receipt of unmanifested waste, in accordance with 40 CFR §264.76.
10. Biennial Report. A biennial report must be submitted covering the facility's activities during odd number calendar years, in accordance with 40 CFR §264.75.
11. Monitoring Reports. Monitoring results shall be reported at intervals specified elsewhere in this Permit.
12. Signatory Requirements. All applications, reports or other information submitted to the Director shall be signed and certified according to the requirements in 40 CFR §270.11.

I.D. Responsibilities

1. Right of Entry. The Permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials and other documents as may be required by law to:
  - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

- d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the Georgia Hazardous Waste Management Act, any substances or parameters at any location.
2. Transfer of Permits. This Permit may be transferred to a new owner or operator only after notice to the Director, and if it is modified or revoked and reissued pursuant to §270.40(b) or §270.41(b)(2) to identify the new Permittee and incorporate such other requirements as may be necessary pursuant to the Georgia Rules for Hazardous Waste Management or the Georgia Hazardous Waste Management Act. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the permitting requirements and the requirements in 40 CFR Parts 264, 268 and 270.
3. Duty to Comply. The Permittee shall comply with all conditions of this Permit (which incorporates applicable sections of the facility's permit application), except to the extent and for the duration such non-compliance is authorized by an emergency permit. Any noncompliance with this Permit constitutes a violation of the Georgia Hazardous Waste Management Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application.
4. Duty to Reapply. If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must submit a complete application for a new permit at least one hundred eighty (180) days before this Permit expires. If the facility has not met the investigative and remedial requirements for releases, pursuant to §264.101 and this Permit; and has not met the Environmental Protection Standards requirements for three (3) consecutive years, the Permittee must, within one hundred eighty (180) days before the expiration date of this permit, submit a complete application for renewal of the Permit.
5. 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.
6. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out all reasonable measures to minimize any adverse impact on human health or the environment resulting from non-compliance with this Permit.
7. Duty to Provide Information. The Permittee shall furnish to the Director, within a reasonable time, any relevant information which the Director 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 Director, upon request, copies of records required to be kept by this Permit.
8. Anticipated Non-Compliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility, permitted activities, or other activities (for example, a change in the process generating the hazardous waste), which may result in non-compliance with Permit requirements. Reporting anticipated non-compliance does not preclude enforcement actions.
9. Reporting Planned Changes. The Permittee shall give notice to the Director as soon as possible prior to any planned changes associated with the permitted facility, including but not limited to the following (note that reporting planned changes does not eliminate the need to execute a permit modification in compliance with Part 270, Subpart D):

- a. Physical alterations,
  - b. Additions to the permitted facility,
  - c. Changes in the process generating the hazardous waste that may affect permitted waste management or other permitted activities,
  - d. Changes in any investigative or corrective action activities (including voluntary remedial actions), which may impact any SWMUs, AOCs, and/or other regulated units.
10. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment, control, etc. (and related appurtenances), which are installed and/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 back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of this Permit.
11. Other Information. When the Permittee becomes aware that the Permittee failed to submit any relevant facts in the Permit Application or a corrective action plan, or submitted incorrect information in a permit application, corrective action plan, or in any report to the Director, the Permittee shall promptly submit such facts or information.

I.E. Definitions

For purposes of this Permit, terms used herein shall have the same meaning as those in 40 CFR Parts 124, 260 through 268, 270 and 279, 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.

1. Area of Concern (AOC) for purposes of this Permit includes any area having a probable release of a Hazardous Waste, Hazardous Constituent, and/or Hazardous Waste Constituent, which is not from a solid waste management unit and is determined by the Director 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 Georgia Hazardous Waste Management Act §12-8-60, et. seq. and 40 CFR §270.32 (b)(2) in order to ensure adequate protection of human health and the environment.
2. Background for the purposes of this Permit is the naturally occurring concentration of a constituent in soils in the immediate vicinity of the Facility in areas not affected by the Facility. For other environmental media, Background is the concentration of a constituent upgradient, upstream, or upwind of the Facility as is applicable for the environmental media.
3. Contamination for the purposes of this Permit refers to the presence of any Hazardous Waste, Hazardous Waste Constituent or Hazardous Constituent in a concentration which exceeds the Background concentration.
4. Corrective Action for prior or continuing releases, as defined in I.E.16 below, from any SWMU or AOC (as defined in this section) at the facility (regardless of the time at which the release occurred), for the purposes of this Permit shall be any measure necessary to protect human health and the environment, as required under 40 CFR §§264.100 and/or 264.101, and as required under the Georgia Hazardous Waste Management Act §12-8-60, et. seq. Corrective action may address releases to air, soils, surface water, sediment, and/or groundwater, both on the facility and beyond the facility boundary.



5. Director shall mean the Director of the Georgia Environmental Protection Division or his/her delegated representative.
6. EPD shall mean the Georgia Environmental Protection Division.
7. Extent of contamination for the purposes of this Permit is defined as the horizontal and vertical area in which the concentrations of Hazardous Waste, Hazardous Waste Constituents or Hazardous Constituents in the environmental media are above method detection limits (provided that the estimated quantification limit, as defined in SW-846, or reporting limit is below the appropriate screening level), or Background concentrations, whichever is appropriate as determined by the Director.
8. Facility for purposes of this Permit includes all contiguous land and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of Hazardous Waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combination of them). For the purposes of implementing corrective action under 40 CFR §264.101, a facility includes all contiguous property under control of the owner or operator seeking a permit under the Georgia Hazardous Waste Management Act.
9. Hazardous Constituents for the purposes of this Permit are those substances listed in 40 CFR Part 261 Appendix VIII and 40 CFR Part 264 Appendix IX, "Groundwater Monitoring List."
10. Hazardous Waste Constituent for the purposes of this Permit means a constituent that caused the USEPA Administrator to list the hazardous waste in 40 CFR Part 261, Subpart D, or a constituent listed in Table 1 of §261.24.
11. Hazardous Waste for the purposes of this Permit means a hazardous waste as defined in 40 CFR §261.3, and newly defined hazardous waste by USEPA or EPD subsequent to the issuance of this permit.
12. Interim Measures for purposes of this Permit are actions necessary to minimize or prevent the further migration of contamination or limit actual or potential human and environmental exposure to contamination while long-term corrective action remedies are evaluated and, if necessary, implemented.
13. Land Disposal Facility for purposes of this Permit is a facility that uses a surface impoundment, landfill, land treatment or waste pile unit to manage or dispose of Hazardous Waste pursuant to §12-8-66 of the Georgia Hazardous Waste Management Act, as amended, and §3004 of RCRA, as amended.
14. Landfill for the purposes of this Permit includes any disposal facility or part of a facility where Hazardous Waste is placed in or on the land which is not a pile, a land treatment facility, surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, or a cave.
15. Qualified Groundwater Scientist for the purposes of this Permit means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields, as demonstrated by a current State of Georgia registration and completion of accredited university courses, that enable that individual to make sound professional judgements regarding groundwater monitoring and contaminant fate and transport.

