I.D. NUMBER NC6 170 022 580 DATE ISSUED:
PERMIT NO. NC6 170 022 580 R3

STATE OF NORTH CAROLINA
DIVISION OF WASTE MANAGEMENT
HAZARDOUS WASTE MANAGEMENT PERMIT

Permittee and Owner:
Marine Corps Base Camp Lejeune
1 Holcomb Boulevard (PSC Box 20004)
Camp Lejeune, NC 28547-2540

Pursuant to the 15A NCAC 13A North Carolina Hazardous Waste Management Rules, a Hazardous and Solid Waste Amendments (HWSA) permit is issued to Marine Corps Base Camp Lejeune located in the White Oak River Basin, in Jacksonville, Onslow County at latitude 34º 39' 58" N and longitude 77º 20' 45" W.

The Permittee must comply with all terms and conditions of the permit. This permit consists of the conditions discussed in Parts I, II, III, IV, V, and VI; the applicable regulations contained in 15A NCAC 13A including the applicable provisions of 40 CFR Parts 260 through 264, 266, 268, 270 and 124; statutory requirements of N.C.G.S. 130A -Article 9 (Solid Waste Management Act as amended) and the attached application.

Applicable regulations are those which are in effect on the date of issuance of this permit [40 CFR 270.32(c) as adopted in 15A NCAC 13A.0113] and are attached.

This permit is based on the assumption that the information submitted in the permit application and as modified by subsequent amendments (hereafter referred to as the Attachment) is accurate and that the facility will be operated as specified in the Attachment. Any inaccuracies found in this information could lead to the termination or modification of this permit and potential enforcement action [40 CFR 270.41, 270.42, and 270.43 as adopted in 15A NCAC 13A .0113]. The Permittee shall inform the North Carolina Department of Environmental Quality of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of ----------2023, and shall remain in effect for ten (10) years until ----------2033, [40 CFR 270.50 as adopted in 15A NCAC 13A .0113] unless revoked and reissued, terminated or continued in accordance with 40 CFR 270.51 as adopted in 15A NCAC 13A .0113.

_____ _____

Adam Ulishney, Chief Date
Hazardous Waste Section

TABLE OF CONTENTS

PART I - STANDARD CONDITIONS

This permit is being issued to Marine Corps Base Camp Lejeune. The facility boundaries are identified in the Figures in the Attachment and in Appendix E of this permit.

A. EFFECT OF PERMIT

Compliance with this permit constitutes compliance, for purposes of enforcement, with the N.C. Hazardous Waste Management Rules (15A NCAC 13A) and N.C.G.S. 130A-Article 9 (Solid Waste Management Act 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 action brought under any law governing protection of public health or the environment for any imminent and substantial endangerment to human health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43 as adopted in 15A NCAC 13A .0113. 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.

C. 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.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued under 40 CFR 270.61 as adopted in 15A NCAC 13A .0113. Any permit noncompliance constitutes a violation of N. C. Hazardous Waste Management Rules and N.C.G.S. 130A-Article 9 (Solid Waste Management Act as amended) and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application.

2. Duty to Reapply. If the Permittee will 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 180 days before this permit expires.

3. Obligation for Corrective Action. Owners and operators of hazardous waste management units must have a permit during the active life of the unit and for any period necessary to comply with the corrective action requirements of this permit.

4. Permit Expiration. This permit and all conditions therein will remain in effect beyond the permit's expiration date and until a decision is made concerning issuance of a new permit if the Permittee has submitted a timely, complete application at least 180 days before the expiration date of the permit (see 15A NCAC 13A .0113(b), (c), (d), and (e) as required) and through no fault of the Permittee, the Secretary of the Department of Environmental Quality or their designee (hereafter referred to as the Department) has not issued a new permit as set forth in 40 CFR 124.15 as adopted in 15A NCAC 13A .0105.

5. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a 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 or correct any adverse impact on the environment resulting from noncompliance with this permit.

7. Proper Operation and Maintenance. The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment, control, monitoring and remediation (and related appurtenances) 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 back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit.

8. 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.

9. Inspection and Entry. The Permittee shall allow the Department or an authorized representative, 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 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 N. C. Hazardous Waste Management Rules, any substances or parameters at any location.

10. Monitoring and Records.

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 to be analyzed must be an appropriate method or an equivalent method 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, or an equivalent method approved by the Department.

b. The Permittee shall retain records of all monitoring information required under the terms of this permit (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), records of all data used to prepare documents required by this permit, copies of all reports and records required by this permit, the certification required by 40 CFR 264.73(b)(9) as adopted in 15A NCAC 13A .0109, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report or record, or until corrective action is completed, whichever date is later. As a generator of hazardous waste, the Permittee shall retain on-site a copy of all notices, certifications, demonstrations, waste analysis data, and other documents produced pursuant to 40 CFR 268 as adopted in 15A NCAC 13A .0112 for at least five years from the date that the waste which is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal, or until corrective action is completed, whichever date is later. These periods may be extended by request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

c. Records of monitoring information shall include:

i. The date, exact place, and time of sampling or measurements;
ii. The individual(s) who performed the sampling or measurements;
iii. The date(s) analyses were performed;
iv. The individual(s) who performed the analyses;
v. The analytical techniques or methods used; and
vi. The results of such analyses.

11. Reporting Planned Changes. The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility, including alterations or additions which may impact any Hazardous Waste Management Units (HWMUs), Solid Waste Management Units (SWMUs), Areas of Concern (AOCs), or the areas contaminated by them, including voluntary corrective measures to the SWMUs or

AOCs listed in Appendix A at the permitted facility as defined in 40 CFR 270.2 as adopted in 15A NCAC 13A .0113.

12. Anticipated Noncompliance. The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

13. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR 270.40, 270.41 and 270.42 as adopted in 15A NCAC 13A .0113. Before transferring ownership or operation of the facility, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR 264 as adopted in 15A NCAC 13A .0109 and 40 CFR 270 as adopted in 15A NCAC 13A .0113, HSWA and this permit.

14. Compliance Schedules. Written notification of compliance or noncompliance with any item identified in the compliance schedule of this permit shall be submitted according to the 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 enforcement action. Submittal of a required item according to the schedule constitutes notification of compliance.

15. Twenty-four Hour Reporting. The Permittee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

    a. information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.

    b. Any information of a release or discharge of hazardous waste, or of a fire or explosion from the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

        i. Name, address, and telephone number of the owner or operator;
        ii. Name, address, and telephone number of the facility;
        iii. Date, time, and type of incident;
        iv. Name and quantity of material(s) involved;
        v. The extent of injuries, if any;
        vi. An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
        vii. Estimated quantity and disposition of recovered material that resulted from the incident.

        A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall

contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Permittee need not comply with the five-day written notice requirement if the Department waives that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise required to be reported at the time monitoring reports are submitted. The reports shall contain the information listed in Condition I.D.15.

17. Other Information. When the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Department, the Permittee shall promptly submit such facts or information.

E. SIGNATORY REQUIREMENTS

All reports or other information requested by the Department shall be signed and certified according to 40 CFR 270.11 as adopted in 15A NCAC 13A .0113.

F. BIENNIAL REPORT

If required because of the Permittee's waste generation status the Permittee shall prepare and submit a biennial report by March 1 of each even numbered year in accordance with 40 CFR 264.75 as adopted in 15A NCAC 13A .0109 and instructions provided by the NC Hazardous Waste Section. The report must cover facility activities during the previous calendar year.

G. DEFINITIONS

For purposes of this permit, terms used herein shall have the same meaning as those in the North Carolina Hazardous Waste Management Rules and Solid Waste Management Law unless this permit specifically provides otherwise; where terms are not defined in 15A NCAC 13A, G.S. 130A - Article 9, the permit, or United States Environmental Protection Agency guidance documents and publications, 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.

H. CONFIDENTIAL INFORMATION

The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR 270.12 as adopted in 15A NCAC 13A .0113.

I. 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. Condition I.J. shall apply only to submittals that have been disapproved and revised by the Department, or have been disapproved by the Department, then revised and resubmitted by the Permittee, and again disapproved by the Department.

J. DISPUTE RESOLUTION

Notwithstanding any other provisions in this permit, in the event the Permittee disagrees, in whole or in part, with the Department's revision of a submittal or disapproval of any revised submittal required by the permit, the following may, at the Permittee's discretion, apply:

1. In the event that the Permittee chooses to invoke the provisions of this section, the Permittee shall notify the Department in writing within thirty (30) days of receipt of the Department's revision of a submittal or disapproval of a revised submittal. Such notice shall set forth the specific matters in dispute, the position the Permittee asserts should be adopted as consistent with the requirements of the permit, the basis for the Permittee's position, and any matters considered necessary for the Department's determination.

2. The Department and the Permittee shall have an additional thirty (30) days from the Department's receipt of the notification provided for in Condition I.J.1. to meet or confer to resolve any disagreement.

3. In the event an agreement is reached, the Permittee shall submit the revised submittal and implement the same in accordance with and within the time frame specified in such agreement.

4. If agreement is not reached within the thirty (30) day period, the Department will notify the Permittee in writing of his/her decision on the dispute, and the Permittee shall comply with the terms and conditions of the Department's decision in the dispute. For the purposes of this provision in this permit, the responsibility for making this decision shall not be delegated below the Chief of the Hazardous Waste Section.

   Invoking any of the dispute resolution procedures of this section does not preclude the Permittee from exercising any of its other rights to petition for a contested case hearing or appeal in accordance with N.C. General Statute 150B. Nor does invoking any of the dispute resolution procedures of this section extend or delay the time periods in which the Permittee must exercise any of those other rights to petition or appeal.

5. With the exception of those conditions under dispute, the Permittee shall proceed to take any action required by those portions of the submission and of the permit that the Department determines are not affected by the dispute.

K. REPORT REQUIREMENTS

1. One (1) paper copy and one (1) electronic (pdf) copy of all reports and plans shall be provided by the Permittee to the Department, unless the Department agrees to an alternate number of paper or electronic copies. Reports and plans shall meet the signatory requirement in Condition I.E. Documents shall be submitted to the following address:

   Hazardous Waste Section
   Division of Waste Management
   1646 Mail Service Center
   Raleigh, NC 27699-1646

2. The Permittee shall provide electronic data deliverables (EDDs) for routine monitoring data collected, including, but not limited to, groundwater, surface water, soil, and vapor intrusion data, as requested by the Department. Electronic data deliverables shall be provided in addition to the report requirement specified in Condition I.K.1.

L. Special Conditions

1. When a discrepancy exists between the wording of an item in the Application and this permit, the permit requirements take precedence over the Application.

2. When a discrepancy exists between the RCRA Facility Assessment (RFA) report and this permit as to the future requirements to be taken at the facility, the permit requirements take precedence over the requirements proposed in the report.

3. The Permittee must comply with 15A NCAC 02C .0108 – Standards of Construction: Wells Other Than Water Supply for all monitoring wells and recovery wells.

PART II - CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs)

The purpose of this section is to provide the facility direction to:

1) perform a RCRA Facility Investigation to determine fully the nature and extent of any release of hazardous waste and/or hazardous constituents at or from the Facility;
2) perform a Corrective Measures Study to identify and evaluate alternatives for the corrective measures necessary to prevent, mitigate, and/or remediate any releases of hazardous wastes or hazardous constituents at or from the Facility;
3) implement the corrective measure or measures selected by the Facility and approved by the State; and
4) perform any other activities necessary to correct or evaluate actual or potential threats to human health and/or the environment resulting from the release or potential release of hazardous waste or hazardous constituents at or from the Facility.

It is understood that some of the information that is required in this Section has either been submitted or is in process.

A. APPLICABILITY

The Conditions of this Part apply to:

1. The solid waste management units (SWMUs) and areas of concern (AOCs) identified in Appendix A of the permit, which require a RCRA Facility Investigation (RFI). There are no SWMUs or AOCs which require an RFI at the time of permit issuance.

2. The SWMUs and AOCs identified in Appendix A of the permit which require no further action at this time.

3. The SWMUs and AOCs identified in Appendix A of the permit which require confirmatory sampling or additional investigation.

4. Any additional SWMUs or AOCs discovered during the course of ground-water monitoring, field investigations, environmental audits, or other means.

5. The solid waste management units (SWMUs) and areas of concern (AOCs) identified in Appendix A of the permit, which are in corrective action.

6. Contamination beyond the facility boundary, if necessary. 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, 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. On-site measures to address such releases will be determined on a case-by-case basis.

B. DEFINITIONS

For purposes of this Part, the following definitions shall be applicable:

1. The term "area of concern" (AOC) includes any area having a probable release of a hazardous waste or hazardous 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 40 CFR 270.32 (b)(2) as adopted in 15A NCAC 13A .0113 in order to insure adequate protection of human health and the environment.

2. Corrective Action shall be defined as all activities including activities conducted beyond the facility boundary, that are proposed or implemented to facilitate assessment, monitoring, and active or passive remediation of releases of hazardous waste or hazardous constituents to soil, groundwater, surface water, or the atmosphere associated with Hazardous Waste Management Units (HWMUs), Solid Waste Management Units (SWMUs), and/or Areas of Concern (AOCs) located at the facility or off-site, as required by 40 CFR 264.100 and 264.101 and adopted in 15A NCAC 13A .0109 or as otherwise required and specified by this permit.

3. A "Corrective Action Management Unit" (CAMU)includes any area within a facility that is designated by the Department under part 264 Subpart S, for the purpose of implementing corrective action requirements under 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 and RCRA section 3008(h). A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

4. "Corrective measures" include all corrective action necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any area of concern or solid waste management unit at the facility, regardless of the time at which waste was placed in the unit, as required under 40 CFR 264.101 as adopted by 15A NCAC 13A .0109. Corrective measures may address releases to air, soils, surface water or ground water.

5. "Extent of contamination" is defined as the horizontal and vertical area in which the concentrations of the hazardous constituents in the environmental media are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Department.

6. "Facility" 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 as adopted in 15A NCAC 13A .0109,

a facility includes all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA.

7. A "hazardous constituent" for the purposes of this Part are those substances listed in 40 CFR Part 261 Appendix VIII as adopted in 15A NCAC 13A .0106 or 40 CFR 264 Appendix IX as adopted in 15A NCAC 13A .0109.

8. "Interim Measures" 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.

9. The term "land disposal" 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.

10. "Landfill" includes any disposal facility or part of a facility where waste is 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.

11. A "release" for purposes of this Part 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.

12. "Remediation waste" includes all solid and hazardous wastes, and all media (including ground water, 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 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 and RCRA section 3008 (h). For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing RCRA sections 3004 (v) or 3008 (h) for releases beyond the facility boundary.

13. The term "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, semi-solid, 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 that 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 by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

14. A "solid waste management unit" (SWMU) for the purposes of this Part 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 management of solid waste. RCRA regulated hazardous waste management units are also solid waste management units. Solid Waste Management Units include areas which have become 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).

15. A "Temporary Unit" (TU) 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 this permit.

16. A "unit" for the purposes of this Part 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.

C. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs

1. The Permittee shall notify the Department in writing, within fifteen (15) calendar days of discovery, of any additional SWMUs as discovered under Condition II.A.4.

2. The Permittee shall notify the Department in writing, within fifteen (15) calendar days of discovery, of any Areas of Concern (AOCs) as discovered under Condition II.A.4. The notification shall include, at a minimum, the location of the AOC and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). If the Department determines that further investigation of an AOC is required, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition II.E.1. or Condition II.F.1.

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

   a. Location of unit(s) on a topographic map of appropriate scale such as required under 40 CFR 270.14(b)(19) as adopted in 15A NCAC 13A .0113.

   b. Designation of type and function of unit(s).

   c. General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).

   d. Dates that the unit(s) was operated.

e. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the waste.

f. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include ground-water data, soil analyses, air, and/or surface water data).

4. Based on the data in the SAR, the Department shall determine the need for further investigations at the SWMUs covered in the SAR. If the Department determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition II.E.1. or II.F.1.

D. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED SWMUs AND AOCs

1. 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. Such newly discovered releases may be from SWMUs or AOCs identified in Condition II.A.2. or SWMUs or AOCs identified in Condition II.A.4.for which further investigation under Condition II.C.4. was not required.

2. If the Department determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition II.F.1.b.

E. CONFIRMATORY SAMPLING (CS)

1. The Permittee shall prepare and submit to the Department, within forty-five (45) calendar days of the effective date of the permit or notification by the Department for a newly identified SWMU, a Confirmatory Sampling (CS) Workplan to determine any release from SWMUs and AOCs identified in Condition II.A.3. and Appendix A. The CS Workplan shall include schedules of implementation and completion of specific actions necessary to determine a release. It should also address applicable requirements and affected media.

2. 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 schedule in the letter approving the CS Workplan. 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) revise the CS Workplan and notify the Permittee of the revisions, or (3) conditionally approve the CS Workplan and notify the Permittee of the conditions.

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

4. The Permittee shall prepare and submit to the Department in accordance with the approved schedule, a Confirmatory Sampling (CS) Report, within sixty (60) calendar days after approval of the CS Workplan, identifying those SWMUs and AOCs listed in Condition II.A.3. that have released hazardous waste or hazardous constituents into the environment. The CS Report shall include all data, including raw data, and a summary and analysis of the data that supports the above determination.

5. Based on the results of the CS Report, the Department shall determine the need for further investigations at the SWMUs and AOCs 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 Condition II.F.1.b. The Department will notify the Permittee of any "no further action" decision.

F. RCRA FACILITY INVESTIGATION (RFI)

1. RFI Workplan(s)

a. The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of the effective date of the permit, a RCRA Facility Investigation (RFI) Workplan for those units identified in Condition II.A.1. This Workplan shall be developed to meet the requirements of Condition II.F.1.c.

b. The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of notification by the Department, an RFI Workplan for those units identified under Condition II.C.4., Condition II.D.2. or Condition II.E.5. This RFI Workplan(s) shall be developed to meet the requirements of Condition II.F.1.c.

c. The RFI Workplan(s) shall meet the requirements of Appendix B at a minimum. The 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 ground water. 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 (ground water, surface water, soil, subsurface gas, or air) 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. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix B. Such omissions or deviations are subject to the approval of the Department. The RFI Workplan may be phased to allow for subsequent investigatory activity to be contingent upon the initial phase findings. If the scope of the Workplan(s) is designed to be an initial phase, the initial phase must summarize all potential final phase activities needed to meet the requirements of this condition. In addition, the scope of the RFI Workplan(s) shall include all investigations necessary to ensure compliance with 40 CFR 264.101(c) as adopted in 15A NCAC 13A .0109.

d. 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) revise the RFI Workplan and notify the Permittee of the revisions and the start date of the schedule within the approved RFI Workplan, or (3) conditionally approve the RFI Workplan and notify the Permittee of the conditions.