16. Release for the 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, Hazardous Waste Constituents or Hazardous Constituents.
17. 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 that are managed for the purposes of implementing corrective action.
18. Solid Waste Management Unit (SWMU) for the purposes of this Permit includes, but is not limited to, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank (including storage, treatment, and accumulation tanks), container storage unit, wastewater treatment unit, including all conveyances and appurtenances used in waste management or storm water handling, elementary neutralization unit, transfer station, or recycling unit or any other unit from which Hazardous Waste, Hazardous Waste Constituents or Hazardous Constituents might migrate, irrespective of whether the units were intended for the management of solid and/or Hazardous Waste. SWMUs include areas that have been contaminated by routine and systemic releases of Hazardous Waste, Hazardous Waste Constituents or Hazardous Constituents.
19. Treatment for the purpose of this Permit refers to any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any Hazardous Waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage or reduced in volume.

I.F. Conditions Related to Compliance with General Facility Standards (40 CFR Part 264 Subparts B, C, D, E, G, H)

1. The Permittee must follow the procedures and plans described in detail in the Permit Application dated July 23, 2012, as amended, which are hereby incorporated by reference and include at least the following:

a.	Waste Analysis Plan	Section C
b.	Inspection Schedule	Section F
c.	Contingency Plan	Section G
d.	Training Program	Section H
e.	Closure Plan	Section I
2. The following activities must be carried out as prescribed in 40 CFR Part 264 Subparts B, C, D, and E; and in accordance with the appropriate Sections of the Permit Renewal Application Parts A & B, dated July 23, 2012, as amended.

a.	Required Notices - §264.12(a) and (b)
b.	Security - §264.14(b) and (c)
c.	Repairs and Inspection Log - §264.15(c) and (d)
d.	Annual Review of Training - §264.16(c)
e.	General Requirements for Ignitable, Reactive and Incompatible Wastes - §264.17
f.	Design and Operation - §264.31
g.	Testing and Maintenance of Equipment - §264.33
h.	Access to Communications or Alarm Systems - §264.34
i.	Maintain Aisle Space - §264.35

- j. Arrangements with Local Authorities - §264.37
  - k. Amendment of Contingency Plan - §264.54
  - l. Operating Record - §264.73 and Disposition of Records - §264.74
  - m. Reports - §264.75 and §264.77
  - n. Manifest System - §264.70 through §264.77
3. The following activities must be carried out as prescribed in 40 CFR Part 264 Subparts G & H, and Section I of the Permit Application dated July 23, 2012, as amended.
- a. Closure Performance Standard - §264.111 and §264.112
  - b. Closure in Accordance with Approved Plan - §264.113
  - c. Amendment of Closure Plan and Notification of Closure - §264.112(c) and (d)
  - d. Disposal or Decontamination of Equipment - §264.114
  - e. Certification of Closure - §264.115

I.G. Special Conditions Applicable to Entire Facility

1. Waste Minimization. The Permittee shall be required to certify no less often than annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that is generated on-site to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment in accordance with 40 CFR §264.73(b)(9).
2. Land Disposal Restrictions. The Permittee shall comply with all provisions of 40 CFR Part 268 "Land Disposal Restrictions" for all wastes to which they are applicable.
3. Contingency Plan. The Permittee must submit any revisions of the contingency plan, pursuant to §270.42(a)(1), to those government agencies and local authorities listed in Section G of the Permit Application dated July 23, 2012, as amended, within five (5) days of those changes. For changes requiring Director's approval prior to implementation, pursuant to §264.42, the Permittee must submit any revisions of the contingency plan to the above entities within twenty (20) days of approval of the revision(s) by the Director.
4. Closure. Within sixty (60) days of completion of any partial closure of the permitted container storage and/or treatment areas, or miscellaneous units, and within sixty (60) days of the completion of final closure, the owner or operator must submit to the Director, by registered mail, a certification that the hazardous waste management unit has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by an independent, registered professional engineer. Documentation supporting the independent, registered professional engineer's certification must additionally be furnished to the Director at that time.

**SECTION II. STORAGE IN CONTAINERS**

II.A. General:

The conditions in this section apply only to the Building 6020 "Hazardous Waste Storage Facility" (HWSF) as described in Section D and as depicted in Figures B-2, B-3, D-1, D-2, and D-3 of the Permit Application dated July 23, 2012, as amended.

II.B. Conditions Related Solely To Storage In Containers

1. Storage of hazardous waste in containers is expressly limited to Building 6020, Hazardous Waste Storage Facility (HWSF). The layout of containers stored in these areas shall be limited to those areas indicated in Figure D-2, D-3, and D-3a of the Permit Application dated July 23, 2012, as amended.
2. The Permittee is authorized to store only the following hazardous waste, listed in Appendix A-1 of the Permit Application dated July 23, 2012, as amended, in containers, at Building 6020 (HWSF), not to exceed at any one time, a maximum capacity of 59,840 gallons:

Area Name	Maximum Storage Capacity (gallons)	EPA Hazardous Waste Codes
Building 6020 (HWSF)	59,840	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D017, D018, D019, D021, D022, D026, D027, D035, D038, D039, D040, D043, F001, F002, F003, F005, U002, U019, U028, U037, U044, U057, U080, U112, U121, U122, U133, U154, U159, U160, U211, U213, U220, U239, U248, U359, P001, P006, P012, P042, P044, P081, P098, P105, P120

3. The Permittee shall operate, and maintain the Building 6020 (HWSF) in accordance with the detailed design plans and specifications contained in Section D.1 and Figures D-1, D-2, D-3, and D-3a of the Permit Application dated July 23, 2012, as amended, and references made herein.
4. If a container holding hazardous waste is not in good condition, or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition.
5. Containers must be managed according to 40 CFR §264.173.
6. Spilled or leaked wastes and accumulated precipitation must be managed per 40 CFR §264.175(b)(5).
7. When stacking containers, the Permittee must place the containers stably on pallets, which are in good condition and stack the containers no more than two (2) vertical layers, except for containers less than 20 gallons in size. Containers sized to hold twenty (20) gallons or less may be stacked more than two (2) vertical layers on a pallet, but only if the following conditions are met:
  - a. The entire stack is no higher than three (3) feet;
  - b. The entire stack must be banded, wrapped, or otherwise restrained for stability; and
  - c. No pallets should be placed on top of the restrained stack of containers sized to hold twenty (20) gallons or less.
8. Incompatible wastes and materials must be managed according to 40 CFR §264.177. The Permittee is prohibited from storing incompatible wastes within the same storage area without separating the incompatible wastes by means of a dike, berm, wall or other device.

9. All hazardous waste containers in storage must be clearly marked with the words, "Hazardous Waste," the EPA Hazardous Waste Number found in 40 CFR Part 261, waste description, and the date upon which the storage of hazardous waste at the facility began.
10. The Permittee shall maintain the containment system in accordance with 40 CFR §264.175.
11. Storage in areas not specifically identified in this Permit herein is strictly prohibited.
12. The Permittee shall comply with the applicable requirements of 40 CFR Part 264 Subpart CC for all containers of waste, which are greater in size than 26.4 gallons, and which have a volatile organic concentration of greater than or equal to 500 ppm by weight.

### **SECTION III. TREATMENT IN WASTE MUNITIONS AND EXPLOSIVES BY OPEN BURNING AND OPEN DETONATION**

#### **III.A. General**

The conditions in this section apply only to the Open Burning (OB) and Open Detonation (OD) Units at the OB/OD Range as described in Section D.2 and as depicted in Figures B-2, B-4, D-5, D-6, D-7, D-8, and D-9 of the Permit Application dated July 23, 2012, as amended.

#### **III.B. Conditions Related Solely to Treatment of Waste Munitions and Explosives**

1. The Permittee is authorized to treat only the following hazardous waste munitions and explosives, listed in Appendix A-1 of the Permit Application dated July 23, 2012, as amended, by open burning and open detonation as specified below in the following areas not exceeding, at any one time, the treatment capacities (short tons Net Explosive Weight per day) listed below:

Area Name	Types of Treatment	Treatment Capacity in Short Tons per Day (Pounds per Day) Net Explosive Weight	Description of Hazardous Wastes to be Treated	EPA Hazardous Waste Codes
OB/OD Range	Open Burning	0.5 (1000)	Ordnance and Debris; Igniters; Oxygen Candles; Miscellaneous Munitions Waste; Detonators; Rocket Motor Propellants; Linear Shaped Charges; Unserviceable Los Line/Harness; Separation Charge Assemblies; and Unserviceable Through Bulkhead Initiators.	D001, D003, D004, D005, D006, D007, D008, D009, D030
	Open Detonation	0.6 (1200)		

2. Treatment is expressly limited to the designated treatment area, OB/OD Range, delineated in Figures B-2 and B-4 of the Permit Application dated July 23, 2012, as amended. No treatment by open burning or open detonation is allowed on any other area of the Facility, except treatment activities taken during emergency response to an immediate threat to human health, public safety, property, or the environment from military munitions or explosives.
3. No storage of untreated waste munitions or explosives is permitted at the OB/OD Range. Treated waste, including ash and contaminated soil, shall be removed from the OB/OD Range within twenty-four (24) hours of treatment. Waste ash and contaminated soils shall be placed in containers, and transported for storage at Building 6020 (HWSF) or an area operated in accordance with §262.34(a).

A hazardous waste determination in accordance with §262.11 of the Georgia Rules for Hazardous Waste Management shall be made on all waste treatment residues.

4. The treatment of waste munitions and explosives may only occur when the Permittee has verified that the meteorological conditions listed in Table D-2 of the Permit Application have been met.
5. The Permittee shall restrict access to the OB/OD Range during treatment events to only those personnel (Detonation/Burn Operations Supervisor and EOD Technicians) conducting the permitted treatment activities. Personnel without current training and qualifications, as described in Section H.3 of the Permit Application, are prohibited from conducting OB/OD treatment activities. Munitions used in training exercises, or research development, testing and evaluation are not solid waste in accordance with §266.202, and thus, the burning or detonation of such munitions are not subject to this Permit.
6. The Permittee is prohibited from treating hazardous waste not identified in Permit Conditions III.B.1 in any area that is not specifically identified in Permit Conditions III.B.1.
7. For each treatment event, the effectiveness of treatment must be determined as soon as practicable (beginning 60 minutes after the treatment event is completed) in accordance with the Permit Application dated July 23, 2012, as amended.
8. The Permittee shall maintain all records required to comply with 40 CFR 264.73 and 40 CFR 264.602.
9. The Permittee shall inspect the OB/OD Range and all emergency equipment at the crew shelter as described in Table F-3 of the Permit Application dated July 23, 2012, as amended.
10. The Permittee shall maintain all stormwater run-off and run-on controls at the OB/OD Range, as described in D.2d(2) of the Permit Application dated July 23, 2012, as amended.
11. At partial or final closure of the OB and/or OD units, the Permittee shall follow the procedures in the Closure Plan, Section I.2 of the Permit application. If, after closure, all contaminated soils and debris cannot be removed or decontaminated in accordance with the Closure Plan, then the Permittee shall submit a post-closure plan in accordance with 40 CFR §264.118 and §264.603.

### III.C. Conditions Related Solely to Treatment by Open Burning

1. The Permittee shall operate and maintain the OB Unit (burn box) in accordance with Section D.2, Figures D-5, D-6, D-8, and D-9, and Appendix D-2 of the Permit Application dated July 23, 2012, as amended, and the conditions of this section.
2. The Permittee is allowed to treat by open burning a maximum of 0.5 short tons (1000 pounds) Net Explosive Weight of waste munitions and explosives per day in the burn box whose location is depicted in Figure B.-4 of the Permit Application dated July 23, 2012, as amended. The wastes to be treated by open burning in the burn box are limited to those wastes described in Appendix C-1 of the Permit Application dated July 23, 2012, as amended.
3. No hazardous waste, such as waste solvents, waste paints or paint-related material, contaminated fuels, or other wastes may be used as an accelerant in the operation of the burn box.
4. The burn box shall remain closed when waste is not being burned/treated.

5. The drain hole in the burn box shall be closed prior to the placement of wastes within the box. Spilled or leaked waste into the secondary containment, whether treated or untreated, and accumulated precipitation must be managed in accordance with §264.175(b)(5). Any spills of accelerant outside of the burn box into the secondary containment shall be cleaned up as soon as possible. Any spill residues and contaminated cleanup materials shall be properly containerized and transported for storage off-range at Building 6020 (HWSF) or an area operated in accordance with §262.34(a).

#### III.D. Conditions Related Solely to Treatment by Open Detonation

1. The Permittee shall operate and maintain the OD Unit in accordance with Section D.2, Figure D-7, and Appendix D-2 of the Permit Application dated July 23, 2012, as amended, and in accordance with the conditions of this section.
2. The Permittee is allowed to treat by open detonation a maximum of 0.6 short tons (1200 pounds) Net Explosive Weight of waste munitions and explosives per day in the OD Unit whose location is depicted in Figure B-4 of the Permit Application dated July 23, 2012, as amended. The wastes to be treated by open detonation in the OD Unit are limited to those wastes described in Appendix C-1 of the Permit Application dated July 23, 2012, as amended.
3. Prior to any treatment event, the OD Unit must be cleared of all solid objects, including stones, metallic debris, or other potential projectiles, as necessary to protect human health and the environment.
4. The Permittee shall remove all visibly contaminated soil and all treatment residues from the OD unit.

#### III.E. Monitoring Requirements

1. All sampling should be conducted in accordance with the most recent version of U.S. Environmental Protection Agency Region 4's *Field Branches Quality System and Technical Procedures*. Laboratory Methods must be those specified in the most recent edition of *Test Methods for Evaluating Solid Waste Physical/Chemical Methods SW-846*.
2. The Permittee shall inspect and maintain the environmental monitoring system for the detection of releases of any hazardous waste constituent from the treatment of hazardous waste munitions and explosives at the OB/OD Range, as described in Section E of the Permit Application dated July 23, 2012, as amended. The Permittee shall maintain, well-marked and in good working order, groundwater monitoring wells OBOD-1, OBOD-2, OBOD-3, and OBOD-4, whose locations are identified in Figures E-1 of the Permit Application dated July 23, 2012, as amended. All groundwater monitoring wells shall be maintained as follows:
  - a. A measuring point shall be clearly marked on the inner protective casing.
  - b. Wells shall be locked to prevent unauthorized entry.
  - c. A continuous pour, intact concrete surface seal and well apron shall be installed that is at least two feet (2') in diameter, centered around the borehole; is four inches (4") thick; and is raised above ground surface. This surface seal shall be sloped away from the well to prevent ponding around the well. There shall be no erosion under the pad.