2. RFI Implementation

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

3. RFI Reports

a. 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:

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 any significant contacts with local community public interest groups or state government;

v. Summaries of any problems or potential problems encountered during the reporting period;

vi. Actions taken to rectify problems;

vii. Changes to relevant personnel;

viii. Projected work for the next reporting period; and

ix. Copies of daily reports, inspection reports, laboratory/monitoring data, etc.

b. The Permittee shall prepare and submit to the Department Draft and Final RCRA Facility Investigation Report(s) for the investigations conducted pursuant to the

Workplan(s) submitted under Condition II.F.1. The Draft RFI Report(s) shall be submitted to the Department for review in accordance with the schedule in the approved RFI Workplan(s). The Final RFI Report(s) shall be submitted to the Department within thirty (30) calendar days of receipt of the Department's comments on the Draft RFI Report. 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 at the facility, including sources and migration pathways, and a description of actual or potential receptors. The Report(s) shall also describe the extent of contamination (qualitative/ quantitative) in relation to background levels indicative of the area. If the Draft 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 Condition II.F.1.d. 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, if necessary.

c. The Department will review the Final RFI Report(s) and notify the Permittee of the need for further investigative action and/or the need for a Corrective Measures Study to meet the requirements of II.H., Appendix C, and 40 CFR 264.101 as adopted in 15A NCAC 13A .0109. The Department will notify the Permittee of any "no further action" decision. Any further investigative action required by the Department shall be prepared and submitted in accordance with a schedule specified by the Department and approved in accordance with Condition II.F.1.d.

G. INTERIM MEASURES (IM)

1. IM Workplan

a. Upon notification by the Department, the Permittee shall prepare and submit an Interim Measures (IM) Workplan for any SWMU or AOC which the Department determines is necessary. IM are necessary in order to minimize or prevent the further migration of contaminants and limit 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 such notification and shall include the elements listed in II.G.1.b. Such interim measures may be conducted concurrently with investigations required under the terms of this permit. The Permittee may initiate IM by submitting an IM Workplan for approval and reporting in accordance with the requirements in Condition II.G.

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 to be consistent with and integrated into any long-term solution at the facility. The IM Workplan shall include: the interim measures objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.

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) revise the IM Workplan and notify the Permittee of the revisions and the start date of the schedule within the approved IM Workplan, or (3) conditionally approve the IM Workplan and notify the Permittee of the conditions.

2. IM Implementation

a. The Permittee shall implement the interim measures in accordance with the approved IM Workplan.

b. The Permittee shall give notice to the Department as soon as possible of any planned changes, reductions, or additions to the IM Workplan.

c. Final approval of corrective action required under 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 which is achieved through interim measures shall be in accordance with 40 CFR 270.41 as adopted in 15A NCAC 13A .0113 and Condition II.I. as a permit modification.

3. IM Reports

a. If the time required for completion of interim measures is greater than one (1) 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:

i. A description of the portion of the interim measures 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;

iv. Projected work for the next reporting period; and

v. Copies of laboratory/monitoring data.

b. The Permittee shall prepare and submit to the Department, within ninety (90) calendar days of completion of interim measures conducted under Condition II.G., an IM Report. The IM Report shall contain the following information at a minimum:

i. A description of interim measures implemented:

ii. Summaries of results;

iii. Summaries of any problems encountered;

iv. Summaries of accomplishments and/or effectiveness of interim measures; and

v. Copies of all relevant laboratory/monitoring data, etc. in accordance with Condition I.D.10.

H. CORRECTIVE MEASURES STUDY

1. Corrective Measures Study (CMS) Workplan

a. The Permittee shall prepare and submit a CMS Workplan for those units 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 Condition II.H.1.b.

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 justification and/or documentation for any unit identified in accordance with Condition II.H.1.a. which is 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 3005(c)(3), 40 CFR 264.101 and 40 CFR 264.552 as adopted in 15A NCAC 13A .0109, and 270.32(b) as adopted in 15A NCAC 13A .0113. The Permittee shall implement corrective actions beyond the facility boundary, as set forth in Condition II.A.6.

c. The Department shall either approve or disapprove, in writing, the CMS plan. 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) revise the CMS Workplan and notify the Permittee of the revisions, or (3) conditionally approve the CMS Workplan and notify the Permittee of the conditions. This modified CMS Workplan becomes the approved CMS Workplan.

2. Corrective Measures Study Implementation

The Permittee shall begin to implement the Corrective Measures Study according to the schedules specified in the CMS Workplan, no later than fifteen (15) calendar days after the Permittee has received written approval from the Department for the CMS Workplan. The

CMS shall be conducted in accordance with the approved CMS Workplan approved in accordance with Condition II.H.1.c.

3. CMS Report

a. The Permittee shall prepare and submit to the Department a draft and final CMS Report for the study conducted pursuant to the approved CMS Workplan. The draft CMS Report shall be submitted to the Department in accordance with the schedule in the approved CMS Workplan. The final CMS Report shall be submitted to the Department within thirty (30) calendar days of receipt of the Department's comments on the draft CMS Report. The CMS Report shall summarize any bench-scale or pilot tests conducted. The CMS Report must include an evaluation of each remedial alternative. If a remedial alternative requires the use of a CAMU, the CMS report shall include all information necessary to establish and implement the CAMU. The CMS Report shall present all information gathered under the approved CMS Workplan. The CMS Final Report must contain adequate information to support the Department's decision on the recommended remedy, described under Condition II.I.

b. If the Department determines that the CMS Final Report does not fully satisfy the information requirements specified under Permit Condition II.H.3.a., the Department may disapprove the CMS Final Report. If the Department disapproves the CMS Final Report, the Department shall notify the Permittee in writing of deficiencies in the CMS Final Report and specify a due date for submittal of a revised CMS Final Report. The Department will notify the Permittee of any no further action decision.

c. As specified under Condition II.H.3.a., based on preliminary results and the CMS Final Report, the Department may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

I. REMEDY APPROVAL AND PERMIT MODIFICATION

1. A remedy shall be selected by the permittee in coordination with the Department from the remedial alternatives evaluated in the CMS. The remedy will be based at a minimum on protection of human health and the environment, as per specific site conditions, existing regulations, and guidance.

2. Pursuant to 40 CFR 270.41 as adopted in 15A NCAC 13A .0113, a permit modification will be initiated by the Department upon concurrence of a remedy selected in accordance with Condition II.I.1. This modification will serve to incorporate a final remedy into the permit.

J. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE

1. 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.

2. Modifications that are initiated and finalized by the Department will be in accordance with the applicable provisions of 40 CFR 270 as adopted in 15A NCAC 13A .0113. The Permittee may also request a permit modification in accordance with 40 CFR 270 as adopted in 15A NCAC 13A .0113.

K. IMMINENT HAZARDS

1. The Permittee shall report to the Department any imminent or existing hazard to public health or the environment from any release of hazardous waste or hazardous constituents. Such information shall be reported orally within 24 hours from such time the Permittee becomes aware of the circumstances. This report shall include the information specified under Condition I.D.15.

2. A written report shall also be provided to the Department within fifteen (15) calendar days of the time the Permittee becomes aware of the circumstances. The written report shall contain the information specified under Condition I.D.15. and; a description of the release and its cause; the period of the release; whether the release has been stopped; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the release.

L. WORKPLAN AND REPORT REQUIREMENTS

1. All plans 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 specified by the Department. Upon approval, the Permittee shall implement all plans and schedules as written.

2. 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 Department based on the Permittee's demonstration that sufficient justification for the extension exists.

3. If the Permittee at any time determines that the SAR information required under Condition II.C., or RFI Workplan(s) required under Condition II.F., no longer satisfies the requirements of 40 CFR 264.101 as adopted in 15A NCAC 13A .0109 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 RFI Workplan(s) to the Department within ninety (90) calendar days of such determination.

4. All reports shall be signed and certified in accordance with 40 CFR 270.11 as adopted in 15A NCAC 13A .0113.

5. Reports and plans submitted in accordance with the requirements of Part II of this Permit shall be provided by the Permittee to the Department at the following address:

Federal Facilities Branch Head
Superfund Section
Division of Waste Management, NC DEQ
1646 Mail Service Center
Raleigh, NC 27699-1646

M. REMEDY DESCRIPTION

1. **SWMU 118, UST-31/S715 and SWMU 422 UST-728:** Air Sparge/Soil Vapor Extraction (AS/SVE) system is shutdown with concurrence from NCDEQ DWM UST Section. Planned work includes a bioinjection event and continued dissolved phase monitoring of select groundwater monitoring wells.

2. **SWMU 269, 816 O/W 8th Engineer 2D FSSG:** Long-Term Monitoring (LTM) ongoing every five years for Volatile Organic Compounds (VOCs) in groundwater and Land Use Controls (LUCs) to restrict groundwater use. LUCs are included as a Geospatial Information Systems (GIS) layer in the Base Master Plan which is maintained by the Base Asset Management Branch.

3. **SWMU 299, AS114 Used Oil AST MCAS Auto Hobby Shop:** Long-Term Monitoring (LTM) is ongoing every five years for VOCs in groundwater and Land Use Controls (LUCs) to restrict groundwater use. LUCs are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch.

4. **SWMU 343, OB/OD Facility G-10 Range Area:** The Closure Plan and Long-Term Monitoring (LTM) plan for the Open Burn/Open Detonation Facility (SWMU-343) was approved by the North Carolina Hazardous Waste Section on November 7, 2008. Quarterly monitoring was implemented at the Site February 2009. Monitoring decreased from quarterly to annually in 2014 and from annually to five years in 2016.

5. **SWMU 214, IR-2 Former Nursery/Day Care Center:** The Final Record of Decision (ROD) to address groundwater contamination at Installation Restoration (IR) Site 2 was signed in September 1994. Prior to completion of the ROD, a Time Critical Removal Action (TCRA) was conducted to remove pesticide contaminated soils. Long-Term Monitoring (LTM) of groundwater every five years and Land Use Controls (LUCs) are in place to prevent exposure to groundwater. The non-industrial LUC was removed in a 2021 Land Use Control Implementation Plan (LUCIP) update. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

6. **SWMU 218, IR-3 Old Creosote Plant:** The Final Record of Decision (ROD) to address soil and groundwater contamination at Installation Restoration (IR) Site 3 was signed on April 3, 1997. A Non-Time Critical Removal Action (NTCRA) was conducted to remove Polycyclic Aromatic Hydrocarbon (PAH) contaminated soils. The remedy for groundwater included Long-Term Monitoring (LTM) of Volatile Organic Compounds (VOCs) and Land Use Controls (LUCs) to prevent exposure to soil, groundwater and prohibit non-Industrial land use. LTM ongoing every five years. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

7. **SWMU 220, IR-35 Camp Geiger Area Fuel Farm:** The Final Record of Decision (ROD) to address groundwater Volatile Organic Compound (VOC) contamination at Installation Restoration (IR) Site 35 was signed in November 2009. The remedy for groundwater consists of Long-Term Monitoring (LTM) for monitored natural attenuation (MNA) of VOCs. The remedy also includes Land Use Controls (LUCs) to prevent exposure to groundwater. A 2019 Land Use Control Implementation Plan (LUCIP) update added a non-industrial LUC for vapor intrusion. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

8. **SWMU 221, IR-36 Camp Geiger Area Dump:** The Final Record of Decision (ROD) to address soil and groundwater Volatile Organic Compound (VOC) contamination at Installation Restoration (IR) Site 36 was signed in July 2005. The remedy for groundwater consists of Long-Term Monitoring (LTM) for monitored natural attenuation (MNA) of VOCs. Surface water monitoring has also been implemented at the Site. The remedy also includes Land Use Controls (LUCs) to prevent exposure to groundwater, soil and prohibit non-industrial land use. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

9. **SWMU 231, IR-69 Rifle Range Chemical Dump:** A Final Record of Decision (ROD) to address soil, groundwater, and waste contamination at Installation Restoration (IR) Site 69 was signed on March 12, 2013. The remedy includes a landfill cap, Long-Term Monitoring (LTM) for monitored natural attenuation (MNA) of VOCs, and Land Use Controls (LUCs) to prevent exposure to groundwater and soil and to prohibit non-industrial land use. A fence was also installed around the perimeter of the known disposal area to prohibit access to the Site. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

10. **SWMU 117, UST-645:** Air Sparge/soil vapor extraction (AS/SVE) system was installed in 1998 and operated until 2011. A bio-sparge system was installed and began operating in 2011. The bio-sparge system was deactivated per the Conditional No Further Action (NFA) with registration of a Notice of Residual Petroleum (groundwater restriction) as granted in a NCDEQ letter dated March 30, 2023. Public notices required by the Conditional NFA are

planned at the time of permit issuance.

11. **SWMUs 120 and 755, UST-820-1 to -4 Berkeley Manor Convenience Store:** Air Sparge/soil vapor extraction (AS/SVE) system began operating in 1997. The SVE is operational but the AS portion was shut down in 2016. After an additional release was detected, AS was restarted in March 2021. Also, an In-Situ Submerged Oxygen Curtain (ISOC) unit is operated in MW19 to affect MTBE concentrations in that well. Groundwater sampling is currently being conducted on a semi-annual basis for select monitoring wells.

12. **SWMU 156, UST-Hadnot Point Industrial Area Former Fuel Farm/1115 and SWMU 480 and SWMU 172:** Groundwater at the subject site is currently being remediated with several different remediation technologies including Aggressive Fluid Vapor Recovery (AFVR) and Bio-pulse and Mobile Sparging. Upon approval from NCDEQ, the pump and treat system was shut down as of January 2023 in favor of AFVR and passive skimmers. Groundwater sampling is currently being conducted annually.

13. **SWMU 157, UST-AS-4141, JP-5 Pump and Treat:** Groundwater remediation with Dual Phase Extraction (DPE) system and Aggressive Fluid Vapor Recovery (AFVR). Both were suspended in December 2018 due to Per-and polyfluoroalkyl substance (PFAS) impacts. A modified system was activated August 2020 to treat PFAS impacted groundwater so that the extraction system/AFVR efforts can be brought back online. Free product detections have reduced at the site to allow for quarterly site wide gauging events and one groundwater monitoring well sampling event to support a request for No Further Action with a Notice of Residual Petroleum. Approval is pending at the time of permit issuance. If free product recurs, then AFVR or manual recovery will be conducted.

14. **SWMU 158, UST-LCH-4015 Service Station:** Groundwater at the subject site was remediated with an Air Sparge/Soil Vapor Extraction (AS/SVE) System. In-Situ Submerged Oxygen Curtain (ISOC) units also operated at select monitoring wells. Groundwater sampling was conducted on an annual basis. The system was deactivated per the Conditional NFA with registration of a Notice of Residual Petroleum (groundwater restriction) as granted for the site in a NCDEQ letter dated March 30, 2023. Public notices required by the Conditional NFA are planned at the time of permit issuance.

15. **SWMU 165, UST-Rapid Refueler A_D MCASNR Rapid Refuel Area/AS-511:** Free-phase product is being recovered weekly with peristaltic pump at various wells and monthly Aggressive Fluid Vapor Recovery (AFVR) events at USTRF-MW18. Groundwater sampling is currently being conducted on an annual basis. Notice of Residual Petroleum recorded 5/3/2019.

16. **SWMU 228, IR-6 Storage Lots 201 and 203 and SWMU 359, Lot 201 Battery Dump:** The Final Record of Decision (ROD) to address soil and groundwater Volatile Organic Compound (VOC) contamination at Installation Restoration (IR) Site 6 was signed in September 1993. The remedy for soil was excavation and offsite disposal of PolyChlorinated Biphenyl (PCB) and pesticide contaminated soil. The remedy for groundwater included a groundwater extraction system. Currently Long-Term Monitoring (LTM) annually for VOCs and Land Use Controls (LUCs) to prevent exposure to groundwater and soil and to prohibit non-

Industrial land use. A 2019 Land Use Control Implementation Plan (LUCIP) update added LUCs for Munitions and vapor intrusion. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

17. **SWMU 233, IR-73 Courthouse Bay Liquid Disposal Area:** A Record of Decision (ROD) to address groundwater contamination at Installation Restoration (IR) Site 73 was signed in November 2009. The selected remedy for groundwater consisted of air sparging using a horizontal well and downgradient injections of Enhanced Reductive Dechlorination (ERD) substrates. A second substrate and bioaugmentation reinjection event was conducted 2019-2020. Land Use Control (LUC) updates were registered 4/16/2019. Annual Long-Term Monitoring (LTM) for monitored natural attenuation (MNA) of VOCs and Land Use Controls (LUCs) to prevent exposure to groundwater and to prohibit non-industrial land use. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

18. **SWMU 237, IR-78 Hadnot Point Industrial Area:** The Final Record of Decision (ROD) to address soil and shallow groundwater Volatile Organic Compound (VOC) contamination at Installation Restoration (IR) Site 78 was signed on September 15, 1994. The remedy for groundwater consisted of two groundwater extraction and treatment systems to prevent migration of the VOC plumes in the groundwater. Contaminated soils were also removed at the Site. An updated Notice of Contaminated Site was filed December 2015. Long-Term Monitoring (LTM) ongoing annually for VOCs and every five years for metals with Land Use Controls (LUCs) to prevent exposure to groundwater and prohibit non-industrial land use. A vapor intrusion LUC was added in 2017. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

19. **SWMU 239, IR-82 Piney Green Road VOC Area:** The Final Record of Decision (ROD) to address soil and groundwater Volatile Organic Compound (VOC) contamination at Installation Restoration (IR) Site 82 was signed in September 1993. The remedy for soil included excavation and offsite disposal of PCB and pesticide contaminated soil. The remedy for groundwater consisted of a Soil Vapor Extraction system and a groundwater extraction system. Currently Long-Term Monitoring (LTM) of VOCs with Land Use Controls (LUCs) to prevent exposure to groundwater and soil and to prohibit non-industrial land use. LUCs for vapor intrusion and Unexploded Ordnance were added in 2019. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

20. **SWMU 240, IR-84 Building 45 Area and SWMU 89, SCLH785 oil/water separator:** The Final Record of Decision (ROD) to address soil PCB contamination at Installation Restoration (IR) Site 84 was signed in January 2009. The remedy for soil included excavation and offsite

disposal of PCB contaminated soil. The remedy also includes a fence isolating area with greater than 50 ppm PCB levels and multiple warning signs. Land Use Controls (LUCs) are in place to prevent exposure to soil and to prohibit non-industrial land use. These restrictions are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

21. **SWMU 250, IR-93 TC-942 Tanks:** A Record of Decision (ROD) to address groundwater contamination at Installation Restoration (IR) Site 93 was signed in October 2006. The selected remedy for groundwater was in-situ contaminant oxidation (ISCO) with permanganate injections. Currently Long-Term Monitoring (LTM) for monitored natural attenuation (MNA) of VOCs and Land Use Controls (LUCs) to prevent exposure to groundwater. LUCs for vapor intrusion were added in 2014. These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

22. **SWMU 455, UST-Rapid Refueler(2)C-D Tank, Rapid Refuel Area:** Free-phase product is being recovered weekly with peristaltic pump at various wells and monthly Aggressive Fluid Vapor Recovery (AFVR) events at USTRF-MW18. Groundwater sampling is currently being conducted on an annual basis. Notice of Residual Petroleum recorded 5/3/2019.

23. **SWMU 456, UST-Rapid Refueler(3)2nd 2002 Release, Rapid Refuel Area:** Free-phase product is being recovered weekly with peristaltic pump at various wells and monthly Aggressive Fluid Vapor Recovery (AFVR) events at USTRF-MW18. Groundwater sampling is currently being conducted on an annual basis. Notice of Residual Petroleum recorded 5/3/2019.

24. **SWMU 457, UST-Rapid Refueler(4)2003 Release, Rapid Refuel Area:** Free-phase product is being recovered weekly with peristaltic pump at various wells and monthly Aggressive Fluid Vapor Recovery (AFVR) events at USTRF-MW18. Groundwater sampling is currently being conducted on an annual basis. Notice of Residual Petroleum recorded 5/3/2019.

25. **SWMU 177, UST 333-C Building 333:** Long-Term Monitoring (LTM) every five years for pesticides and Land Use Controls (LUCs).

26. **SWMUs 350 (above ground storage tanks) and SWMUs 351, 352, 353, and 354 (underground storage tanks):** Long-Term Monitoring (LTM) for monitored natural attenuation (MNA) of VOCs and Land Use Controls (LUCs) to prevent exposure to groundwater.

27. **SWMU 67, IR-49 MCAS suspected dump:** Monitored natural attenuation (MNA) biennially for VOCs and Land Use Controls (LUCs).

28. **SWMU 217, IR-88 Building 25 and SWMU 244, UST-25 and SWMU 615 Building 133 Former Armory:** VOC treatment of groundwater, Long-Term Monitoring (LTM) and Land Use Controls (LUCs)

29. **SWMU 242, IR-86 Tank Area AS419-AS421:** Long-Term Monitoring (LTM) and Monitored natural attenuation (MNA) every five years for VOCs and Land Use Controls (LUCs). These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

30. **SWMU 245, IR-89 Former DRMO and SWMU 288 Rack DRMO:** Permeable reactive barrier, aerators, additional investigation ongoing to refine delineation. Air Sparging was turned off November 2022. Long-Term Monitoring (LTM) initiated in 2014 includes annual sampling for MNA. Land Use Controls (LUCs) implemented in 2013 are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

31. **SWMU 360, IR-96 Building 1817 UST:** Long-Term Monitoring (LTM) for monitored natural attenuation (MNA) and Land Use Controls (LUCs). These controls are included as a GIS layer in the Base Master Plan which is maintained by the Base Asset Management Branch. An annual certification that institutional controls remain in place shall be submitted by May 31 of each year.

32. **SWMU 146, UST-CG1:** Pump and Treat, Aggressive Fluid Vapor Recovery (AFVR), and manual bailing of free phase product. See PPV SWMU 530 entry.

33. **SWMU 184, UST-TC342 Camp Geiger Mess Hall Heating Plant and SWMU 505 UST-TC341 Camp Geiger Heating Plant Pipeline and SWMU 208, USTG480:** Free Product Recovery and Surfactant injection (see also SWMU220).

34. **SWMU 530, CG-1-2 MCASNR PPV:** Pump and Treat, Aggressive Fluid Vapor Recovery (AFVR), and manual bailing of free phase product. Monthly gauging of site groundwater monitoring wells and annual sampling is proposed for the site in the most recent 2022 Annual Monitoring Report.

PART III - WASTE MINIMIZATION

A. GENERAL REQUIREMENTS

In the event that the Permittee treats, stores, or actively disposes of hazardous wastes on-site where such wastes were generated, then the Permittee must comply with 40 CFR 264.73(b)(9) as adopted in 15A NCAC 13A .0109, and Section 3005(h) of RCRA, 42 U.S.C. 6925(h), the Permittee must certify, no less often than annually that:

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

2. 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.

B. WASTE MINIMIZATION RECORD KEEPING

The Permittee shall maintain copies of the certification in the facility operating record as required by 40 CFR 264.73(b)(9) as adopted in 15A NCAC 13A .0109.

C. WASTE MINIMIZATION PROGRAM OBJECTIVES

The Waste Minimization Program should include the following elements:

1. Top Management Support
   a. Dated and signed policy describing management support for waste minimization and for implementation of a waste minimization plan.

   b. Description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible.

   c. 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
   a. Identification of all points in a process where materials can be prevented from becoming a waste, or can be recycled.

b. Identification of potential waste reduction and recycling techniques applicable to each waste, with a cost estimate for capital investment and implementation.

c. Description of technically and economically practical waste reduction/recycling options to be implemented, and a planned schedule for implementation.

d. 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
   a. 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.

   b. Description of how departments are held accountable for the wastes they generate.

   c. 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 associations, technical assistance programs, and professional consultants.

6. Program Evaluation
   a. Description of types and amounts of hazardous waste reduced or recycled.

   b. Analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented.

   c. Amendments to waste minimization plan and explanation.

   d. Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan.

   e. 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 25056, June 12, 1989.

"Waste Minimization Opportunity Assessment Manual", EPA/625/788/003, July 1988.

PART IV - LAND DISPOSAL RESTRICTIONS

A. GENERAL RESTRICTIONS

1. 40 CFR Part 268 as adopted in 15A NCAC 13A .0112 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances which an 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 requirements of 40 CFR 268 as adopted in 15A NCAC 13A .0112. Where the Permittee has applied for an extension, waiver or variance under 40 CFR 268 as adopted in 15A NCAC 13A .0112 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.

B. LAND DISPOSAL PROHIBITIONS AND TREATMENT STANDARDS

1. A restricted waste identified in 40 CFR Part 268 Subpart C as adopted in 15A NCAC 13A .0112 may not be placed in a land disposal unit without further treatment unless the requirements of 40 CFR Part 268 Subparts C and/or D as adopted in 15A NCAC 13A .0112 are met.

2. The storage of hazardous wastes restricted from land disposal under 40 CFR Part 268 as adopted in 15A NCAC 13A .0112 is prohibited unless the requirements of 40 CFR 268 Subpart E as adopted in 15A NCAC 13A .0112 are met.

C. DEFINITIONS

1. For the purposes of 40 CFR Part 268 as adopted in 15A NCAC 13A .0112, "Land Disposal" means placement in or on the land 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.

PART V - ORGANIC AIR EMISSIONS REQUIREMENTS FOR PROCESS VENTS AND EQUIPMENT LEAKS

A. APPLICABILITY

Subpart AA contains emission standards for process vents associated with distillation fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that process hazardous waste with an annual average total organic concentration of at least ten (10) parts per million (ppm) by weight. Subpart AA does not apply to air stripping operations used for corrective action purposes. Subpart BB contains emission standards that address leaks from specific equipment (i.e. pumps, valves, compressors, etc.) that contains or contacts hazardous waste that has an organic concentration of at least ten (10) percent by weight.

B. ORGANIC AIR EMISSION STANDARDS

The Permittee has no units at the present time to which the Organic Air Emissions Requirements of 40 CFR 264, Subpart AA (for process vents), and/or Subpart BB (for equipment leaks) as adopted in 15A NCAC 13A .0109 applies. If the Permittee should change, modify or otherwise identify any unit that is or has become subject to these regulations, the Permittee is required to comply with all 40 CFR 264 as adopted in 15A NCAC 13A .0109, Subpart AA and Subpart BB regulations and is required to submit all 40 CFR 270.24 and 270.25 as adopted in 15A NCAC 13A .0113 informational requirements within thirty (30) calendar days after implementation of the unit's modification.

PART VI - RCRA ORGANIC AIR EMISSION REQUIREMENTS

A. APPLICABILITY

The Permittee has no units at the present time to which the Organic Air Emissions Requirements of 40 CFR 264, Subpart CC (Air Emission Standards for Tanks, Surface Impoundments, and Containers) as adopted in 15A NCAC 13A .0109 applies. If the Permittee should change, modify or otherwise identify any unit that is or has become subject to these regulations, the Permittee is required to comply with all 40 CFR 264 as adopted in 15A NCAC 13A .0109, Subpart CC regulations and is required to submit all 40 CFR 270.24 and 270.25 as adopted in 15A NCAC 13A .0113 informational requirements within thirty (30) calendar days after implementation of the unit's modification.

B. REPORTING REQUIREMENTS

For each tank, surface impoundment, or container which manages hazardous waste that is exempted from using air emission controls, a written report shall be submitted to the Department within fifteen (15) days of each occurrence when hazardous waste is placed in the waste management unit in noncompliance with 40 CFR 264.1082(c)(1) or (c)(2) as adopted in 15A NCAC 13A .0109, as applicable. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent reoccurrence of the noncompliance. All reports shall be signed and dated by an authorized representative of the Permittee as per 40 CFR 270.11(b) as adopted in 15A NCAC 13A .0113.

C. NOTIFICATION OF NEW UNITS

Prior to installing any tank, container, surface impoundment or miscellaneous unit subject to 40 CFR Part 264, Subpart CC, the Permittee shall apply for a permit modification under 40 CFR 270.42 as adopted in 15A NCAC 13A .0113 and provide specific Part B application information required under 40 CFR 270.14-17 and 270.27 as adopted in 15A NCAC 13A .0113, as applicable, with the modification request.

APPENDIX A

SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN SUMMARY

Table A-1: Solid Waste Management Units and Areas of Concern that require No Further Action at this time as indicated in the 2010 RCRA permit and in Table 5 and Table 6 of the Attachment to this Permit:

SWMU No.	Site Description	
1	Building 1014 – Container Storage	
2	Building 1700 Pond A Base Maintenance	2
3	Building 236 Backwash Marine Corps Base Swimming Pool	1
4	Building 540 Backwash Marine Corps Base Area 5 Training Pool	1
5	Building 575-Rack 2nd LAI, 2D Mar Div Wash Rack	
6	A1–Rack 2D Amphibious Assault BN, 2D Mar Div	
10	AS–Curtis Ditch Skimmer MCAS11	1
11	AS–Longstaff–Ditch Skimmer MCAS	1
12	AS-Primington-Ditch Skimmer	5
13	AS199-Rack Base Motor Transport	1
14	AS226 Solvent Reclamation Still	
15	AS3003 Ditch Skimmer MCAS	1
16	AS4151 Basin Base Maintenance Oil/Water Separator/Spill Containment Basin	
17	AS5020 MCAS Drainage Ditch Skimmer	1
20	Backwash Pond for Bldg 670 WTP	1
21	Backwash pond for Onslow Beach WTP	1
22	Backwash Basins for Hadnot Point WTP	5
23	Backwash Ponds for MCAS WTP	5
24	BB-190 Backwash Basin	5
25	BB9-Basin MCB (Spill Containment Basin)	
26	Industrial Dumpsters, Basewide (169)	1
27	Non-Industrial Dumpsters, Basewide (2885)	1
30	FC19 Rack H&S Battalion, 2nd FSSG Wash Rack	
31	Grease Traps Basewide (33)	1
32	H36 Rack HQSV CO Engr 2D MEF Wash Rack	5
33	Less than 90-Day HW Sites, Basewide (81)	5
35	M105 Rack	
36	Oil/Water Separators Basewide (97)	1
37	PCB Warehouse TP-464	
38	PT33-Pile MCB	
39	S1001 Basin Marine Corps Base	
40	Sanitary Sewer Basewide	1
41	SAS137 Basin Bldg SAS137	5
42	Silver Recovery Units, Basewide (32)	5
53	IR-26 Coal Storage Area	2
90	SM264 Rack	
91	ST32-Construction Debris Soil Pile – Tarawa Terrace	
92	STC872-Pile DRMO	
93	Stormwater Collection System	1
94	TC364 Basin	5
95	TP45-Rack Truck Driving School	
96	Used Oil Tanks Basewide (190)	1
196	45-Pond MCB	
207	DRMO Yard Near Building TC-861	
209	Former SA22-Pile Near Building SA 21	5
246	IR-9 Firefighting Training Pit at Piney Green Road	1
254	1408 Base Motor Transport Dumpster	3
255	1502-O/W-1 MCB Logistics Vehicle Maintenance Oil/Water Separator and Grit Chamber	
256	1700-OW-1 Base Maintenance	2

257	1700-OW-2 Base Maintenance	2
258	1745-O/W Truck Company Operations, HQ Battery, 2D Mar Div	
259	1775 Dumpster	3
260	1780-O/W-1 Truck Company Maintenance, HQ BN 2D MAR DIV	4
263	1808 Dumpster	3
264	2611-Container Gun Club	
265	2615-O/W Officer's Club	
266	2616 Officers Club BOQ Dumpster	
267	511 2D Mar Div – Recon BN Dumpster	3
268	522 2D MAR DIV Dumpster	3
270	902 2D FSSG Dumpster	3
271	AS410 MWR Gas Station Dumpster	
272	AS137-Basin MCAS	
273	BA 128/BA 105 Dumpster	3
274	BB-245 Exchange Dumpster	3
275	BB-48 Construction Shop Dumpster	
276	BB-49 Base Maintenance Dumpster	3
277	FC 120 2nd FSSG, Combat Engineer BN	
278	FC-190 2D FSSG Dumpster	
279	FC200-O/W 8th Engineering 2D FSSG	4
280	FC285-AST Maintenance BN, 2D FSSG	
281	H100 2D Mar Div, 8th Marines Dumpster	3
282	LCH 4034 MWR Gas Station/7 Day Store Dumpster	3
283	Release (FC279) 8th Motor Transport 2D FSSG	
284	S947-Container Environmental Management Dumpster	
285	S947-O/W Environmental Management	
286	S947-Pile Environmental Management Waste Pile	
287	Site 45 Base Maintenance Dumpster	
289	TT 2453 MWR Hobby Shop Dumpster	
290	TT 2478 MWR Gas Station Dumpster	
291	034 Ditch 5th BN, 10th Marines, 2D Mar Div	5
293	1106/1107-O/W Motor T Auto Hobby Shop	4
294	1203-O/W Base Maintenance	4
296	1700-Basin-B Base Maintenance Coal Pile Runoff Collection Basin	2
297	1780 O/W-2 Truck Co. Maint, HQ Bttry, 2D Mar Div	
298	1780-OW-3 Near Bldg. 1780	4
300	AS118-Used Oil AST Logistic Motor Transportation.	5
301	AS4115-AST HMLA 167, MAG 26, 2D MAW	5
302	AS563 – AST (Originally identified as AS504 and AS566)	5
304	BA130-O/W Motor T, 2D Recon BN, 2D MAR DIV	4
305	BB224-Pile MCB	
306	FC230-O/W-1 8th Communications BN, 2D SRIG	4
307	G649 Rack Base Maintenance Wash Rack	
308	GP19-O/W 8th Engineers 2nd FSSG	4
309	UST-NH-118-3 Waste Oil UST Naval Hospital Vehicle Maintenance Shop	
310	PT33-Pond-O/W MCB Kitchen Grease Dewatering Unit	
311	S1619-O/W 8th Communications BN, 2D SRIG	4
312	S1735-O/W Base Maintenance	4
313	S1753-O/W-AST Small Craft Co, HQ BN 2D Mar Div	
314	SM187-O/W Marine Corps Supported Services School Group	4
315	SM269-Basin Near Bldg. M 200 Containment Basin	5
316	TC733-O/W School of Infantry	4
317	TT2453-Release Near Bldg. TT 2453	

319	Camp Geiger Wastewater Treatment Plant	
320	Camp Johnson Wastewater Treatment Plant	
321	Courthouse Bay Wastewater Treatment Plant	
324	Hadnot Point Wastewater Treatment Plant	
326	Incinerator NH-100	
327	Onslow Beach Wastewater Treatment Plant	
328	Stormwater Ponds Basewide (12)	6
329	Rifle Range Wastewater Treatment Plant	
330	Tarawa Terrace Wastewater Treatment Plant	
331	FC-286-6 2D FSSG, Vat 1	1
332	FC-286 2D FSSG, Vat 2	
333	FC-280 2D FSSG, Vat 3	1
334	FC-280 2D FSSG, Vat 4	1
335	FC-280 2D FSSG, Vat 5	1
336	Paint Stripper Tank Bldg 4106, MALS 29	
337	Paint Stripper Tank, Bldg 518, MALS 26	
338	FSC-282 2D FSSG Storage	1
339	Sandblaster, Bldg. AS4146, MALS 26	5
342	OB/OD Facility K-2 Range Area (5,000 lb/hr)	
347	UST-S889/S891 Above Ground Storage Tanks(2)	
358	Borrow Pit, Battery Dump	
362	Dog 11 Area	
363	M-21 Arresting Gear	
468	UN234 – Septic Tank	
469	UN1184 – Septic Tank	
470	Courthouse Bay BB28 Diesel Contaminated Site	
471	GSRA Asbestos Shingle Dump Site	
473	HP237 Hydraulic Lifts	
474	Courthouse Bay BB52 Maintenance Facility Dump Site	
475	MCASNR White Street Stormwater Pond	
476	Old Landfill Septic Leachfield	
477	Dogwood Road Mixed Waste Dump Site	
482	GSRA Reserve Center Dump Site	
484	GSRA Carbon Fiber Soil Contamination	
485	RCRA Used Oil Containment Release	
502	Courthouse Bay BB-177 Floor Drain	
503	MCAS Steam Plant Stockpiled Soils	
506	Asbestos Shingle Pile	
44	IR-13 Golf Course Construction Dump Site	
45	IR-14 Knox Area Riprap	
47	IR-17 Montford Point Area Riprap	
48	IR-18 Watkins Village (E) Site	
49	IR-19 Naval Research Lab Dump	
50	IR-20 Naval Research Lab Incinerator	
51	IR-23 Roads and Grounds Building 1105	
52	IR-25 Base Incinerator	
54	IR-27 Naval Hospital Area Riprap	
55	IR-31 Engineer Stockade – G4 Range Road	
56	IR-32 French's Creek	
57	IR-33 Onslow Beach Road	
58	IR-34 Ocean Drive	
59	IR-37 Camp Geiger Area Surface Dump	
60	IR-38 Camp Geiger Construction Dump	