3. The Permittee shall conduct **semi-annual** inspections of groundwater monitoring wells OBOD-1, OBOD-2, OBOD-3, and OBOD-4, to determine if the wells are marked and in good working order. All inspections should be documented and should include descriptions of any problems found and the remedial actions taken to correct problems.
4. The Permittee shall conduct **annual** sampling and analysis for the hazardous constituents below in the soil and groundwater at the following locations:

Hazardous Constituents	
Soil Sampling Locations (depth to be sampled)	
Background Location SS-A (1-2 feet)	Barium
SS-B (0 – 6 inches)	Cadmium
SS-C (0 – 6 inches)	Lead
SS-D (0 - 1 feet)	Selenium
SS-E (1 – 2 feet)	Mercury
SS-F (2 – 3 feet)	2,4-dinitrotoluene
	2,6- dinitrotoluene
	2,4,6-trinitrotoluene
	RDX
Groundwater Monitoring Wells	
OBOD-1 (Background)	Barium
OBOD-2 (Compliance Point)	Cadmium
OBOD-3 (Compliance Point)	Lead
OBOD-4 (Compliance Point)	Selenium
	Mercury
	2,4-dinitrotoluene
	2,6- dinitrotoluene

5. The groundwater monitoring program shall include a determination of groundwater surface elevation at all monitoring wells identified in Permit Section III.E.4 each time the groundwater is sampled. The Permittee shall also record the following information from each monitoring well: pH, temperature, specific conductance and turbidity.
6. All sampling and analysis shall be conducted in accordance with Section E.7 of the Permit Application dated July 23, 2012, as amended. If any hazardous constituent is detected in any soil sample over background and the EPA Regional Screening Levels for residential soils, the Permittee shall notify EPD and provide sampling results to EPD within sixty (60) days of the sampling event. EPD will review the sampling data submitted by the Permittee and determine if further investigation or corrective action for a release to soil is warranted. If there is statistically significant evidence of contamination at any monitoring well at the compliance point, the Permittee shall notify EPD within sixty (7) days of the finding, and follow the procedures for re-sampling in Section E.7 of the Permit Application dated July 23, 2012, as amended. If re-sampling verifies that there is statistically significant evidence of contamination at any monitoring well at the compliance point, the Permittee shall follow the procedures in Section E.8 of the Permit Application dated July 23, 2012, as amended.
7. If EPD determines that corrective action is warranted for any release to soil and/or groundwater at the OB/OD Range, the Permittee must submit a request for a permit modification, with a Corrective Action Plan, to remediate the release within ninety (90) days of such determination. The Corrective Action Plan shall include all of the information included in Permit Condition IV.E.2.



8. The Permittee shall dispose of all contaminated environmental media and any waste generated as a result of the operation of the environmental monitoring system in accordance with all applicable federal, state, and local laws.
9. If the Permittee believes that a sample result from a well is anomalous, the Permittee may resample the well(s). The Permittee must submit to the Director written notification of his or her plan to resample the well(s) within thirty (30) days of the discovery of an anomalous result. The written notification shall include an explanation for the belief that the sampling results were anomalous and the date upon which the resampling will take place.
10. At the request of EPD, the Permittee may be required to install additional groundwater wells at the OB/OD Range as necessary to replace a damaged well or a well that cannot yield a representative groundwater sample, to delineate contamination horizontally or vertically, to respond to changes in hydrological conditions, or for any other reason.
11. The Permittee shall enter all monitoring, testing and analytical data obtained pursuant to the conditions of this Section in the operating record, as required by §264.73(b)(6).

#### **SECTION IV. SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs)**

##### **IV.A. Applicability**

The conditions of this section apply to the Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) listed below, as identified in the RCRA Facility Assessments (RFA) dated September 1985, May 1993, and January 2009, and any additional SWMUs or AOCs discovered by any other means. The determination of the need for and subsequent implementation of corrective action is required by 40 CFR §264.101(a) and §12-8-66 of the Georgia Hazardous Waste Management Act for releases from all SWMUs and AOCs contained within the facility property boundaries and, as required by §12-8-66 of the Georgia Hazardous Waste Management Act and 40 CFR §264.101(c), for releases extending beyond the facility property boundaries.

1. SWMUs Requiring Further Investigation under Section IV.C of the Permit:
  - SWMU 9: Consolidated Mess Open, Building 1039, Heating Oil Tank Release
  - SWMU 27: Former Satellite Accumulation Area #2010-2
2. SWMUs requiring corrective action and which are being handled under Sections V of this Permit:
  - SWMU 3: Old Camden County Landfill (Site 11)
  - SWMU 14: Electrical Substation #1 Diesel UST Release (handled by EPD's Underground Storage Tank Management Program)
3. SWMUs requiring no further action at this time:
  - SWMU 1: Area Adjacent to the Boat Paint Kitchen at Refit #2
  - SWMU 2: Outside Building 5117 at the 90-day Storage Area
  - SWMU 4: Army Reserve Disposal Area, Towhee Trail (Site 5)
  - SWMU 5: Fire Fighting Pit (Site 2)
  - SWMU 6: Army Reserve Disposal Area Near Old Sewage Lagoon 3990 (Site 16)
  - SWMU 7: Paint Mix Storage Building Inside Hull Cleaning Support Building 5073
  - SWMU 10: HWSF, Building 6020
  - SWMU 11: OB/OD Unit
  - SWMU 12: Trident Refit Facility Building 4026, Clean Line Sumps and ASTs
  - SWMU 15: PCB Transformer Storage Area No. 1 (Site 1)
  - SWMU 16: PCB Transformer Storage Area No. 2 (Site 3)

- SWMU 17: PCB Transformer Storage Area No. 3 (Site 4)
- SWMU 18: Army Reserve Disposal Area No. 1 (Site 6)
- SWMU 19: Army Reserve Disposal Area No. 2 (Site 7)
- SWMU 20: Army Reserve Disposal Area No. 3 (Site 8)
- SWMU 21: Blue Star Shipping Disposal Area, Parking Lot Site (Site 9)
- SWMU 22: Blue Star Shipping Disposal Area, T-Shed (Site 10)
- SWMU 23: Army Reserve Disposal Area at Dry Dock (Site 12)
- SWMU 24: Old DPDO Yard (Site 13)
- SWMU 25: Army Reserve Disposal Area Near Kamehameha Avenue (Site 14)
- SWMU 26: Army Reserve Disposal Area Near Wastewater Treatment Facility (Site 15)
- SWMU 28: Industrial Wastewater Treatment Facility
- SWMU 29: Waterfront Wastewater Treatment Facility
- SWMU 30: Upper Base Wastewater Treatment Facility
- SWMU 31: Fuel Farm Transfer Station Area
- SWMU 32: Consolidated Sandblast and Paint Facility, Building 4041, Roll-off Container
- SWMU 33: Waterfront Revival Tent Roll-off Container
- SWMU 34: Equipment Maintenance Building 3020, Hydraulic Fluid Release
- SWMU 35: Electrical Substation #2 Diesel UST Release
- SWMU 36: Electrical Substation #3 Diesel UST Release