61	IR-39 Camp Geiger Construction Slab Dump	
62	IR-4 Sawmill Road Construction Debris Dump	
63	IR-40 Camp Geiger Area Borrow Pit	
64	IR-42 Building 705 BOQ Dump	
65	IR-46 MCAS Main Gate Dump	
66	IR-47 MCAS Riprap near Stick Creek	
68	IR-5 Piney Green Road	
69	IR-50 MCAS Small Craft Berthing Riprap	
70	IR-51 MCAS Football Field	
71	IR-52 MCAS Direct Refuel Depot	
72	IR-53 MCAS Building 3525 Area	
73	IR-55 Air Station East Perimeter Dump	
74	IR-56 MCAS Oiled Roads to Marina	
75	IR-57 Runway 36 Dump	
76	IR-58 MCAS Tank Training Area	
77	IR-59 MCAS Infantry Training Area	
78	IR-60 EOD K-326 Range	
80	IR-61 Rhodes Point Road Dump	
81	IR-62 Race Course Area Dump	
82	IR-64 Marines Road – Sneads Ferry Road MOGAS Spill	
83	IR-66 AMTRAK Landing Site and Storage Area	
84	IR-67 Engineers TNT Burn Site	
85	IR-70 Oak Grove Field – Surface Dump	
86	IR-71 Oak Grove Field - Buried Dump	
87	IR-72 Oak Grove Field - Coal Pile	
88	IR-8 Flammable Storage Warehouse Bldg. TP-451 & TP- 452	
105	IR-94 Building 1613 1-4 MWR Gas Station (ROD signed 8/28/2006)	
210	IR-1 French Creek Liquids Disposal Area	
212	IR-12 EOD-1 Range (Formerly EOD (G-4A))	
216	IR-24 Industrial Area Fly Ash Dump (ROD signed 9/15/1994)	
219	IR-30 Sneads Ferry Road – Fuel Tank Sludge Area (ROD signed May 1996)	
226	IR-48 Marine Corps Air Station New River Mercury Dump Site (ROD Sept 1993)	
230	IR-68 Rifle Range Dump (7/31/2001 NFA)	
232	IR-7 Tarawa Terrace Dump (ROD signed 1/20/1998)	
235	IR-75 MCAS Basketball Court Site	
236	IR-76 MCAS Curtis Road Site	
241	IR-85 Camp Johnson Battery Dump	
243	IR-87 MCAS Officer's Housing Area (Formerly Site A)	
247	IR-90 BB-9 Tanks (ROD signed 9/30/2001)	
248	IR-91 BB-51 Tanks (ROD signed 9/30/2001)	
249	IR-92 BB-46 Tanks (ROD signed 9/30 2001)	

[1] Identified in Table 5 of the Application as "Active" or from a "past date – Present"

[2] Identified in Table 5 of the Application as "Active" or from a "past date – Present" and as part of Building 1700, former Steam Plant in the July 18, 2023 update letter.

[3] Identified in Table 5 of the Application as "Active" or from a "past date – Present" and as part of base wide Dumpsters SWMUs 26 and 27 in the July 18, 2023 update letter.

[4] Identified in Table 5 of the Application as "Active" or from a "past date – Present" and as part of base wide Oil/Water separators SWMU 36 in the July 18, 2023 update letter.

[5] Identified in Table 5 of the Application as "Active" or from a "past date – Present" but "in use" removed in the July 18, 2023 update letter.

[6] Identified in Table 5 of the Application as "unknown" period of operation, but "in use" added in the July 18, 2023 update letter

Table A-2: Solid Waste Management Units and Areas of Concern that require No Further Action at this time as active or former 90-day/Central Accumulation areas or former permitted TSD:

SWMU No.	Site Description		
97	RCRA 90-day Storage Facility (Building S-962)	active	
124	RCRA 90-day Storage Facility (Building AS-4225)	inactive	
325	Hazardous Waste Container Storage Facility, former permitted TSD (Buildings TP-451 and TP-463)	inactive	NFA July 1996
420	Former Permitted Treatment Storage and Disposal Facility (Building 490)	inactive	Closure certification accepted: 2/20/2007
789	AS-3525 RCRA 90 day Central Accumulation Area	active	

Table A-3: Solid Waste Management Units and Areas of Concern that require No Further Action at this time (either identified or granted NFA since the 2010 RCRA Permit) as indicated in Table 5 and 6 of the Attachment to this Permit:

SWMU No.	Site Description		Date NFA Granted
43	IR-11 Pest Control Shop, former oil/water separator	Table 5	8/24/2017 Cancellation of LUCs recorded 5/29/2018
303	AS515 AST-E HMM 266 HMM 261 (IR-86, SWMU 242)	Table 6	October 2009, Transferred to SWMU 242, IR-86
318	AS515 O/W separator Near Bldg. AS 515 (IR-86, SWMU 242)	Table 6	October 2009, Transferred to SWMU 242, IR-86
344, 345, 346	UST-AS-419,420,421 Lift Station Generator Tanks (Part of IR-86, SWMU 242)	Table 6	POL NFA 8/2/2011 Near SWMU 500
421	IR-95(a) Animal Dipping Vats (Jaybird Road Dipping Vat)	Table 6	NTCRA performed 2010; NFA signed 11/7/11
483	Camp Johnson Battery Dump Site	Table 5	November 2011
517	IR-95(b) Animal Dipping Vats(Magnolia Road Dipping Vat)	Table 6	NTCRA performed 2010; NFA signed 11/7/11
501	BB-50 Trench	Table 5	June 2011
574	Building 908 Hazmat	Table 6	2013
575	AS-1000 Grease Rack/Petroleum Release	Table 5	April 2015
576	Parachute Tower Road Drums	Table 5	June 2012
614	Parachute Tower Road Expansion-White powder	Table 5	January 2013
670	Courthouse Bay – 30 Deteriorated Drums	Table 5	April 2016
689	AS4101 Wash Rack Release	Table 5 and 4B	5/23/2017
AOC-A	Drums near PT-464 off Piney Green Road Midway Park Former LCH-1353	Table 5	September 2013
AOC-B	Former Radar Mounds AS3500 and AS3522	Table 5	April 2016
AOC-C	Montford Point Drum Site	Table 5	September 2016
AOC-D	Connector Road Dump	Table 5	May 3, 2023
717	(IR-110)Demolished Water Towers(S-5)	Table 6	2020
718	(IR-110)Demolished Water Towers(S-2323)	Table 6	2020
719	(IR-110)Demolished Water Towers(LCH-4004)	Table 6	2020
720	(IR-110)Demolished Water Towers(S-830)	Table 6	2020
721	(IR-110)Demolished Water Towers(SBA-108)	Table 6	2020

Table A-4: Solid Waste Management Units and Areas of Concern that require No Further Action at this time and have Land Use Controls in place as indicated in Table 5 of the Attachment to this Permit:

SWMU No.	Site Description	Comment	Date
322	Old Base Sanitary Landfill (Sneads Ferry Road) (Permit #67-03)(closed)	Closed Base Landfill Managed under Solid Waste Section Under LUCs since 6/5/2008	6/5/2008
323	Existing Subtitle D Landfill Operating under NCDEQ Solid Waste Section Permit # 6708-MSWLF-1997.	Semiannual groundwater and quarterly landfill gas collected around perimeter.	In Use
423	Michael Road Construction Site	LUC Implementation Plan submitted to document LUC in 2013	2013
504	Sneads Ferry Landfill Debris Site	Part of SWMU 322 Sneads Ferry Road Landfill under Permit #67-03	8/30/2011

Table A-5: Solid Waste Management Units and Areas of Concern that require No Further Action at this time and have Land Use Controls in place as indicated in Table 6 of the Attachment to this Permit:

SWMU No.	Site Description	Comment	Date
46	IR-15, Montford Point Dump Site	Part of larger site in 2010 permit	2/1/2013
195	IR-28, Hadnot Point Burn Dump	LTM and LUC 10/9/1996; LTM closed 2002, LUC boundary updated 2014	ROD 10/9/1996 LUC updated 2014
197	IR-63, Verona Loop Road Dump	NFA in 2010 RCRA permit, ESD 2012 to document LUC as final remedy	ROD April 1997, LUC updated 2014
211	IR-10, Original Base Dump	NFA in 2010 RCRA permit, Base-implemented LUCs	4/27/2005
213	IR-16, Montford Point Burn Dump	NFA in 2010 RCRA permit, ESD 2012 to document LUC as final remedy	ROD 10/30/1996 LUC updated 2014
215	IR-21, Transformer Storage Lot 140	NFA in 2010 RCRA permit, excavation to industrial levels	ROD 9/15/1994 LUCs implemented 2001 and 2002
222	IR-41 Camp Geiger Dump Near Former Trailer Point	NFA in 2010 RCRA permit	ROD signed 1/16/1996 closed 7/2006
223	IR-43, Agan Street Dump	NFA in 2010 RCRA permit; Soil LUCs implemented 2005	ROD 7/13/2005 IRACR 2/8/2007
224	IR-44, Jones Street Dump	NFA in 2010 RCRA permit, Soil LUCs implemented 2005	ROD 7/13/2005 IRACR August 2007
227	IR-54, Crash Crew Fire Training Burn Pit at Air Station	NFA in 2010 RCRA permit, reopened additional sampling conducted in 2017, confirmed PFAS	ROD 7/13/2005 IRACR 2007
229	IR-65, Engineer Area Dump	NFA in 2010 RCRA permit, construction in 2013 indicated presence of asbestos containing material. Base implemented LUC in 2014.	ROD 9/28/2001 LUC added in 2014
234	IR-74, Mess Hall Grease Disposal Area	NFA in 2010 RCRA permit, Closed out in 2006 RACR; additional sampling conducted 2012	ROD 1/16/1996
238	IR-80, Paradise Point Golf Course Maintenance Area	NFA in 2010 RCRA permit, reopened additional sampling conducted; ESD 2012 to document LUC as final remedy	ROD 1/20/1998

Table A-6: Solid Waste Management Units and Areas of Concern with Remedy Selected, in–place as indicated in Table 5 of the Attachment to this Permit:

SWMU No.	Site Description	Remedy Selected	Date
89	SCLH785 Basin Base Maintenance O/W separator (active) (Associated with SWMU 240, part of IR-84, see Table A-7 of this permit)	PCB soils removed as part of remedy, however not all contamination could be excavated. Fencing in place for soils >50 ppm. LUCs implemented 3/19/2010.	3/19/2010
177	UST 333-C, Building 333 2D FSSG Inspector's Office	LTM every 5th year for pesticides with LUCs The 4/16/2009 Statement of Basis included LTM and LUCs.	LTM Implementation Plan 7/24/2008, Updated August 2017
269	816 O/W Separator 8th Engineer 2D FSSG	LTM every 5th year for VOCs with LUCs The 2006 Statement of Basis included LTM and LUCs. LUCs implemented 2009.	LTM Implementation Plan 7/24/2008
299	AS114 Used Oil AST MCAS Auto Hobby Shop	LTM every 5th year for VOCs with LUCs The 2006 Statement of Basis included LTM and LUCs.	LTM Implementation Plan 7/24/2008
343	OB/OD G-10	LTM every 5th year for SVOCs and explosive residue with LUCs. Monitoring events were conducted in August 2015 and August 2020.	Quarterly monitoring began 2009. Schedule was modified in 2012 and 2014. Five-year monitoring proposed in 2016 was approved June 1, 2017.
350	6 ASTs ASTS-STT61-66 Used Oil Storage Tanks	MNA for groundwater VOCs with LUCs	Statement of Basis, December 2021
AOC-F	Off base source AOPC 9 - Lejeune Exxon Handymart, Lejeune Boulevard and Camp Knox Road	LTM ongoing periodically for MTBE in groundwater since 2015. See Table 5, several off site sources located across the NC Highway 24/Lejeune Blvd right-of-way	~2015
AOC-G	Off base source AOPC 10 - Lejeune Boulevard and Tarawa Boulevard, Silance Service Center and Coastal Cleaners & Laundry	LTM ongoing periodically for VOCs in groundwater since 2014 See Table 5, several off site sources located on the northern side of NC Highway 24	~2014
AOC-H	Off base source AOPC 11 - Former Dogwood Variety Store	LTM ongoing periodically for VOCs in groundwater since 2014 Former Dogwood Variety Store LUST site issued NFA by NC DEQ	~2014

Table A-7: Solid Waste Management Units and Areas of Concern with Remedy Selected, in–place as indicated in Table 6 of the Attachment to this Permit:

SWMU No.	Site Description	Remedy Selected	Date
67	IR-49, MCAS Suspected Minor Dump	originally NFA, reopened and sampled in 2011; MNA biennially for VOCs, with LUCs	4/24/2014
214	IR-2, Former Nursery/Day-Care Center	LTM every 5 years for 4,4'-DDD and 4,4'-DDT and LUC on aquifer use. Soil LUC to be removed	Closed 9/2008 Modified 2020-21
217	IR-88, Building 25	VOC groundwater treatment, LTM, and LUCs (Remedial Action begun in 2020)	ROD signed 5/28/2019
218	IR-3, Old Creosote Site	LTM every 5 years for SVOCs with LUCs	ROD 7/28/1999
220	IR-35, Camp Geiger Area Fuel Farm	MNA annually for VOCs in groundwater and LUCs	ROD 11/16/2009 LUC updated May 2019
221	IR-36, Camp Geiger Area Dump near Sewage Treatment Plant	MNA every 5 years for VOCs in groundwater and LUCs	ROD 7/6/2005 LUC updated May 2019
228	IR-6, Storage Lots 201 and 203	LTM annually for VOCs in groundwater and LUCs	ROD 9/24/1993 LUC updated May 2019
231	IR-69, Rifle Range Chemical Dump	Landfill Cap; MNA annually for VOCs in groundwater: LTM every 5 years for pesticides, PCBs, metals, and CA; LUCs 9/15/2015	ROD 3/12/2013
233	IR-73, Courthouse Bay Liquid Disposal Area	Enhanced Reductive Dechlorination MNA annually for VOCs in groundwater; LUCs 4/16/2019	ROD 8/24/2009
237	IR-78, Hadnot Point Industrial Area	Pump&Treat in past, currently vapor intrusion mitigation; LTM annually for VOCs in groundwater; Monitoring every 5 years for metals; LUCs updated December 2015	ROD 9/8/1994
239	IR-82, VOC Disposal Area at Piney Green Road	pump and treat, LTM, LUCs VI and UXO LUCs added in 2019	ROD 9/24/1993 LUC updated May 2019
240	IR-84, Building 45 Area	Excavation of contaminated soils. Fence isolating area with greater than 50 ppm PCB levels. LUC implemented 3/19/2010.	March 2010
242	IR-86, Tank Area AS419-AS421 at MCAS	Monitoring every 5 years for NAIPs and VOCs; LUCs implemented 9/23/2015 additional sampling conducted in 2017, confirmed PFAS	ROD 7/11/2014
244	UST-25 Base Dry Cleaners (IR-88, SWMU 217)	VOC groundwater treatment, LTM, and LUCs (RA planned in 2020)	ROD signed 5/18/2019
245	IR-89, Former DRMO	Air Sparging, permeable reactive barrier, aerators, additional investigation ongoing to refine delineation. LTM initiated in 2014 includes annual sampling for MNA LUCs implemented 11/28/2013	ROD signed 12/6/2012 IRACR 2014

250	IR-93, TC-942 Tanks	MNA ongoing annually for VOCs in groundwater; LUCs in place and updated in 2014.	ROD signed 10/2/2006
288	STC-868 Rack DRMO (IR-89, part of SWMU 245)	Air Sparging, permeable reactive barrier, aerators, additional investigation ongoing to refine delineation. LTM initiated in 2014 includes annual MNA monitoring LUCs implemented 11/28/2013	ROD signed 12/6/1012 IRACR 2014
359	Lot 201 Battery Dump (IR-6, SWMU 228)	Part of SWMU 228 LTM annually for VOCs; LUCs updated in 2019	ROD signed 9/24/1993
360	(IR-96) Building 1817 UST Warehouse and Supply	Transferred from RCRA to CERCLA 5/16/2009 MNA ands LUCs	ROD signed 9/29/2022
615	Building 133 Former Armory (IR-88)	Transferred to IRP site 88 on 1/12/2016 VOC groundwater treatment, LTM, and LUCs with SWMU 217	ROD signed 5/28/2019

Table A-8: Solid Waste Management Units and Areas of Concern managed under the UST program that require No Further Action at this time as indicated in the 2010 RCRA permit and in Table 4C of the Attachment to this Permit:

SWMU No.	Site Description
7	UST-AS-118 Auto Maintenance Shop
8	UST-AS-3504 Electronics/Communications Maintenance
9	UST-AS-4146-3 Support Equipment Shop
18	UST-AS-605 MCASNR Lawn Mower Maintenance Facility
19	UST-BA-130/SBA-131 2nd Recon BN Wash Rack
28	UST-FC-102/SFC-104 Combat Vehicle Maintenance
29	UST-FC-201 (W) 2nd FSSG Auto Shop/Lube Rack
34	UST-M-178-1 Waste Water Treatment Plant Tank
79	UST-61 Storage
98	UST-1106 Auto Hobby Shop Area
100	UST-1310-1 Motor Transport
101	UST-1401 Old Bakery
102	UST-1450-1, 2, 5, 6, 7 Maintenance Shop
103	UST-1502-1 Motor Transport Shop
104	UST-1607 Maintenance Shop
106	UST-1736 Heating Plant
107	UST-1775-2,-3 Military Maintenance Facility
108	UST-1804/S-1856-1 to –6 2D Mar Div CBT Eng BN Lube Rack
109	UST-1815/S-1813 Pump Island
110	UST-1854-2,3,5,6 Tank/Auto Maintenance Facility
111	UST-1880-1 2D Marine Division Engineering BN Motor Pool
112	UST-1880-3 2D Marine Division Engineering BN Motor Pool
113	UST-1919-1 Base Maintenance Shop
114	UST-1932-2 Golf Maintenance Facility
116	UST-600 Golf Course Maintenance
119	UST-738 Maintenance Shop
122	UST-903 Warehouse
123	UST-AS-114 Hobby Shop
125	UST-AS-3000 Power Production
133	UST-AS-522 Generator House
134	UST-AS-804 Photo Building
135	UST-AS-822 Emergency Generator
136	UST-AS-840 Hangar
138	UST-AS-849 Storage
139	UST-AS-872 MCASNR Power Production
140	UST-BA-130-1 2nd Recon BN Auto shop
141	UST-BB-177 MWR Fuel Station
142	BB-177-6 MWR Fuel Station (UST Site BB-177, SWMU 141)
144	UST-BB-52/SBB-70-1 CHB USMC Eng. Instruction Bldg.
145	UST-BB-71 Auto Hobby Shop
148	UST-FC-120-2 Auto Maintenance Shop
149	UST-FC-201 (E) 2nd FSSG Auto Shop/Lube Rack
150	UST-FC-241 Maintenance Shop
151	UST-FC-251-2, -3 2D FSSG Maintenance Shop
152	UST-FC-263-5 2D FSSG Maintenance Shop
153	UST-H-19 II MEF
159	UST-LCH-4022 Fire Station
160	UST-M-101-1 Instruction/Storage Facility
161	UST-M-230-1 Boiler Room

163	UST-M-90 Motor Transport Facility
167	UST-RR-72 MCX Service Station
169	UST-S-947-1,-2 (913) Base Maintenance Wash Rack
170	UST-SBB-161 USMC Eng School Lumber Storage
171	UST-21 Waste Water Treatment Plant Tank
173	UST-24 Base Communications Electronics
174	UST-32-1 Wastewater Treatment Plant Tank
175	UST-33 Civilian Personnel Division Building
176	UST-331 MWR Administration Office
179	UST-SLCH-4019 Oil Water Separator Tank at Grease Rack
180	UST-STT-39A Water Treatment Plant Tank
181	UST-STT-69 Maintenance Facility
182	UST-TC-1251 Well House
185	UST-TC-774 Wash Rack
186	UST-TC-912 Camp Geiger Mini C Store
189	UST-TT-2455 Commissary
194	UST-TT-44 TT Community Center
198	UST-A-10/SA-26 Grease Rack (IR-73, SWMU 233)
200	UST-A-13/SA2 Maintenance Shed (IR-73, SWMU 233)
202	UST-A-47-4 Maintenance Shop
204	UST-BB-46 Spec. Services Boathouse (IR-92, SWMU 249)
205	UST-BB-51 USMC Eng. Instr. Bldg. (IR-91, SWMU 248)
251	UST-STC-868 Lube Rack (IR-89, SWMU 245)
253	Building 1205-AST H&S Company HQSVC Co. 2D MEF Used Oil
261	1780-UST-1 Truck Company, Maintenance, HQ BN, 2D Mar Div
262	1780-UST-2 Truck Co. Maintenance, HQ BN 2D MAR DIV
292	1106/1107-Used Oil AST Motor T Auto Hobby Shop MWR
295	1601-Used Oil AST 2D FSSG
341	UST-BB-293 CHB Washpad Oil/Water Separator Tank
348	UST-S-891 (UST Site S889/891, SWMU 347)
355	UST-M-167 Camp Johnson Equipment Room (Tele Exchange)
356	UST-TC-307 Camp Geiger Gatehouse
357	UST-TC-755 Camp Geiger Telephone Exchange
361	UST-40-1,2 School
365	UST-1205/S-1213 Motor Transport
367	UST-1604/S-1616 Grease Rack
368	UST-1775-4 Maintenance Shop
369	UST-1841-1,2 (599) Maintenance Shop
370	UST-1860-1 Elec/Comm Maintenance Shop
371	UST-1880-2 2D Marine Division Engineering BN Motor Pool
372	UST-575-2 Light armored vehicle maintenance
373	UST-5400 Elementary School
374	UST-A-47-2 Maintenance Shop
375	UST-AS-109/SAS-157 Grease Rack
376	UST-AS-146 MCASNR Campbell Street Fuel Farm
377	UST-AS-1011 Housing Area
378	UST-AS-2804 Marina Gasoline Dispensing Station
379	UST-FC-190-1,-2 Maintenance Shop
380	UST-FC-200 Maintenance Shop
381	UST-FC-280 Vehicle Maintenance
382	UST-FC-281 Maintenance Shop
383	UST-H-18 Ambulance Garage
384	UST-HP-100 Combat Vehicle Maintenance Shop

385	UST-HP-250 Vehicle Maintenance Shop
386	UST-PT-37 Parachute Tower Road near MP Dog School
387	UST-RR-80 Wash Rack
388	UST-S-688 Old Wastewater Treatment Plant Area
389	UST-SBB-94 Sports Complex
390	UST-TC-647 Waste Water Treatment Generator Building
391	UST-TT-48 TTII Elementary School
392	UST-TT-60 TTI Primary School
393	UST-TT-2453 (HYD LIFTS) Base Housing
394	UST-1 Office Building
395	UST-20-1 Water Treatment Plant
396	UST-311 Warehouse/ Office Facility
397	UST-333-B 2nd FSSG Inspectors Office
400	UST-1612 Automotive Garage
402	UST-1919-2 Base Maintenance Shop
403	UST-1919-3 Base Maintenance Shop
404	UST-A-47-5 Maintenance Shop
406	UST-AS-114(2) MCASNR Hobby Shop
407	UST-AS-118(2) MCASNR Auto Maintenance Shop
409	UST-AS-840(new) MCASNR Hangar
410	UST-AS-2094 MCASNR Officer's Base Housing
411	UST-AS-4146(new) MCASNR Support Equipment Shop
412	UST-BB-30 CHB Gas Station
413	UST-H-31 Former Naval Hospital Clinic
415	UST-M-171 Camp Johnson Gas Station
416	UST-M-230-2 Camp Johnson Boiler Room
417	UST-TC-501 Camp Geiger Former Waste Water Treatment Plant
418	UST-TT-2634 Tarawa Terrace Base Housing
424	UST-1775-5 Maintenance Shop
425	UST-1829-3 Auto Maintenance Facility
426	UST-1854-1 Auto Maintenance Facility
427	UST-1854-4 Auto Maintenance Facility
428	UST-575-4 Light armored vehicle maintenance
429	UST-575-6 Light armored vehicle maintenance
430	UST-AS-2804(new) Marina Gasoline Dispensing Station
431	UST-FC-40-2 Auto Maintenance Shop
432	UST-FC-45 Maintenance Shop
434	UST-FC-230-3 Auto Maintenance Shop
435	UST-FC-270-1 Auto Maintenance Shop
436	UST-FC-270-2 Auto Maintenance Shop
437	UST- HP-100-3 Combat Vehicle Maintenance Shop
438	UST-PP-3358 Paradise Point Base Housing
439	UST-TT-779 TT Family Housing
440	UST-TT-3140 TT Family Housing
441	UST-TT-2254 TT Family Housing
442	UST-TT-2258 TT Family Housing
445	UST-PP-3322 Paradise Point Base Housing
451	UST-PP-3350 Paradise Point Base Housing
453	UST-PP-3363 Paradise Point Base Housing
454	UST-PT-39 Hazardous Material Storage Building
459	UST-TT-3165 TT Family Housing
460	UST-TT-3233 TT Family Housing
461	UST-TT-3548 TT Family Housing

462	UST-1780-1 Maintenance Shop
463	UST-1780-1A Maintenance Shop
464	UST-1780-1B Maintenance Shop
465	UST-1860 Elec/Comm Maintenance Shop
466	UST-TT-3524 TT Family Housing
467	UST-FC-40-3 Auto Maintenance Shop
478	UST-2004 Helicopter Release
488	UST-AS-4146-1,2 Gasoline/Diesel Service
489	UST-A2-01A (Dispenser Pump/Associated Piping; MCAS)
492	UST-AS-4151-1 MCAS Steam Plant Used Oil Tank
493	UST-AS-4151-2 MCAS Steam Plant Diesel Tank (Generator)
514	UST-TT-3026 Tarawa Terrace Former Housing Unit (NFA 3/18/2009)

Table A-9: Solid Waste Management Units and Areas of Concern managed under the UST program that require No Further Action at this time as indicated in Table 4B of the Attachment to this Permit:

SWMU No.	Site Description	Date NFA Granted
99	115 Building 1115/1100 (UST Site HPFF/1115, SWMU 156)	1/8/2020
129	UST-AS4158-1,-2,-3 MCASNR Maintenance Fuel Supply	6/15/2011
132	AS-511-3 Rapid Refueler (associated with Rapid Refueler area, UST Site Rapid Refueler/AS-511) (SWMU 165)	1/8/2020
137	UST-AS843 MCASNR OPS	3/3/2011
143	UST-BB190-1 CHB Wastewater Treatment Plant Tank	11/29/2012
162	UST-M232-236 Camp Johnson Bachelor Quarters	6/24/2012
178	UST-45-1 Maintenance Facility (associated with IR-84, SWMU 240)	3/10/2011
190	UST-TT-2463-2473 Shopping Center	8/23/2012
191	UST-TT-2477-2478 MWR Gas Station/Chapel	8/23/2012
199	UST-A12-1,-2 Fueling Area	8/22/2012
203	UST-A47/SA21 Aph. Veh. Mnt. Fac. (IR-73, SWMU 233)	5/23/2016
206	UST-BB9 Base Utilities Boiler House (IR-90, SWMU 247)	4/29/2015
340	UST-1601 AC/S Logistics Maint. (IR-78,SWMU 237)	12/6/2011
401	UST-2613-(1-4) MWR Service Station	4/21/2014
414	UST-JP-5 Line Leak MCASNR JP-5 Line	5/21/2012
433	UST-FC-230-2 Auto Maintenance Shop	2/18/2013
443	UST-NH-100 Naval Hospital	2/18/2013
481	UST-AS511-3 MCASNR	1/8/2020
487(641)	TT-2989 Tarawa Terrace Base Housing	See SWMU 641
490	JP5-179TH (2007 Tracer Hits)	11/6/2018
491	UST-CSFF-Manhole (2006 release)	2/17/2014
494(642)	TT-2995 Tarawa Terrace Base Housing	See SWMU 642
495(643)	TT-3019 Tarawa Terrace Base Housing	See SWMU 643
498(640)	TT-2947 Tarawa Terrace Base Housing	See SWMU 640
507	UST-30-1	9/26/2019
510	UST-TT-48-1	11/9/2011
513	UST-AS-499 Engine Test Cell Facility	8/21/2020
515(542)	UST-LCH-4023 MP, Driver's License Office	See SWMU 542
516	UST-TT-2778 Tarawa Terrace Former Housing Unit	11/9/2011

519	1775-1 Vehicle Storage and Maintenance Facility	3/8/2010
522	575 (1,3) Vehicle Storage and Maintenance Facility	6/10/2010
523	A-111 Courthouse Bay Maintenance Facility	9/30/2010
524	AS-3625 Emergency Generator Facility	8/12/2010
525(658)	TT-2965 Tarawa Terrace Base Housing	See SWMU 658
529	Beaufort US Highway 70 Surface Release	Unknown (<55 gal spill)
532(687)	FC-255 Vehicle Storage and Maintenance Facility	See SWMU 687
533	FC-436 Waste Water Treatment Plant Surface Release	12/15/2010
534	HP-237 (1,2) Vehicle Storage and Maintenance Facility	2/2/2010
535	Landfill AST Release(< 25 gallons spill)	2/24/2010
536	LCH-1225 Midway Park Base Housing	unknown
537	LCH-1232 Midway Park Base Housing	unknown
538(666)	LCH-1239 Midway Park Base Housing	See SWMU 666
539(668)	LCH-1332 Midway Park Base Housing	See SWMU 668
540(667)	LCH-1259 Midway Park Base Housing	See SWMU 667
541	LCH-1333 Midway Park Base Housing	6/8/2010
542(515)	LCH-4023 Driver's License Office	4/30/2012
543	LCH-778 Midway Park Base Housing	unknown
544(602)	SR-10 Generator Surface Release	See SWMU 602
545	Stone Bay Hydraulic Release	12/15/2010
546	TFM-103 Training Facility	8/30/2010
547(633)	TT-2007 Tarawa Terrace Base Housing	See SWMU 633
549(663)	TT-2077 Tarawa Terrace Base Housing	See SWMU 663
550	TT-2084 Tarawa Terrace Base Housing	4/30/2009
552(647)	TT-2103 Tarawa Terrace Base Housing	See SWMU 647
553(648)	TT-2111 Tarawa Terrace Base Housing	See SWMU 648
555(634)	TT-2125 Tarawa Terrace Base Housing	See SWMU 634
557	TT-2139 Tarawa Terrace Base Housing	12/23/2009
559(635)	TT-2502 Tarawa Terrace Base Housing	See SWMU 635
561	TT-2533 Tarawa Terrace Base Housing	unknown
562(654)	TT-2539 Tarawa Terrace Base Housing	See SWMU 654
563(655)	TT-2540 Tarawa Terrace Base Housing	See SWMU 655
564	TT-2570 Tarawa Terrace Base Housing	8/27/2012
565	TT-2586 Tarawa Terrace Base Housing	unknown
566(636)	TT-2590 Tarawa Terrace Base Housing	See SWMU 636
567(637)	TT-2594 Tarawa Terrace Base Housing	See SWMU 637
568(638)	TT-2610 Tarawa Terrace Base Housing	See SWMU 638
569	TT-2618 Tarawa Terrace Base Housing	unknown
571(656)	TT-2908 Tarawa Terrace Base Housing	See SWMU 656
572(657)	TT-2929 Tarawa Terrace Base Housing	See SWMU 657
573(639)	TT-2939 Tarawa Terrace Base Housing	See SWMU 639
578	AS-705 MCASNR	12/20/2012
579	BB-56 Courthouse Bay Area	5/22/2012
580	Base Scales Soil Investigation	4/18/2012
582	FC-200 French Creek	7/26/2011
583	FC-263 spill French Creek	4/12/2011
584	Camp Lejeune Recovery Well Incident Ash Street Hadnot Point Industrial Area	10/26/2011
585	LCH-1434 Midway Park Housing	8/1/2012
586	LCH-1700 Midway Park Housing	7/18/2012
587	LCH-1704 Midway Park Housing	7/18/2012
588	LCH-1705 Midway Park Housing	3/20/2012
589	LCH-1706 Midway Park Housing	4/24/2012
590	LCH-1709 Midway Park Housing	6/4/2012

591	LCH-1710/1712 Midway Park Housing	8/8/2012
592(610)	LCH-1712 Midway Park Housing	See SWMU 610
593	LCH-1713 Midway Park Housing	6/4/2012
594	LCH-1715 Midway Park Housing	3/22/2012
595	LCH-1717 Midway Park Housing	3/20/2012
596	LCH-1718 Midway Park Housing	6/13/2012
597	LCH-1719 Midway Park Housing	3/21/2012
598	LCH-1721 Midway Park Housing	3/22/2012
599	LCH-1720 Midway Park Housing	4/3/2012
600	LCH-1722 Midway Park Housing	6/4/2012
602(544)	SR-10 Spill (2nd Incident) SR-10 Range Greater Sandy Run Area	10/31/2011
603	TC-774 Petroleum Impacted Soil Camp Geiger	6/7/2012; 10/3/2012
604	TC-774 UST Site Camp Geiger	10/3/2012
605	LCH-1124 Midway Park Housing	8/29/2012
606	LCH-1128 Midway Park Housing	8/29/2012
607	LCH-1706B Midway Park Housing	7/18/2012
608	LCH-1709 C/D Midway Park Housing	8/1/2012
609	LCH-1723 Midway Park Housing	11/6/2012
610(592)	LCH-1712 D/E Midway Park Housing	11/7/2012
611	Midway Park CDC Crash Gate Midway Park	10/8/2012
612	Onslow Beach Site Onslow Beach Area	1/29/2013
617	P-1268/2 (G-484) Camp Geiger	9/1/2015
618	SRR-84/85 Rifle Range	3/10/2016
619	P-1268 Camp Geiger/ AB Building P-1268 Camp Geiger/ AINE Building P-1268 Camp Geiger/ AINW Building P-1268 Camp Geiger/ SB Building	6/21/2012
620	Piney Green and Sneads Ferry Rd Incident Hadnot Point Industrial Area	9/6/2012
621	1610 1612 Hydraulic Lifts Hadnot Point Industrial Area	10/8/2012
622	LCH-1707 Midway Park Housing	12/19/2012
623	LCH-1055 Midway Park Housing	12/19/2012
624	LCH-1039 Midway Park Housing	12/18/2012
625	LCH-1043 Midway Park Housing	12/18/2012
626	AS-527 MCAS New River	4/12/2011
627	LCH-1705B Midway Park Housing	3/4/2013
628	LCH-1030/1031 Midway Park Housing	3/4/2013
629	LCH-1016 Midway Park Housing	4/17/2013
631	RR-49	12/5/2013
633(547)	TT-2007	1/7/2010
634(555)	TT-2125	2/8/2010
635(559)	TT-2502	6/23/2010
636(566)	TT-2590	1/27/2010
637(567)	TT-2594	1/26/2010
638(568)	TT-2610	1/7/2010
639(573)	TT-2939	2/11/2010
640(498)	TT-2947	1/27/2010
641(487)	TT-2989	1/27/2010
642(494)	TT-2995	1/26/2010
643(495)	TT-3019	2/15/2010
644	TT-2048	4/16/2009
645	TT-2084	4/30/2009
646	TT-2086	4/16/2009
647(552)	TT-2103	2/8/2010