IV.B. Notification and Assessment Requirements for Newly Identified SWMUs and AOCs

1. The Permittee shall notify the Director in writing, within fifteen (15) calendar days of discovery, of any additional SWMUs and/or AOCs discovered during the course of groundwater monitoring, on-going field investigations, environmental audits, or any other means. This shall include, but is not limited to, newly discovered releases at previously identified SWMUs or AOCs. Notification shall include, at a minimum, the location of the SWMU and/or AOC and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). The Permit shall be modified in accordance with 40 CFR Part 270 to incorporate the newly discovered SWMUs or AOCs.
2. The Permittee shall prepare a SWMU Assessment Report (SAR) for each additional SWMU or AOC discovered subsequent to issuance of this Permit which is known or suspected to have releases to the environment. The SAR shall be submitted within sixty (60) days of discovery of a new SWMU or AOC. The report must also include, at a minimum, the following information for each SWMU or AOC:
  - a. Type of unit;
  - b. Location of each unit in a topographic map of appropriate scale, as required by §270.14(b)(19);
  - c. General dimensions, capacities and structural description of the unit(s) (supply any available plans/drawings);
  - d. Function of unit;
  - e. Dates that the unit was operated;
  - f. Description of the wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes; and

- g. Description of any known releases or spills (to include groundwater data, soil analyses, sediment, air, and/or surface water data). If the report is being prepared as a result of a newly discovered release at a previously identified SWMU or AOC, the data may be limited to that pertaining to the newly discovered release, as long as a brief summary of the investigative and remedial actions taken in response to previous releases at the SWMU and/or AOC is provided, along with the current status in relation to those releases.
4. Based on the contents of the SAR, the Director shall determine the need for further investigations at the SWMUs and/or AOCs covered in the report. If the Director determines that such investigations are needed, the Permittee shall be notified to prepare a RCRA Facility Investigation (RFI) Workplan, as outlined in Permit Section IV.C, for such investigations.

IV.C. RCRA Facility Investigation (RFI)

1. The Permittee shall complete and submit an RFI Workplan for:
  - a. SWMUs/AOCs identified in Permit Section IV.A.1 as requiring investigation - This workplan shall be submitted within ninety (90) days of the effective date of this permit.
  - b. SWMUs/AOCs identified pursuant to Permit Section IV.B as requiring investigation - This workplan shall be submitted no later than sixty (60) days after notification by EPD pursuant to Permit Condition IV.B.3.
2. The RFI Workplan required by Permit Condition IV.C.1 shall include, but is not limited to, a schedule for implementation and report submittal; a description of the specific actions necessary to determine the nature and Extent of Contamination (including releases that extend beyond the facility's property boundary); potential migration pathways for Releases (e.g., air, land, surface water, and groundwater); actual or potential receptors; applicable background concentrations; and a risk assessment workplan (if applicable, following the *Georgia EPD Guidance for Selecting Media Remediation Levels at RCRA Solid Waste Management Units*, dated November 1996). The Permittee must provide sufficient justification that migration through a potential pathway is not likely if it is not included in the plan. Such deletions are subject to the approval of the Director. When drafting the workplans and conducting the investigations, the Permittee must follow the procedures below, unless otherwise noted:
  - a. Environmental investigations should follow USEPA's "SESD Field Branches Quality System And Technical Procedures" (which can be found at <http://www.epa.gov/region4/sesd/fbqstp/index.html>), or, if it is superceded, its USEPA successors, unless a specific alternate procedure is approved by the Director. Approval of a specific alternate procedure shall not affect the requirement to use the other USEPA Procedures.
  - b. In determining background concentrations for the Facility, the Permittee shall follow the background determination methods set forth below for the media specified (note, additional actions are required, if warranted, based on site specific conditions, as determined by the Director):
    - i. For Determining Background Concentrations in Soils and Sediments: Part A of the USEPA document "Determination of Background Concentrations of Inorganics in Soils and Sediments at Hazardous Waste Sites," published by the US EPA, December 1995, Document #EPA/540/5-96/500.

- ii. For Determining Background Concentrations in Groundwater: Obtain samples from wells upgradient of the Facility and/or unit that is being investigated (as is appropriate). Since groundwater quality can vary at different depths and aquifers, the Permittee should install background groundwater monitoring wells at various depths and within different aquifers, as is applicable to the subsurface at the facility.
    - iii. For Determining Background Concentrations in Surface Water: Obtain samples upstream of the facility and/or upstream of potential source(s) (including the potential source of contaminated groundwater from a SWMU and/or AOC discharging to the water body), from the facility or unit being investigated (as is appropriate).
  - c. Detection Limits for analytical results shall be below the appropriate screening levels for the environmental media being analyzed.
- 3. Upon approval by the Director of the RFI Workplan(s) required by Permit Section IV.C, the Permittee shall conduct the RFI(s) in accordance with the schedule contained therein.
- 4. RFI Reports
  - a. The Permittee shall complete and submit the RFI Report(s) in accordance with the schedule contained in the RFI Workplan required by Permit Condition IV.C.1. The RFI Report(s) shall address all Releases, including those that extend beyond the facility property boundary, unless the Permittee demonstrates to the Director's satisfaction that, despite the Permittee's best efforts, the Permittee was unable to obtain permission to undertake actions on off-site properties required by the workplan(s). The report(s) shall provide, but are not limited to the following:
    - i. A summary of all activities undertaken during the RFI(s) to implement the approved workplan.
    - ii. A clear and complete description of the nature and extent of contamination identified during the RFI(s) including sources, migration pathways, actual or potential receptors, and applicable background concentrations.
    - iii. Potentiometric maps, isopleth maps (using standard units of measure for the corresponding media), figures, diagrams, cross-sections, conceptual site model (CSM), etc., to illustrate the findings in a clear concise manner.
    - iv. If applicable, the results of the risk assessment conducted in accordance with an approved risk assessment workplan.
  - b. If the time required to conduct the RFI(s) is greater than one hundred eighty (180) calendar days, the Permittee may be required to provide the Director with quarterly RFI Progress Reports (90 day intervals) beginning ninety (90) calendar days from the initiation of the RFI(s), as specified in the approved RFI Workplan(s). The progress report(s) shall, at a minimum, contain the following information:
    - i. A description of the portion of the RFI completed;
    - ii. Summaries of findings;
    - iii. Summaries of any deviations from the approved RFI Workplan during the reporting period;
    - iv. Summaries of all contacts with local community public interest groups or State government regarding RFI investigations;

- v. Summaries of any problems or potential problems encountered during the reporting period;
  - vi. Actions taken to rectify problems;
  - vii. Changes in relevant personnel; and
  - viii. Projected work for the next reporting period.
5. Based on the findings from the RFI Report(s) required by Permit Condition IV.C.4 or other information obtained by EPD, the Director shall notify the Permittee of the need for further investigative actions and/or the need for corrective action as required under §264.101(a), §264.101(c) of the Georgia Rules for Hazardous Waste Management, and §12-8-71(b) of the Georgia Hazardous Waste Management Act. If further investigation is required, the Permittee shall submit subsequent RFI workplans, in compliance with the requirements set forth in Condition IV.C.2 above, on the schedule specified by the Director. The Permittee shall also comply with Conditions IV.C.3 and IV.C.4 above, with respect to the subsequent investigations.