648(553)	TT-2111	12/23/2009
649	Building 411	9/6/2017
650	TT-2225	1/26/2009
651	TT-2361	11/4/2008
652	TT-2369	1/23/2009
653	TT-2423	12/8/2008
654(562)	TT-2539	5/5/2010
655(563)	TT-2540	1/20/2010
656(571)	TT-2908	2/4/2009
657(572)	TT-2929	1/19/2010
658(525)	TT-2965	6/3/2010
659	TT-3103	4/13/2009
660	TT-3114	4/29/2009
661	TT-3123	4/8/2009
662	TT-3278	4/1/2009
663(549)	TT-2077A	3/1/2010
664	TT-2886	12/8/2008
665	TT-3145	4/29/2009
666(538)	LCH-1239	8/26/2010
667(540)	LCH-1259	8/9/2010
668(539)	LCH-1332	8/25/2010
669	LCH-1104	1/28/2013
672	S-580	1/18/2018
673	Wallace Creek Area Spill	6/16/2014
674	Building 1819	7/9/2014
675	Lot 201 Base Scales	4/18/2012
676	Lot 201 Bldg 1081 Spill	3/22/2011
677	NH-100 2014 Spill	3/6/2017
679	TT-6084 Burn Pit (Residential)	3/12/2014
680	AS-3628	12/10/2013
681	Chateau Road	7/19/2013
682	AS-480 Drainage Ditch	8/26/2013
683	LCH-1022	9/17/2013
684	LCH-1116	12/4/2013
685	Taxiway Delta JP-5 Release November 2012	9/3/2013
686	LCH-1702B	6/17/2013
687(532)	FC-255-1	1/23/2013
690	Midway Park Former LCH-1353	9/2/2015
691	AS-4146 AST 2015	5/9/2016
693	AS-119 and White Street Roadway Release	9/11/2017
694	TLZ Vulture Site	5/31/2017
695	Former Building 2002	9/8/2008
696	1700 Steam Plant Air Compressor Condensate Line	3/4/2015
697	AS-122	12/12/2014
698	Camp Davis JP-8 Release	2/11/2015
699	RS-1 Transformer Release	3/4/2015
700	AST/Generator 353	1/14/2016
701	TT-43	10/9/2015
702	New River Fuel Truck Parking Area	9/2/2015
703	FC-286 Hydraulic Lifts	10/29/2015
704	1612 Waste Oil UST	10/22/2015
705	Building 825	10/22/2015
706	M-101 Former Wash Apron	11/6/2015

707	BA-130-3	3/30/1995
708	FC-211 2015 Bulldozer Release	1/13/2016
709	1021-1022	2/16/2016
710	Mainside Skeet Range Ditch	3/28/2016
716	Knox Landing 2015 Release	11/18/2015
725	FC-200 OPS	9/12/2017
728	S-931 OPS	2/17/2020
729	883 AST	6/13/2017
730	TC-1110	3/29/2017
731	BB-350 Generator	10/10/2019
732	1658C	1/9/2020
733	739 OPS	2/1/2017
734	1310 OPS	4/27/2016
735	1842 OPS	4/11/2016
736	GP-15 OPS	4/7/2016
737	Fire Training Pit (TP-468)	9/6/2016
738	1919 OPS	3/15/2016
739	SBA-153 OPS	8/3/2016
740	G-650 OPS	6/2/2016
741(742)	Knox Landing 2015 Release	See SWMU 742
742(741)	Knox Landing USTs (Community Center)	8/30/2016
743	952 OPS	8/17/2016
744	SBB-161 OPS	8/16/2016
745	AS-3900 OWS Release	8/9/2016
746	TC-942 OPS	9/29/2016
747	AS-1070	9/20/2016
748	A-11 OPS	5/4/2017
749	FC-375 AST	1/18/2017
750	S-923 OPS	11/14/2016
752	Building 1854-5, Tanks 6/2	7/20/2010
757	Building 1880 Vehicle Fuel Release (2018)	1/15/2020
758	AS-4135 Ditch	4/11/2018
759	FC-259 Generator Release	7/26/2017

*Numbers in parentheses are duplicate SWMU numbers.

Table A-10: Solid Waste Management Units and Areas of Concern managed under the UST program listed under assessment in Table 4A of the Attachment to this Permit that have obtained No Further Action per the July 18, 2023 update letter:

SWMU No.	Site Description	Comment
715	A-2 OPS site Courthouse Bay AAV area (SWMU 722 is a duplicate of 715)	June 2021 soil sampling indicates levels below residential MSCCs. NFA granted 7/18/2022.
724	BA-130 OPS	NFA granted in letter dated 6/2/2022
727	FC-39 AST	NFA with NRP granted in letter dated 3/30/2023. Public notice underway at time of permit issuance as required by conditional NFA.

Table A-11: Solid Waste Management Units and Areas of Concern managed under the UST program that have obtained No Further Action as indicated in Table 4C of the Attachment to this Permit:

SWMU No.	Site Description	Date NFA Granted
187	TT Pump and Treat Old Service Station (UST Site TT-2453-5, SWMU 188)	Prior to 3/2011
188	UST-TT-2453, Auto Hobby Shop	2/1/2008
192	TT-2477-3 Chapel (UST Site TT-2477-78, SWMU 191)	Prior to 3/2011
193	TT-2478 MWR Gas Station UST Site TT-2477-78, SWMU 191)	Prior to 3/2011
398	UST-1323-3 Combat Vehicle Maintenance Facility	5/24/2004
419	UST-45(new) Fuel Oil UST (associated with IR-84, SWMU 240)	3/10/2011

Table A-12: Solid Waste Management Units and Areas of Concern managed under the UST program that have obtained No Further Action as indicated in Table 7 of the Attachment to this Permit:

SWMU No.	Site Description	Comment	NFA date
760	Building 24 AST Generator Release	Soil excavation and PetroBac treatment	12/17/2019
764	TLZ Penguin Surface release	Cleanup performed to TPH action levels	1/17/2019
765	Hathcock Range Excavator Release	Cleanup performed to below TPH action levels	1/23/2019
766	Container 239 Release Middle Street	Soil excavation	1/23/2019
767	G-21 Generator Release	Soil excavation	4/25/2019
768	AST 673-01AG Fuel Release	Soil Excavation	5/16/2019
769	207-Tank Closure	No action taken – see Table 7	7/3/2019
770	901 Contaminated Soils	No action taken – see Table 7	7/18/2019
771	HP-55 Surface Release	Soil excavation	5/16/2019
772	2604 Transformer Release	see Table 7	3/25/2019
773	AS-4146-1/2, 2/2 –Tank Closure	1994 tank closure – see Table 7	3/13/2019
774	A-1 Pistol Range Transformer Release	Soil excavation	3/25/2019
775	FC-364 – Tank Closure	No action taken – see Table 7	3/13/2019
776	AS-4135-3 – Tank Closure	No action taken – see Table 7	3/12/2019
777	SH-8 – Tank Closure	see Table 7	3/4/2019
778	1406-04A	see Table 7	12/18/2019
779	HP-99	see Table 7	9/16/2019
780	M-440	see Table 7	1/15/2020
781	AS-511 UST Vent Release	see Table 7	2/6/2020

Table A-13: Solid Waste Management Units and Areas of Concern managed under the UST program that require No Further Action at this time and have Land Use Controls in place as indicated in Table 4B or Table 7 of the Attachment to this Permit:

SWMU No.	Site Description	Date NFA Granted
128	AS-4151 Steam Plant (duplicate of SWMU 147)	2/17/2014
147	UST-CSFF/AS-4151 Campbell Street Fuel Farm Duplicate of SWMU 225 and 128	2/17/2014
349	UST-S781 Maint. Facility (AST) at Building 45 (associated with IR-84, SWMU 240)	11/28/2011
486	FC-100 Buried Oil Filters/POL Site	2/2/2017
496	TT-3127 Tarawa Terrace Base Housing	11/9/2011

497	TT-3642 Tarawa Terrace Base Housing	11/9/2011
500	UST-AS-510 Used Oil Tank	12/3/2012
508	UST-AS-4159-2/2 Used Oil 1,000 gallon MCAS New River	8/23/2012
509	UST-CSFF 2008 Release	2/17/2014
512	2/09 White Street JP-5 Pipeline Leak	8/22/2012
518	1323 (1,2) Vehicle Storage and Maintenance Facility	11/7/2012
520	1829 (1,2) Vehicle Storage and Maintenance Facility	3/27/2012
521	TT-2953 Tarawa Terrace Base Housing	11/9/2011
526	AS-499 Test Cell Facility	1/8/2020
527	AS-843 AST Spill	11/3/2009
528	AS-845 Fire Training Pit	3/3/2011
531	TT-2969 Tarawa Terrace Base Housing	11/9/2011
548	TT-2018 Tarawa Terrace Base Housing	11/9/2011
551	TT-2089 Tarawa Terrace Base Housing	unknown
554	TT-2117 Tarawa Terrace Base Housing	11/9/2011
556	TT-2129 Tarawa Terrace Base Housing	unknown
558	TT-2478 MCX Gas Station UST Overfill	8/23/2012
560	TT-2506 Tarawa Terrace Base Housing	11/9/2011
577	2011 JP-5 Pipeline Release MCASNR	11/7/2012
581	Camp Lejeune Taxiway Echo Stormwater Ditch MCASNR	10/12/2015
601	Midway Park CDC (Community Center)	7/15/2013
613	2D Tank Battalion Site French Creek Area	2/2/2017
616	CSFF 2012 Spill MCASNR	2/4/2015
630	RR-249 Rifle Range	7/15/2013
632	Building 1854-2, Tanks 3/2	3/27/2012
671	Building 1932	7/22/2014
678	AS-705-2	7/22/2014
688	FC-200-1,2,3,4	3/27/2012
692	1700 Fuel Oil UST	11/1/2016
711	20-2,3 Transfer Piping	11/1/2018
712	1854 2015 Surface Release	12/9/2019
713	SM-177	2/2/2017
726	1841 OPS	7/9/2018
751	FC-100 SB-31 Combat Vehicle Maintenance	3/7/2013
782	Building 689 (Pole-mounted Transformer Release near Hadnot point) See Table 7	3/2/2020

Table A-14: Solid Waste Management Units and Areas of Concern managed under the UST program that require No Further Action at this time and have Land Use Controls in place as indicated in Table 4C of the Attachment to this Permit:

SWMU No.	Site Description	Date NFA Granted
115	UST-45/S-941-1,2	Prior to 3/2011
121	UST-900 Warehouse	Prior to 3/2011
126	UST-AS-410(N) MCASNR Gasoline Dispensing Station	Prior to 3/2011
127	UST-AS-410(S) MCASNR MWR Service Station	Prior to 3/2011
130	UST-AS-4159-2 Refueling Bay	*10/1/2007
131	UST-AS-428 MCASNR Air Traffic Control Generator Building	Prior to 3/2011
154	UST-H-28 Officer Housing Tank	Prior to 3/2011
155	UST-H-30 Old Naval Hospital Barracks	Prior to 3/2011
164	UST-PT-5 Mars Station	Prior to 3/2011
166	Rapid Refueler C,D (UST Site Rapid Refueler/AS-511) (Near SWMUs 165, 455, 456, 457)	Prior to 3/2011
168	UST-S-2633 Lift Station Generator Tank	Prior to 3/2011
183	UST-TC-1255 Well House	Prior to 3/2011 (NFA in 2010 permit)
201	UST-A-47-3 Maintenance Shop (IR-73, SWMU 233)	Prior to 3/2011
225	IR-45, Campbell Street Underground AVGAS Storage and Adjacent JP Fuel. Duplicate of SWMU 147.	2/17/2014
252	UST-TC-942 Warehouse and Supply (IR-93,SWMU 250)	*4/1/2005
364	UST-1323 Combat Vehicle Maintenance Facility	3/3/2010
366	UST-1450-3,4 Maintenance Shop	Prior to 3/2011
399	UST-1502-2 Maintenance SHOP	Prior to 3/2011
405	UST-AS-1-4 MCASNR Boatplane Refueling Tanks	Prior to 3/2011
408	UST-AS-142-1 MCASNR MWR Service Station	Prior to 3/2011
444	UST-PP-3311 Paradise Point Family Housing	Prior to 3/2011
446	UST-PP-3326 Paradise Point Family Housing	Prior to 3/2011
447	UST-PP-3330 Paradise Point Family Housing	Prior to 3/2011
448	UST-PP-3332 Paradise Point Family Housing	Prior to 3/2011
449	UST-PP-3340 Paradise Point Family Housing	Prior to 3/2011
450	UST-PP-3343 Paradise Point Family Housing	Prior to 3/2011
452	UST-PP-3354 Paradise Point Family Housing	Prior to 3/2011
458	UST-TT-2302 Tarawa Terrace	Prior to 3/2011
472	UST-FC-286	Prior to 3/2011
479	UST-CSFF (2005 Release)	Prior to 3/2011
499	UST-AS-3504 Dispenser Island	Prior to 3/2011
511	UST-TT-48-3	Prior to 9/2010
570	TT-2778 Tarawa Terrace base house	Prior to 3/2011

Table A-15: Solid Waste Management Units and Areas of Concern managed under the UST program with Remedy Selected and In-Place as indicated in Table 4A of the Attachment to this Permit:

SWMU No.	Site Description	Remedy Selected	Implement Date
117	UST-645	AS/SVE removed September 2012; Biosparge implemented May 2011. System deactivated as conditional NFA with NRP was granted 3/30/2023.	1998
118	UST-31/S715 Gottschalk Marina	AS/SVE is shutdown, bioinjection followed by LTM planned	May 2013
120 and 755	UST-820 Berkeley Manor Convenience Store Active gas station	AS/SVE system began operating in 1997. AS system shut down in 2016 due to fouling. Second release detected in January 2018 identified as SWMU 755. Restart of AS wells in March 2021. ISOC in select groundwater wells. Groundwater sampling currently conducted on a semi-annual basis in select wells.	Oct 1997
146	UST-CG1	AFVR, Pump & Treat, and manual bailing of free phase product. See SWMU 530.	July 2014
157	UST-AS4141	Dual phase extraction and AFVR suspended in December 2018 due to PFAS impacts. Modified system activated August 2020 to treat PFAS impacted groundwater.	Feb 1994
158	UST-LCH4015 Service Station	AS/SVE system and ISOC units deactivated as NFA with NRP granted 3/30/2023.	1998
184	UST-TC341 Camp Geiger Mess Hall Heating Plant	Soil excavation, Free product recovery and surfactant injection (with SWMU 505)	Oct 2013
208	UST-G480 EOD/Armory (Near SWMU 220 and SWMU 505)	Qualified for NFA 1/26/2009 and could be closed out with a LUR; however site remains open due to proximity to TC341 pipeline and is considered part of SWMU 505.	See SWMU 184, 505, 220
422	UST-728 Gottschalk Marina	Eligible for NFA prior to 2010 permit with a NRP. Located in vicinity of SWMU 118 which has remedy in place.	See SWMU 118
480	UST-Michael Road Fuel Farm	A part of Hadnot Point Fuel Farm remediation site. See SWMU 156.	Feb 1999
505	UST-TC-341 Camp Geiger Heating Plant Pipeline	Soil excavation; Free product recovery system and surfactant injection (with SWMU 184)	Oct 2013
530	CG-1-2 MCASNR PPV Officer Housing	Large scale soil excavation was completed at the site in 2010. AFVR, groundwater pump and treat system, and manual bailing of free phase product are in use.	July 2014

Table A-16: Solid Waste Management Units and Areas of Concern managed under the UST program with Remedy Selected and In–Place with Land Use Controls as indicated in Table 4A of the Attachment to this Permit:

SWMU No.	Site Description	Remedy Selected	Date
156	UST-HPFF/1115 Hadnot Point Industrial Area Former Fuel Farm/1115 Hadnot Point Fuel Farm remediation site	Free Phase Product Recovery, mobile sparging of select groundwater monitoring wells, AFVR, SVE, biopulse sparging, and vapor intrusion mitigation systems. Pump and treat system shut down in January 2020.	1999
165	UST-Rapid Refueler A_D MCASNR Rapid Refuel Area/AS-511	AFVR and manual pumping methods. NCDEQ requested NRP be recorded although site is active. NRP registered on 5/3/2019 and includes groundwater restriction. Groundwater monitoring with free product recovery ongoing.	1998
172	IR-22 Industrial Area Tank Farm (UST Site HPFF/1115)	Part of Hadnot Point Fuel Farm remediation site. See SWMU 156.	1999
351	UST-STT-62 (UST Site STT-61-66, SWMU 350)	See SWMU 350, Table A-6 of this permit	
352	UST-STT-63 (UST Site STT-61-66, SWMU 350)	See SWMU 350, Table A-6 of this permit	
353	UST-STT-64 (UST Site STT-61-66, SWMU 350)	See SWMU 350, Table A-6 of this permit	
354	UST-STT-65 (UST Site STT-61-66, SWMU 350)	See SWMU 350, Table A-6 of this permit	
455	UST-Rapid Refueler (2)C-D Tank, Rapid Refuel Area	AFVR and manual pumping methods. NCDEQ requested NRP be recorded although site is active. NRP registered on 5/3/2019 and includes groundwater restriction. Groundwater monitoring with free product recovery ongoing.	1998
456	UST-Rapid refueler (3)2nd 2002 Release,Rapid Refuel Area	AFVR and manual pumping methods. NCDEQ requested NRP be recorded although site is active. NRP registered on 5/3/2019 and includes groundwater restriction. Groundwater monitoring with free product recovery ongoing.	1998
457	UST-Rapid Refueler (4) 2003 Release,Rapid Refuel Area	AFVR and manual pumping methods. NCDEQ requested NRP be recorded although site is active. NRP registered on 5/3/2019 and includes groundwater restriction. Groundwater monitoring with free product recovery ongoing.	1998

Table A-17: Solid Waste Management Units and Areas of Concern managed under the UST program under assessment as indicated in Table 4A of the Attachment to this Permit:

SWMU No.	Site Description	Comment
714	Former Building 1943 OPS site	Groundwater impacts remain. Additional sampling is scheduled for April 2024.
723	MAG-29 OPS	Since the site is within the Site IR-89 remediation system influence, no further assessment recommended at time of permit issuance.
753	Public Supply Well 647	Well sampled February 2022. Report of Findings submitted January 2023 and recommends resampling at the site in five years to track attenuation. Well abandonment expected summer 2023. Team to re-evaluate sampling plan once the water supply well abandonment is complete.
754	1340 Transformer Release	Soil sampling was conducted September 2022. Report is being prepared at time of permit issuance. NFA recommended.
755	UST-820 Release 2	See SWMU 120.
756	TP-468 AST	Transferred to IR program (IR-9)

Table A-18: Solid Waste Management Units and Areas of Concern managed under the UST program under assessment as indicated in Table 7 of the Attachment to this Permit:

SWMU No.	Site Description	Comment
761	AS-1274 Sumner St.	Sampling conducted 2021, report pending
762	AST 1657-01G Nov 2018 release	Report submitted 2/24/2023. Groundwater sampling conducted August 2022 indicated below NC 2L standards. NFA requested.
763	FC-120 Used Oil UST	Investigated as part of POL Legacy Site Project. Soil sampling completed July/August 2022 indicates no contaminants above Maximum Soil Contaminant Concentrations. Groundwater sampling was not warranted. NFA requested, report pending.