#### IV.D. Interim Measures (IM)

##### 1. Requirement for Interim Measures

The Permittee shall conduct Interim Measures (IM) for any SWMU and/or AOC, either upon notification by the Director that IM are necessary or if the Permittee decides to implement IM at a SWMU and/or AOC in order to stabilize a release.

##### 2. IM Workplan

- a. If the Permittee is notified by the Director that IM are necessary, an IM Workplan shall be submitted within thirty (30) days of such notification. If the Permittee chooses to conduct IM prior to notification by the Director, the Permittee shall submit a workplan for that activity. IM may be conducted concurrently with investigations required under the terms of this Permit.
- b. An IM Workplan submitted pursuant to Permit Condition IV.D.2.a above shall be consistent with and, if required by the Director integrated into any long-term corrective action at the facility. The IM Workplan shall include: the IM objectives, procedures for implementation (including any designs, plans, or specifications), schedules for implementation and completion, and schedules for submittal of progress reports.
- c. The IM Workplan must be approved by the Director, in writing, prior to implementation.

##### 3. IM Implementation

- a. The Permittee shall implement the IM in accordance with the schedule contained in the approved IM Workplan.
- b. The Permittee shall give notice to the Director, for approval, at least fifteen (15) days prior to any planned changes, reductions or additions to the IM Workplan.
- c. If corrective action required by §264.101 and/or Permit Section IV.E is achieved through IM, the Permittee shall apply for a permit modification pursuant to §270.42(c) to incorporate the IM into the Permit as the final corrective action.

##### 4. IM Reports

- a. Within forty-five (45) days of completion of IM, the Permittee shall complete and submit to the Director an IM Report. The report shall provide, but is not limited to, the following information:
  - i. A description of IM implemented;
  - ii. A summary of all data or other information obtained during implementation of IM;
  - iii. A summary of the effectiveness of the IM in achieving the objective of containing, removing and/or treating contamination resulting from a release from a SWMU and/or AOC in order to protect human health and the environment;
  - iv. A summary of all problems encountered during the IM implementation, and the solutions to those problems; and
  - v. Copies of all relevant laboratory/monitoring data.
- b. If the time required for completion of IM is greater than one year, the Permittee shall provide the Director with progress reports at intervals specified in the approved IM Workplan. The progress reports shall contain the following information at a minimum:
  - i. A description of the portion of the IM completed;
  - ii. Summaries of any deviations from the IM Workplan during the reporting period;
  - iii. Summaries of any problems or potential problems encountered during the reporting period and the solutions to those problems;
  - v. Projected work for the next reporting period; and
  - vi. Copies of laboratory/monitoring data.

IV.E. Corrective Action Plan (CAP)

1. The Permittee may be required to submit a 'Conceptual Corrective Action Plan' (CCAP). If requested, the Permittee shall submit the CCAP in accordance with a schedule to be determined by the Director. The Permittee will be notified of that schedule by written notice. The CCAP must include a description of the remedial measures to be taken at each SWMU and/or AOC, a schedule of implementation and completion. The submittal of a CCAP does not satisfy the requirement for submittal of a CAP.
2. The Permittee shall submit a Corrective Action Plan (CAP) in accordance with a schedule to be determined by the Director. The Permittee will be notified of that schedule by written notice. The CAP must include the following:
  - a. A detailed design and description of the corrective actions to be taken at each SWMU and/or AOC that will remediate the release,
  - b. A schedule of implementation and completion,
  - c. A detailed description of the environmental monitoring system, and a sampling and analysis plan to monitor, analyze and evaluate contaminant trends, the effectiveness of the corrective action(s), and changes in the extent of contamination due to the migration of the mobile media such as groundwater, surface water and sediment. The description of the monitoring system shall include the locations of sampling points, including groundwater monitoring wells, and soil surface water and sediment sampling locations on a map(s) and cross-section(s), overlain with the area(s) of contamination to demonstrate that the monitoring system is sufficient to detect migration of mobile environmental media and evaluate the effectiveness of the corrective action. At a minimum, the sampling and analysis plan shall include the following information: project data quality objectives, sampling rationale, field methods and procedures,

disposal of residual materials, sampling documentation and quality control, parameters and analytical methods and field health and safety procedures.

- d. Remedial Goals. The Permittee may remediate the contamination to background concentrations or approved risk-based concentrations. For constituents with a MCL, the groundwater protection standard is the MCL. Therefore, risk-based concentrations may only be derived for those constituent without a Maximum Contaminant Level (MCL). If the Remedial Goals are derived from a site-specific risk assessment, the *Georgia EPD Guidance for Selecting Media Remediation Levels at RCRA Solid Waste Management Units*, dated November 1996, as amended, must be followed.
  - e. A detailed inspection plan (for malfunction, deterioration, operator error, and other problems), and an associated schedule that sets forth what will be inspected (listing, individually, all aspects of the remedial system, associated monitoring structures, etc.), specifying what will be evaluated at each structure (including, but not limited to listing 'potential' problems to be looked for during the inspection), and the inspection form to be completed that provides a place to record the above information, along with the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
  - f. A contingent CAP, if the chosen corrective action includes monitored natural attenuation, or an innovative technology.
3. Upon approval by the Director of any CAP required by Permit Condition IV.E.2, the Permittee shall implement any required corrective action in accordance with the schedule in the approved CAP.
  4. If the Permittee is required to develop a CAP under Permit Section IV.E, the Permittee shall apply for a permit modification pursuant to §270.42(c) to incorporate the plan into the Permit.
  5. Any unauthorized corrective action which exacerbates or spreads contaminant releases shall be considered a violation of this Permit.

#### IV.F. Reporting, Recordkeeping and Response

1. All workplans and schedules shall be subject to approval by the Director prior to implementation. Upon approval, the Permittee shall implement all workplans and schedules as written, or as specified by the Director.
2. 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 Director based on the Permittee's demonstration that sufficient justification for the extension exists.
3. The Permittee shall enter all monitoring, testing and analytical data obtained pursuant to the conditions of this Permit into the operating record, as required by 40 CFR §264.73(b)(6).
4. The Permittee shall have all workplans and reports, which involve installation of groundwater monitoring wells or systems and/or the interpretation of data gathered from those wells or systems, prepared and certified by a qualified groundwater scientist.
5. The Permittee shall report all analytical data in parts per billion for groundwater and surface water.