Solid Waste Management Units and Areas of Concern 518 through 782 have been added since the 2010 permit application was submitted.
SWMU numbers 783 through 788 were skipped when SWMU 789 was added.

Remedies*

AFVR Aggressive Fluid Vapor Recovery
AS/SVE Air Sparge/Soil Vapor Extraction
DPE Dual Phase Extraction System
ERD Enhanced Reductive Dechlorination
ISCO In-Situ Contaminant Oxidation
ISOC In-Situ Submerged Oxygen Curtain
LTM Long Term Monitoring
LUCs Land Use Controls
MNA Monitored Natural Attenuation
NFA No Further Action
NRP Notice of Residual Petroleum
UST Underground Storage Tank
ROD Record of Decision
RACR Remedial Action Completion Report
NTCRA non-time critical removal action

APPENDIX B

RCRA FACILITY INVESTIGATION (RFI) WORKPLAN OUTLINE

I. RFI WORKPLAN REQUIREMENTS

The Permittee shall prepare a RCRA Facility Investigation (RFI) Workplan that meets the requirements of Part II of this document 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 which 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 Characterization of Hazardous Waste Sites A Methods Manual: Volume II., Available Sampling Methods, EPA-600/4-84-076, or EPA Region IV Engineering Compliance Branch's Standard Operating Procedure and Quality Assurance Manual (SOP). Any deviations from these references must be requested by the applicant and approved by EPA. The Sampling and Analysis Plan must specifically discuss the following unless the EPA-600/4-84-076 or SOP procedures are specifically referenced.

1. Sampling Strategy
   a. Selecting appropriate sampling locations, depths, etc.;

   b. Obtaining all necessary ancillary data;

   c. Determining conditions under which sampling should be conducted;

   d. Determining which media are to be sampled (e.g., ground water, air, soil, sediment, subsurface gas);

   e. Determining which parameters are to be measured and where;

   f. Selecting the frequency of sampling and length of sampling period;

   g. Selecting the types of samples (e.g., composites vs. grabs) and number of samples to be collected.

2. Sampling Procedures
   a. Documenting field sampling operations and procedures, including;
      i. Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, preservatives, and absorbing reagents);
      ii. Procedures and forms for recording the exact location and specific considerations associated with sample acquisition;
      iii. Documentation of specific sample preservation method;
      iv. Calibration of field instruments;
      v. Submission of field-biased blanks, where appropriate;
      vi. Potential interferences present at the facility;
      vii. Construction materials and techniques, associated with monitoring wells and piezometers;
      viii. Field equipment listing and sampling containers;
      ix. Sampling order; and
      x. Decontamination procedures.

   b. Selecting appropriate sample containers;

   c. Sampling preservation; and

   d. Chain-of-custody, including:
      i. Standardized field tracking reporting forms to establish sample custody in the field prior to shipment; and
      ii. Pre-prepared sample labels containing all information necessary for effective sample tracking.

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

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

   b. Sample storage;

   c. Sample preparation methods;

d. Analytical Procedures, including:
   i. Scope and application of the procedure;
   ii. Sample matrix;
   iii. Potential interferences;
   iv. Precision and accuracy of the methodology; and
   v. Method detection limits.

e. Calibration procedures and frequency;

f. Data reduction, validation and reporting;

g. Internal quality control checks, laboratory performance and systems audits and frequency, including:
   i. Method blank(s);
   ii. Laboratory control sample(s);
   iii. Calibration check sample(s);
   iv. Replicate sample(s);
   v. Matrix-spiked sample(s);
   vi. Control charts;
   vii. Surrogate samples;
   viii. Zero and span gases; and
   ix. Reagent quality control checks.

h. Preventative maintenance procedures and schedules;

i. Corrective action (for laboratory problems); and

j. Turnaround time.

C. Data Management Plan

The Permittee shall develop and initiate a Data Management Plan to 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.

1. Data Record
   The data record shall include the following:

   a. Unique sample or field measurement code;

   b. Sampling or field measurement location and sample or measurement type;

   c. Sampling or field measurement raw data;

d. Laboratory analysis ID number;

e. Property or component measures; and

f. Result of analysis (e.g., concentration).

2. Tabular Displays
The following data shall be presented in tabular displays:

a. Unsorted (raw) data;

b. Results for each medium, or for each constituent monitored;

c. Data reduction for statistical analysis, as appropriate;

d. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and

e. Summary data.

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

a. Display sampling location and sampling grid;

b. Indicate boundaries of sampling area, and area where more data are required;

c. Display geographical extent of contamination;

d. Illustrate changes in concentration in relation to distances from the source, time, depth or other parameters; and

e. Indicate features affecting inter-media transport and show potential receptors.

II. 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 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.

1. Hydrogeology

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

a. A description of the regional and facility specific geologic and hydrogeologic characteristics affecting ground-water flow beneath the facility, including:
   i. Regional and facility specific stratigraphy: description of strata including strike and dip, identification of stratigraphic contacts;
   ii. Structural geology: description of local and regional structural features (e.g., folding, faulting, tilting, jointing, etc.);
   iii. Depositional history;
   iv. Regional and facility specific ground-water flow patterns; and
   v. Identification and characterization of areas and amounts of recharge and discharge.

b. An analysis of any topographic features that might influence the ground-water flow system.

c. 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:
   i. Hydraulic conductivity and porosity (total and effective);
   ii. Lithology, grain size, sorting, degree of cementation;
   iii. An interpretation of hydraulic interconnections between saturated zones; and
   iv. The attenuation capacity and mechanisms of the natural earth materials (e.g., ion exchange capacity, organic carbon content, mineral content, etc.).

d. Based on data obtained from ground-water monitoring wells and piezometers installed up gradient and down gradient of the potential contaminant source, a representative description of water level or fluid pressure monitoring including:
   i. Water-level contour and/or potentiometric maps;
   ii. Hydrologic cross-sections showing vertical gradients;
   iii. The flow system, including the vertical and horizontal components of flow; and
   iv. Any temporal changes in hydraulic gradients, for example, due to tidal or seasonal influences.

e. A description of man-made influences that may affect the hydrology of the site, identifying:
   i. Local water-supply and production wells with an approximate schedule of pumping; and
   ii. Man-made hydraulic structures (pipelines, trench drains, ditches, etc.)

2. 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:

a. Surface soil distribution;

b. Soil profile, including ASTM classification of soil;

c. Transepts of soil stratigraphy;

d. Hydraulic conductivity (saturated and unsaturated);

e. Relative permeability;

f. Bulk density;

g. Porosity;

h. Soil sorption capacity;

i. Cation exchange capacity (CEC);

j. Soil organic content;

k. Soil pH;

l. Particle size distribution;

m. Depth of water table;

n. Moisture content;

o. Effect of stratification on unsaturated flow;

p. Infiltration;

q. Evapotranspiration;

r. Storage capacity;

s. Vertical flow rate; and

t. Mineral content.

3. Surface Water and Sediment

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

a. Description of the temporal and permanent surface water bodies including:
   i. For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth, temperature stratification, and volume;
   ii. For impoundments: location, elevation, surface area, depth, volume, freeboard, and construction and purpose;
   iii. 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.
   iv. Drainage patterns; and
   v. Evapotranspiration.

b. 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, oxygen demand, total organic carbon, specific contaminant concentrations, etc.

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

4. Air

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

a. A description of the following parameter:
   i. Annual and monthly rainfall averages;
   ii. Monthly temperature averages and extremes;
   iii. Wind speed and direction;
   iv. Relative humidity/dew point;
   v. Atmospheric pressure;
   vi. Evaporation data;
   vii. Development of inversions; and
   viii. Climate extremes that have been known to occur in the vicinity of the facility, including frequency of occurrence (i.e., Hurricanes).

b. A description of topographic and man-made features which affect air flow and emission patterns, including:
   i. Ridges, hills or mountain area;
   ii. Canyons or valleys;
   iii. Surface water bodies (e.g., rivers, lakes, bays, etc.); and
   iv. 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:

1. Unit/Disposal Area Characteristics

a. Location of unit/disposal area;

b. Type of unit/disposal area;

c. Design features;

d. Operating practices (past and present);

e. Period of operation;

f. Age of unit/disposal area;

g. General physical conditions; and

h. Method used to close the unit/disposal area.

2. Waste Characteristics:

   a. Type of wastes placed in the unit;
      i. Hazardous classification (e.g., flammable, reactive, corrosive, oxidizing or reducing agent);
      ii. Quantity; and
      iii. Chemical composition.

   b. Physical and chemical characteristics such as;
      i. Physical form (solid, liquid, gas);
      ii. Physical description (e.g., powder, oily sludge);
      iii. Temperature;
      iv. pH;
      v. General chemical class (e.g., acid, base, solvent);
      vi. Molecular weight;
      vii. Density;
      viii. Boiling point;
      ix. Viscosity;
      x. Solubility in water;
      xi. Cohesiveness of the waste; and
      xii. Vapor pressure.

   c. Migration and dispersal characteristics of the waste such as:
      i. Sorption capability;
      ii. Biodegradability, bioconcentration, biotransformation;
      iii. Photodegradation rates;
      iv. Hydrolysis rates; and
      v. 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 ground water, soils, surface water, sediment, and subsurface gas contamination n 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:

1. Ground-water Contamination
   The Permittee shall conduct a ground-water investigation to characterize any plumes of contamination detected at the facility. This investigation shall at a minimum provide the following information:

a. A description of the horizontal and vertical extent of any plume(s) of hazardous constituents originating from or within the facility;

b. The horizontal and vertical direction of contamination movement;

c. The velocity of contaminant movement;

d. The horizontal and vertical concentration profiles of hazardous constituents in the plume(s);

e. An evaluation of factors influencing the plume movement; and

f. 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.).

2. 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:

a. A description of the vertical and horizontal extent of contamination;

b. 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;

c. Specific contaminant concentrations;

d. The velocity and direction of contaminant movement; and

e. An extrapolation of future contaminant movement.

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

3. 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:

a. A description of the horizontal and vertical extent of any plume(s) originating from the facility, and the extent of contamination in underlying sediments;

b. The horizontal and vertical direction of contaminant movement;

c. The contaminant velocity;

d. An evaluation of the physical, biological and chemical factors influencing contaminant movement;

e. An extrapolation of future contaminant movement; and

f. A description of the chemistry of the contaminated surface waters and sediments. This includes determining the pH, total dissolved solids, specific contaminant concentrations, etc.

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

4. 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:

a. A description of the horizontal and vertical direction and velocity of contaminant movement;

b. The rate and amount of the release; and

c. 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:

1. Current local uses and planned future uses of ground water:

a. Type of use (e.g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial); and

b. 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.

2. Current local uses and planned future uses of surface waters directly impacted by the facility:

    a. Domestic and municipal (e.g., potable and lawn/gardening watering);

    b. Recreational (e.g., swimming, fishing);

    c. Agricultural;

    d. Industrial; and

    e. Environmental (e.g., fish and wildlife propagation).

3. Human use of or access to the facility and adjacent lands, including but not limited to:

    a. Recreation;

    b. Hunting;

    c. Residential;

    d. Commercial; and

    e. Relationship between population locations and prevailing wind direction.

4. A general description of the biota in surface water bodies on, adjacent to, or affected by the facility.

5. A general description of the ecology within the area adjacent to the facility.

6. A general demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age; sex; and sensitive subgroups.

7. A description of any known or documented endangered or threatened species near the facility.

APPENDIX C

CORRECTIVE MEASURES STUDY PLAN OUTLINE (CMS)

I. IDENTIFICATION AND DEVELOPMENT OF THE CORRECTIVE MEASURES ALTERNATIVES

Based on the results of the RCRA Facility Investigation and consideration of the identified potential corrective measure technologies, the Permittee shall identify, screen and develop the alternatives for removal, containment, treatment and/or other remediation of the contamination based on the objectives established for the corrective action.

A. Description of Current Situation

The Permittee shall submit 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. The Permittee shall provide an update to information presented in the RFI regarding previous response activities and interim measures which have been 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.

B. Establishment of Corrective Action Objectives

The Permittee shall propose facility-specific objectives for the corrective action. These objectives shall be based on public health and environmental criteria, information gathered during the RFI, EPA guidance, and the requirements of any applicable Federal statutes. At a minimum, all corrective actions concerning ground-water releases from regulated units must be consistent with, and as stringent as, those required under 40 CFR 264.100 as adopted in 15A NCAC 13A .0109.

C. Screening of Corrective Measure Technologies

The Permittee shall review the results of the RFI and assess the technologies which are applicable at the facility. 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 which 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 which 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.

D. Identification of the Corrective Measure Alternatives

The Permittee shall develop the Corrective Measure Alternatives based on the corrective action objectives and analysis of potential corrective measure technologies. The Permittee shall rely on engineering practice to determine which of the previously identified technologies appear most suitable for the site. Technologies can be combined to form the overall corrective action alternatives. The alternatives developed should represent a workable number of option(s) that each appear to adequately address all site problems and corrective action objectives. Each alternative may consist of an individual technology or a combination of technologies. The Permittee shall document the reasons for excluding technologies.

II. EVALUATION OF THE CORRECTIVE MEASURE ALTERNATIVES

The Permittee shall describe each corrective measure alternative that passes through the initial screening and evaluate each corrective measure alternative and its components. The evaluation shall be based on technical, environmental, human health and institutional concerns. The Permittee shall also develop cost estimates of each corrective measure.

A. Technical/Environmental/Human Health/Institutional

The Permittee shall provide a description of each corrective measure alternative which includes but is not limited to the following: preliminary process flow sheets; preliminary sizing and type of construction for buildings and structures; and rough quantities of utilities required. The Permittee shall evaluate each alternative in the four following areas:

1. Technical;

   a. The Permittee shall evaluate each corrective measure alternative based on performance, reliability, implementability and safety.

i. Effectiveness shall be evaluated in terms of the ability to perform intended functions, such as containment, diversion, removal, destruction, or treatment. The effectiveness of each corrective measure shall be determined either through design specifications or by performance evaluation. Any specific waste or site characteristics which could potentially impede effectiveness shall be considered. The evaluation should also consider the effectiveness of combinations of technologies; and

ii. Useful life is defined as the length of time the level of desired effectiveness can be maintained. Most corrective measure technologies, with the exception of destruction, deteriorate with time. Often, deterioration can be slowed through proper system operation and maintenance, but the technology eventually may require replacement. Each corrective measure shall be evaluated in terms of the projected service lives of its component technologies. Resource availability in the future life of the technology, as well as appropriateness of the technologies, must be considered in estimating the useful life of the project.

b. The Permittee shall provide information on the reliability of each corrective measure including their operation and maintenance requirements and their demonstrated reliability:

i. Operation and maintenance requirements include the frequency and complexity of necessary operation and maintenance. Technologies requiring frequent or complex operation and maintenance activities should be regarded as less reliable than technologies requiring little or straightforward operation and maintenance. The availability of labor and materials to meet these requirements shall also be considered; and

ii. Demonstrated and expected reliability is a way of measuring the risk and effect of failure. The Respondent should evaluate whether the technologies have been used effectively under analogous conditions; whether the combination of technologies have been used together effectively; whether failure of any one technology has an immediate impact on receptors; and whether the corrective measure has the flexibility to deal with uncontrollable changes at the site.

c. The Permittee shall describe the implementability of each corrective measure including the relative ease of installation (constructability) and the time required to achieve a given level of response:

i. Constructability is determined by conditions both internal and external to the facility conditions and include such items as location of underground utilities, depth to water table, heterogeneity of subsurface materials, and location of the facility (i.e., remote location vs. a congested urban area). The Permittee shall evaluate what measures can be taken to facilitate construction under these conditions. External factors which affect implementation include the need for special permits or agreements, equipment availability, and the location of suitable off-site treatment or disposal facilities; and

ii. Time has two components that shall be addressed: the time it takes to implement a corrective measure and the time it takes to actually see beneficial results. Beneficial results are defined as the reduction of contaminants to some acceptable, pre-established level.

d. The Permittee shall evaluate each corrective measure alternative with regard to safety. This evaluation shall include threats to the safety of nearby communities and environments as well as those to workers during implementation. Factors to consider are fire, explosion, and exposure to hazardous substances.

2. Environmental;
The Permittee shall perform an Environmental Assessment for each alternative. The Environmental Assessment shall focus on the facility conditions and pathways of contamination actually addressed by each alternative. The Environmental Assessment for each alternative will include, at a minimum, an evaluation of: the short- and long-term beneficial and adverse effects of the response alternative; and adverse effects on environmentally sensitive areas; and an analysis of measures to mitigate adverse effects.

3. Human Health;
The Permittee shall assess each alternative in terms of the extent to which it mitigates short- and long-term potential exposure to any residual contamination and protects human health both during and after implementation of the corrective measure. The assessment will describe the concentrations and characteristics of the contaminants on-site, potential exposure routes, and potentially affected population. Each alternative will be evaluated to determine the level of exposure to contaminants and the reduction over time for management of mitigation measures, the relative levels of each alternative with existing criteria, standards, or guidelines acceptable to EPA.

4. Institutional
The Permittee shall assess relevant institutional needs for each alternative. Specifically, the effects of Federal, state and local environmental and public health standards, regulations, guidance, advisories, ordinances, or community relations on the design, operation, and timing of each alternative. If the selected remedy is capping and closure in place, a notation must be made in the land deed.