6. In the event of the Director's disapproval (in whole or in part) of any document required by this Permit Section, the Director shall specify any deficiencies in writing. In the event of disagreement, the Permittee shall revise all submittals as specified by the Director.
7. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and any other supporting information gathered or generated during activities undertaken pursuant to this section shall be maintained at the facility during the term of this Permit, including any reissued permits.
8. All plans and schedules required by the conditions of Permit Section IV are, upon approval by the Director, incorporated into this section by reference and become an enforceable part of this Permit. Any non-compliance with such approved plans and schedules shall be termed non-compliance with this Permit.
9. The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Director required in Permit Section IV are signed and certified in accordance with 40 CFR §270.11.
10. If the Director or the Permittee at any time determines that any reports or activities conducted pursuant to any plan required by Permit Section IV of this Permit, no longer satisfies the requirements of 40 CFR §264.101, this Permit, or the intent of that plan or report for prior or continuing releases, the Permittee must submit an amended plan to the Director within sixty (60) days of such determination.
11. Failure to submit the information required in this Section, or falsification of any submitted information, is grounds for termination of this Permit.

**SECTION V. CORRECTIVE ACTION OF CONTAMINATED GROUNDWATER AT THE OLD CAMDEN COUNTY LANDFILL (SITE 11)**

**V.A. Applicability**

1. The conditions of this Section apply to corrective action of contaminated environmental media (including soil, groundwater, sediment, surface water, and indoor air) as applicable at the Solid Waste Management Units (SWMUs) listed below, as described in the approved Corrective Action Plan listed below [hereinafter "CAP"]:

SWMU #	SWMU Name	Title and Date of Approved Corrective Action Plan
3	Old Camden County Landfill (Site 11)	"Corrective Action Plan, Site 11, Old Camden County Landfill, Naval Submarine Base Kings Bay, Georgia" dated July 1998

2. Any unauthorized corrective action which exacerbates or spreads contaminant releases shall be considered a violation of this Permit.

**V.B. Corrective Action Program**

1. The Permittee shall conduct, for the duration of the Compliance Period, corrective action, as described in the CAP, to treat contamination at the facility which exceeds the groundwater protection standards (GPSs) specified in Permit Section V.D, as required under §12-8-66 of the Georgia Hazardous Waste Management Act, as amended.



2. The Permittee shall expand the corrective action system as necessary to treat all contaminated groundwater above GPSs described in the CAP. Any plan for changes in the corrective action system shall be submitted thirty (30) days prior to commencement of said changes.
3. The Permittee shall dispose of all contaminated environmental media and any waste generated as a result of the operation of the corrective action systems in accordance with all applicable federal, state, and local laws.
4. The Permittee is not relieved of responsibility to clean up a release that has migrated beyond the facility's property boundary where off-site access is denied.

V.C. Groundwater Monitoring and Corrective Action Wells

1. The Permittee shall maintain the groundwater monitoring system at the facility. The Permittee shall install and maintain additional wells and/or piezometers as necessary to assess changes in the rate and extent of contamination or to assess the effectiveness of the corrective action program, following Permit Condition V.C.11.
2. The Permittee shall maintain, well-marked and in good working order, all groundwater monitoring wells whose locations are identified in Figure 3-13 of the *August 2012 Draft Optimization of Groundwater Monitoring Program, Site 11, Old Camden County Landfill*. All groundwater monitoring wells shall be maintained as follows:
  - a. A measuring point shall be clearly marked on the inner protective casing.
  - b. Wells shall be locked to prevent unauthorized entry.
  - c. A continuous pour, intact concrete surface seal and well apron shall be installed that is at least two feet (2') in diameter, centered around the borehole; is four inches (4") thick; and is raised above ground surface. This surface seal shall be sloped away from the well to prevent ponding around the well. There shall be no erosion under the pad.
3. *Sentinel wells.* A sentinel well is placed to intercept potential migration of the contaminant plume, is used to determine the maximum horizontal and vertical extent of the plume, and does not contain constituents above background. Sentinel well shall be screened within the same interval of the aquifer as the contaminant plume, shall be located downgradient, side-gradient, or upgradient of the plume. The Permittee shall maintain an adequate number of sentinel wells in order to maintain delineation of the contaminant plume.
4. *Performance Monitoring.* The Permittee shall perform sampling for the parameters described in Permit Condition V.C.9, according to the schedule in paragraphs (a), (b), and (c) below, for the duration of the compliance period at the monitoring wells whose locations are identified in Figure 3-13 of the *August 2012 Draft Optimization of Groundwater Monitoring Program, Site 11, Old Camden County Landfill*, except as provided in Permit Condition V.C.6. The purpose of this "performance" monitoring is to determine if the corrective action system is effectively treating all contamination, meeting interim performance goals, and reducing contaminant concentrations to the GPSs.

- a. The Permittee shall sample the following monitoring wells on a **semi-annual** basis, until the concentrations of all VOC contaminants are below the GPSs as defined in Permit Section V.D:

KBA-11-16	KBA-11-34	KBA-11-37
108 Cottage Court (R)	USGS-7	

- b. The Permittee shall sample the following monitoring wells on an **annual** basis, until the concentrations of all VOC contaminants are below the GPSs as defined in Permit Section V.D:

KBA-11-11A	KBA-11-13A	USGS-1
USGS-2	USGS-3	USGS-4
USGS-5	USGS-8	USGS-10
USGS-12	KBA-11-03B	

- c. The Permittee shall sample all monitoring wells on a **semi-annual** basis once GPSs as defined in Permit Section V.D have been met in all wells until the end of the Compliance Period as defined in Permit Section V.E.

5. With the exception of sentinel wells described in Permit Condition V.C.3, the Permittee may petition the Director, and if approved, may cease sampling any monitoring well if sampling results from that well indicate that the concentrations of hazardous constituents have not exceeded the GPSs specified in Permit Section V.D for a period of three (3) consecutive years.
6. If the Permittee believes that a sample result from a well is anomalous, the Permittee may resample the well(s). The Permittee must submit to the Director written notification of his or her plan to resample the well(s) within thirty (30) days of the discovery of an anomalous result. The written notification shall include an explanation for the belief that the sampling results were anomalous and the date upon which the resampling will take place.
7. The groundwater monitoring program shall include a determination of groundwater surface elevation at the following monitoring wells and those monitoring wells identified in Permit Condition V.C.4 each time the groundwater is sampled:

KBA-11-10B	KBA-11-15	KBA-11-17B	PS-2
KBA-11-20	KBA-11-21	KBA-11-08B	KBA-11-18
KBA-11-22B	KBA-11-36	KBA-11-2	KBA-11-13B

8. The Permittee shall determine the groundwater flow rate and direction from the groundwater surface elevation data collected from all monitoring wells identified in Permit Conditions V.C.4 and V.C.7 each time the groundwater is sampled.
9. Groundwater samples from monitoring wells identified below shall be analyzed for the following parameters:

Wells to sampled	Parameters	Methods
Wells identified in Permit Condition V.C.4	Dissolved Oxygen	Field
	Oxidation Reduction Potential	
	pH	
	Turbidity	

Wells to sampled	Parameters	Methods
	Temperature	SW-846 Method 8260B
	Specific conductance	
	Tetrachloroethene	
	Trichloroethene	
	cis-1,2-dichloroethene	
	Vinyl Chloride	

10. The data collected pursuant to Permit Section V.C shall be reported to EPD on or before sixty (60) days following the completion of the monitoring performed in accordance with the schedule set forth in Permit Section V.C.4 for the duration of the compliance period. These reports shall include but are not limited to the following:
  - a. Laboratory data sheets from all sampling conducted pursuant to Permit Conditions V.C.4 and V.C.9;
  - b. Tabulation of all data collected in parts per billion (ppb);
  - c. Maps of sample locations, with isoconcentration lines for each individual constituent showing the extent of contamination to detection limits (provided the detection limit is below the GPS);
  - d. Potentiometric representations depicting groundwater flow direction; and
  - e. Reports and discussion of anomalies, problems, and anticipated problems with data.
11. If the Director or the Permittee determines that additional or replacement wells are needed, the Permittee shall submit, for approval, a plan for the design, location, and installation of any additional or replacement monitoring wells, with a Class I permit modification request, thirty (30) days prior to proposed installation, unless it is deemed appropriate by the Director and the Permittee that the wells should be installed on an accelerated schedule. The plan, at a minimum, shall include:
  - a. Well construction techniques including casing depths and proposed total depths of well(s);
  - b. Well development method(s);
  - c. A complete evaluation of well construction materials;
  - d. A schedule of implementation for construction; and
  - e. Provisions for determining the lithologic character and hydraulic conductivity for the applicable aquifer unit(s) at the location of the new well(s).

The Permittee may be required to install additional or replacement monitoring wells as necessary for the following reasons:

  - To replace a damaged well or a well that cannot yield a representative groundwater sample;
  - To maintain delineation of contamination horizontally and vertically;
  - To respond to changes in hydrological conditions (For example, when a well becomes dry from a lowered water table); or
  - For any other reason determined by the Director.
12. The closure of any groundwater monitoring well shall follow the Georgia Water Well Standards Act, O.C.G.A. §12-5-134, et seq.
13. Within thirty (30) days of issuance of the Permit, the Permittee must submit a groundwater monitoring well checklist to be used with all inspections, that identifies the items to be inspected, and lists potential problems to be evaluated.

14. The Permittee shall conduct semi-annual inspections of the wells to determine if the wells are marked and in good working order. All inspections must be documented and must include descriptions of any problems found and the remedial actions taken to correct problems. All inspections should be documented and should include descriptions of what was evaluated, any problems found, and remedial actions taken to correct problems.

V.D. Groundwater Protection Standards

The groundwater protection standards (GPSs) shall consist of the following limits as established below:

Hazardous Constituent	CAS Number	Groundwater Protection Standards (GPSs) (ug/L)
Tetrachloroethene	127-18-4	5
Trichloroethene	79-01-6	5
cis-1,2-dichloroethene	156-59-2	70
Vinyl Chloride	75-01-4	2

V.E. Compliance Period

1. The compliance period shall be defined as beginning on the effective date of this Permit and continuing until the concentrations of hazardous constituents in the groundwater have not exceeded the GPSs during two consecutive sampling events for a period of three (3) consecutive years. Anomalous sampling results, as provided for in Permit Condition V.C.6, shall not be counted as a sampling event.
2. If the GPSs are met for two consecutive semi-annual sampling events during the compliance period, the Permittee may cease corrective action, but must continue to monitor the facility's groundwater quality pursuant to Permit Condition V.C.4.c until the GPSs have not been exceeded for three (3) consecutive years from the date the GPSs were achieved. If the GPSs are exceeded in any one well at any time during the compliance period, the Permittee shall resume operation of the corrective action systems, as described in the CAP, within thirty (30) days of the exceedance.

V.F. Reporting, Recordkeeping and Response

1. 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 groundwater must be the appropriate method from 40 CFR Part 261 Appendix I. All sampling should be conducted in accordance with the most recent version of U.S. Environmental Protection Agency Region 4's *Field Branches Quality System and Technical Procedures*. Laboratory Methods must be those specified in the most recent edition of *Test Methods for Evaluating Solid Waste Physical/Chemical Methods SW-846*.
2. The Permittee shall have all reports, which involve installation of groundwater monitoring wells or systems and/or interpretation of data gathered from those wells or systems, prepared and certified by a qualified groundwater scientist.
3. The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Director required in this Section are signed and certified in accordance with §270.11 of the Georgia Rules for Hazardous Waste Management.

4. The results of all plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Director based on the Permittee's demonstration that sufficient justification for the extension exists.
5. The Permittee shall enter all monitoring, testing and analytical data obtained pursuant to the conditions of this Section in the operating record, as required by §264.73(b)(6).
6. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and any other supporting information gathered and generated during activities undertaken pursuant to this Section shall be maintained at the facility during the term of this Permit, including any reissued permits.
7. All plans and schedules required by the conditions of this Section are, upon approval by the Director, incorporated into this Section by reference and become an enforceable part of this Permit. Any non-compliance with such approved plans and schedules shall be termed non-compliance with this Permit.
8. Failure to submit the information required in this Section, or falsification of any submitted information, is grounds for termination of this Permit.

V.G. Effectiveness of Corrective Action

1. The Permittee shall document the effectiveness of the corrective action required in this Section and as described in the CAPs and shall submit this information in an annual progress report which is due on or before July 1 each year during the compliance period. The report shall include, but is not limited to the following:
  - a. Removal or destruction rates of the contaminants listed in Permit Condition V.D;
  - b. Whether the corrective action system is addressing all contamination;
  - c. Progress towards remedial goals, including an estimate of when corrective action will be completed using the data collected thus far;
  - d. An evaluation of the data and the corrective action program in accordance with the CAP, including a discussion of any changes in environmental conditions (i.e., geochemical, hydrogeologic, microbial, or other changes), the detection of any toxic or mobile transformation products, the effectiveness of land use controls, whether the plume is expanding or is stable, and any recommendations and/or conclusions.
  - e. Tabulation of all data collected during the corrective action program;
  - f. Graphical representation of all data collected during the corrective action program, including trend graphs and maps of sample locations with isoconcentration lines showing the extent of contamination;
  - g. Groundwater elevation tables and maps depicting groundwater each time water level data is collected; and
  - h. Reports and discussions of anomalies, problems, and anticipated problems with the data, and any deviations or modifications to the approved CAP.

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V.H. Permit Modification

1. If the Director or the Permittee at any time determines that the corrective action program no longer satisfies the requirements of §264.101 or this Section for releases of hazardous waste, hazardous waste constituents, or hazardous constituents, the Permittee must submit an application requesting a permit modification, within ninety (90) days of such determination to make any appropriate changes in the program.
2. If the Director determines that further actions beyond those provided in this Section or changes to that which is stated herein are warranted, the Permittee shall submit a modification to the Permit according to the modification procedures under §270.41 of the Georgia Rules for Hazardous Waste Management.