B. Cost Estimate

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.

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

a. Direct capital costs include:
i. Construction costs:

Costs of materials, labor (including fringe benefits and worker's compensation), and equipment required to install the corrective measure.

ii. Equipment costs:
Costs of treatment, containment, disposal and/or service equipment necessary to implement the action; these materials remain until the corrective action is complete;

iii. Land and site-development costs:
Expenses associated with purchase of land and development of existing property; and

iv. Buildings and services costs:
Costs of process and non-process buildings, utility connections, purchased services, and disposal costs.

b. Indirect capital costs include:

i. Engineering expenses:
Cost of administration, design, construction supervision, drafting, and testing of corrective measure alternatives;

ii. Legal fees and license or permit costs:
Administrative and technical costs necessary to obtain licenses and permits for installation and operation;

iii. Start-up and shakedown costs:
Costs incurred during corrective measure start-up; and

iv. Contingency allowances:
Funds to cover costs resulting from unforeseen circumstances, such as inadequate facility characterization.

2. Operation and maintenance costs are post-construction costs necessary to ensure continued effectiveness of a corrective measure. The Permittee shall consider the following operation and maintenance cost components:

a. Operating labor costs:
Wages, salaries, training, overhead, and fringe benefits associated with the labor needed for post-construction operations;

b. Maintenance materials and labor costs:
Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment;

c. Auxiliary materials and energy:
Costs of such items as chemicals and electricity for treatment plant operations, water and sewer service, and fuel;

d. Purchased services:
Sampling costs, laboratory fees, and professional fees for which the need can be predicted;

e. Disposal and treatment costs:
Costs of transporting, treating, and disposing of waste materials, such as treatment plant residues, generated during operations;

f. Administrative costs:
Costs associated with administration of corrective measure operation and maintenance not included under other categories;

g. Insurance, taxes, and licensing costs:
Costs of such items as liability and sudden accident insurance; real estate taxes on purchased land or right-of-way; licensing fees for certain technologies; and permit renewal and reporting costs;

h. Maintenance reserve and contingency funds:
Annual payments into escrow funds to cover (1) costs of anticipated replacement or rebuilding of equipment and (2) any large unanticipated operation and maintenance costs; and

i. Other costs:
Items that do not fit any of the above categories.

III. JUSTIFICATION AND RECOMMENDATION OF THE CORRECTIVE MEASURE OR MEASURES

The Permittee shall justify and recommend a corrective measure alternative using technical, human health, and environmental criteria. This recommendation shall include summary tables which 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 obtained from work completed under Section II and III. At a minimum, the following criteria will be used to justify the final corrective measure or measures.

A. Technical

1. Performance - corrective measure or measures which are most effective at performing their intended functions and maintaining the performance over extended periods of time will be given preference;

2. Reliability - corrective measure or measures which do not require frequent or complex operation and maintenance activities and that have proved effective under waste and facility conditions similar to those anticipated will be given preference;

3. Implementability - corrective measure or measures which can be constructed and operated to reduce levels of contamination to attain or exceed applicable standards in the shortest period of time will be preferred; and

4. Safety - corrective measure or measures which pose the least threat to the safety of nearby residents and environments as well as workers during implementation will be preferred.

B. Human Health

The corrective measure(s) must comply with existing U.S. EPA criteria, standards, or guidelines for the protection of human health. Corrective measures which provide the minimum level of exposure to contaminants and the maximum reduction in exposure with time are preferred.

C. Environmental

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

IV. REPORTS

The Permittee shall prepare a Corrective Measure Study Report presenting the results obtained from Sections I through III and recommending a corrective measure alternative. Copies of the preliminary report shall be provided by the Permittee to the Department for review and approval.

A. Draft

The Report shall at a minimum include:

1. A description of the facility;

    a. Site topographic map and preliminary layouts.

2. A summary of the corrective measure(s) and rationale for selection;

    a. Description of the corrective measure(s) and rationale for selection;

    b. Performance expectations;

    c. Preliminary design criteria and rationale;

    d. General operation and maintenance requirements; and

    e. Long-term monitoring requirements.

3. A summary of the RCRA Facility Investigation and impact on the selected corrective measure or measures;

    a. Field studies (ground water, surface water, soil, air); and

b. Laboratory studies (bench scale, pick scale).

4. Design and Implementation Precautions;

a. Special technical problems;

b. Additional engineering data required;

c. Permits and regulatory requirements;

d. Access, easements, right-of-way;

e. Health and safety requirements; and

f. Community relations activities.

5. Cost Estimates and Schedules;

a. Capital cost estimate;

b. Operation and maintenance cost estimate; and

c. Project schedule design, construction, and operation.

Copies of the draft shall be provided by the Permittee to the Department.

B. Final

The Permittee shall finalize the Corrective Measure Study Report incorporating comments received from the Department on the Draft Corrective Measure Study Report. The report shall become final upon approval by the Department.

C. Public Review and Final Selection of Corrective Measures

Upon receipt of the Final Corrective Measure Study Report, EPA shall announce its availability to the public for review and comment. At the end of the comment period, the Department shall review the comments and then inform the Permittee of the final decision as to the approved Corrective Measures to be implemented.

APPENDIX D

SCHEDULE OF COMPLIANCE

Schedule of Compliance	Due Date
General	
Duty to Reapply for a Permit Condition I.D.2.	Submit a complete application 180 days prior to permit expiration date.
Prepare and submit a biennial report if required Condition I.F.	Prepare and submit a biennial report on or before March 1 of each even numbered year unless directed otherwise.
Solid Waste Management Units and Corrective Action	
Notification of Newly Identified SWMUs and AOCs. Condition II.C.1 and Condition II.C.2.	Within fifteen (15) calendar days of discovery.
SWMU Assessment Report. Condition II.C.3.	Within ninety (90) calendar days of notification.
Notification for Newly Discovered Releases at Previously Identified SWMUs and AOCs. Condition II.D.1.	Within fifteen (15) calendar days of discovery.
Confirmatory Sampling Workplan for SWMUs identified in Appendix A. Condition II.E.1.	Within forty-five (45) calendar days after effective date of permit.
Confirmatory Sampling Report. Condition II.E.4.	Within sixty (60) calendar days after approval of the CS Workplan.
RFI Workplan for SWMU(s) and AOC(s) Identified in Appendix A. Condition II.F.1.a.	Within ninety (90) calendar days after the approval of the Confirmatory Sampling Report.
RFI Workplan for SWMU(s) and AOC(s) Identified under Condition II.C.4., Condition II.D.2., or Condition II.E.5. Condition II.F.1.b.	Within ninety (90) calendar days after receipt of notification by the Department which SWMUs or AOCs require an RFI.
RFI Progress Reports. Condition II.F.3.a.	Quarterly, beginning ninety (90) calendar days from the start date specified by the Department. *
Draft RFI Report. Condition II.F.3.b.	In accordance with the approved RFI Workplan.
Final RFI Report Condition II.F.3.b.	Within thirty (30) calendar days after receipt of the Department's comments on the Draft RFI Report.

Schedule of Compliance	Due Date
Interim Measures Plan Condition II.G.1.a.	Within thirty (30) calendar days of notification by the Department.
Interim Measures Progress Reports Condition II.G.3.a.	In accordance with the approved Interim Measures Workplan. **
Interim Measure Report Condition II.G.3.b.	Within ninety (90) calendar days of completion of interim measures.
CMS Workplan Condition II.H.1.a.	Within ninety (90) calendar days of notification by the Department that a CMS is needed.
Implementation of CMS Workplan Condition II.H.2.	Within fifteen (15) calendar days after receipt of Department approval of plan.
Draft CMS Report Condition II.H.3.a.	In accordance with the schedule in the approved CMS Workplan.
Final CMS Report Condition II.H.3.a.	Within thirty (30) calendar days of Department's comments on draft CMS Report.
Imminent Hazard Report Condition II.K.1. and II.K.2.	Oral within 24 hours; Written within fifteen (15) calendar days of the time the Permittee becomes aware of the circumstances.
Waste Minimization	
Waste Minimization Certification Condition III.	Annually from effective date of permit.
Organic Air Emissions (AA, BB, CC)	
Organic Air Emissions Report Condition V.B. and VI.A.	Within thirty (30) calendar days after the effective date of the permit or modified permit as required or identifying a unit subject to Organic Air Emissions requirements.
Written report of noncompliance of tanks, surface impoundments or containers with 40 CFR 264.1082(c)(1) or (c)(2) Condition VI.B.	Within fifteen (15) calendar days of becoming aware of noncompliance.

The above reports must be signed and certified in accordance with 40 CFR 270.11 as adopted by 15A NCAC 13A .0113.

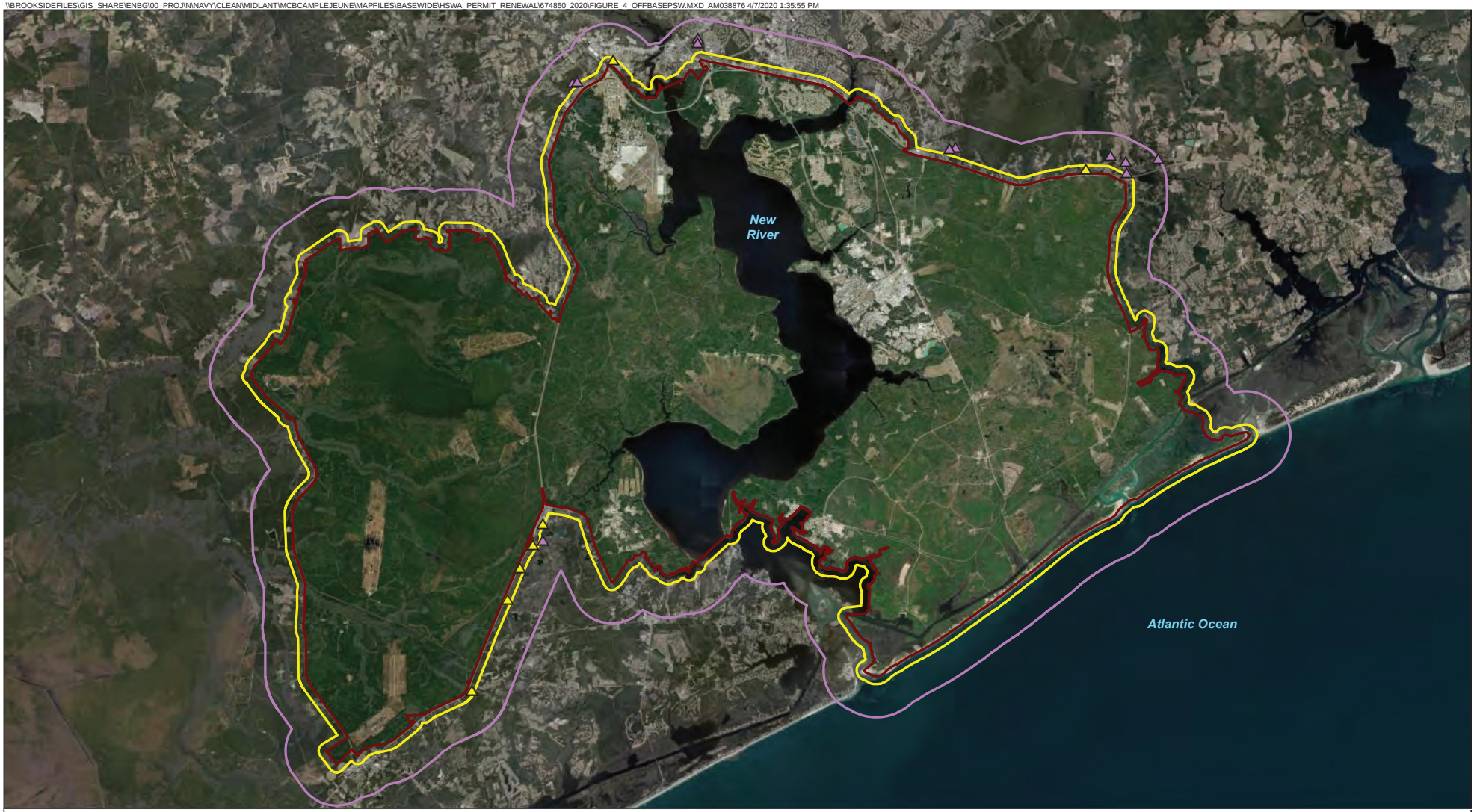
* This applies to Workplan execution that requires more than one hundred and eighty (180) calendar days.

** This applies to Workplan execution that requires more than one year.

APPENDIX E

FIGURES

\\BROOKSIDEFILES\GIS_SHARE\ENBG\00_PROJ\N\NAVY\CLEAN\MIDLANT\MCBCAMPLEJEUNE\MAPFILES\BASEWIDE\HSWA_PERMIT_RENEWAL\674850_2020\FIGURE_4_OFFBASEPSW.MXD AM038876 4/7/2020 1:35:55 PM



Legend

- Community Public Water Supply Wells - NC DEQ - 1000ft buffer
- Community Public Water Supply Wells - NC DEQ - 1 mile buffer
- 1 mile buffer
- 1000 ft Buffer
- Installation Boundary

N

0 6,000 12,000 Feet

1 inch = 12,000 feet

Imagery Source: Esri 2018

Figure 4
Off-Base Public Supply Wells
HSWA Permit Renewal
MCB Camp Lejeune
North Carolina

ch2m

State of North Carolina
Office of Administrative Hearings

Certification

I hereby certify the attached 11 sheets to be a true copy of

15A NCAC 13 - SOLID WASTE MANAGEMENT

SUBCHAPTER 13A - HAZARDOUS WASTE MANAGEMENT

The original of which is filed in this office in conformance with Chapter 150B of the General Statutes of the State of North Carolina.

In witness whereof, I authorize this certification and affix the official seal of the North Carolina Office of Administrative Hearings at Raleigh, this 6th day of August 2020.

Julian Mann, III
Chief Administrative Law Judge, Director

By: Molly Masich
Codifier of Rules

CHAPTER 13 - SOLID WASTE MANAGEMENT

SUBCHAPTER 13A - HAZARDOUS WASTE MANAGEMENT

SECTION .0100 - HAZARDOUS WASTE

15A NCAC 13A .0101 GENERAL

(a) The Hazardous Waste Section of the Division of Waste Management shall administer the hazardous waste management program for the State of North Carolina.

(b) In applying the federal requirements incorporated by reference throughout this Subchapter, the following substitutions or exceptions shall apply:

When used in any of the federal regulations incorporated by reference throughout this Subchapter, except where the context requires references to remain without substitution including with regard to forms, publications, and regulations concerning international shipments, variances from land disposal restrictions, and other program areas over which the federal government retains sole authority: "United States" shall mean the State of North Carolina; "Environmental Protection Agency," "EPA," and "Agency" shall mean the Department of Environmental Quality; and "Administrator," "Regional Administrator," "Assistant Administrator," and "Director" shall mean the Secretary of the Department of Environmental Quality. The North Carolina Solid Waste Management Act and other applicable North Carolina General Statutes set forth in G.S. 130A shall be substituted for references to "the Solid Waste Disposal Act," "the Resource Conservation and Recovery Act," and "RCRA" where required by context.

(c) In the event that there are inconsistencies or duplications in the requirements of those Federal regulations incorporated by reference throughout this Subchapter and the State rules set out in this Subchapter, the provisions incorporated by reference shall prevail except where the State rules are more stringent.

(d) 40 CFR 260.1 through 260.5 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.

(e) 40 CFR 260.11, "Incorporation by Reference" is incorporated by reference including subsequent amendments and editions.

(f) Copies of all materials in this Subchapter may be inspected or obtained as follows:

(1) Persons interested in receiving rule-making notices concerning the North Carolina Hazardous Waste Management Rules shall submit a written request to the Hazardous Waste Section, 1646 Mail Service Center, Raleigh, N.C. 27699-1646 or send an email request to DENR.DWM_Rules@ncdenr.gov. Upon receipt of each request, individuals shall be placed on a list to receive notices.

(2) Material incorporated by reference in the Federal Register may be obtained electronically free of charge from the United States Environmental Protection Agency website at http://www.epa.gov/laws-regulations/regulations.

(3) All material is available for inspection at the Department of Environmental Quality, Hazardous Waste Section, 217 West Jones Street, Raleigh, NC and at https://deq.nc.gov/about/divisions/waste-management/hw/rules.

History Note: *Authority G.S. 130A-294(c);*
Eff. September 1, 1979;
Amended Eff. June 1, 1989; June 1, 1988; August 1, 1987; May 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0001 Eff. April 4, 1990;
Amended Eff. October 1, 1993; April 1, 1993; October 1, 1992; December 1, 1991;
Recodified from 15A NCAC 13A .0001 Eff. December 20, 1996;
Amended Eff. July 1, 2016; August 1, 2004; August 1, 2000; August 1, 1998; August 1, 1997;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. June 24, 2017;
Amended Eff. July 1, 2020; March 1, 2018.

15A NCAC 13A .0102 DEFINITIONS

(a) The definitions contained in G.S. 130A-290 apply to this Subchapter.

(b) 40 CFR 260.10 (Subpart B), "Definitions" is incorporated by reference, including subsequent amendments and editions except that the definitions for "Disposal," "Landfill," "Management or hazardous waste management," "Person," "Sludge," "Storage," and "Treatment" are defined by G.S. 130A-290 and are not incorporated by reference and the definition in 260.10 for "Contained" is not incorporated by reference.
(c) The following definition shall be substituted for "Contained:" "Contained" means held in a unit (including a land-based unit as defined in this subpart) that meets the following criteria:

(1) the unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials or hazardous constituents originating from the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. "Unpermitted releases" means releases that are not covered by a permit (such as a permit to discharge to water or air) and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, windblown dust, fugitive air emissions, and catastrophic unit failures;

(2) the unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and

(3) the unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions.

(4) Hazardous secondary materials in units that meet the applicable requirements of 40 CFR parts 264 or 265 are presumptively contained.

(d) The following additional definitions shall apply throughout this Subchapter:

(1) "Section" means the Hazardous Waste Section, in the Division of Waste Management, Department of Environmental Quality.

(2) The "Department" means the Department of Environmental Quality (DEQ).

(3) "Division" means the Division of Waste Management (DWM).

(4) "Long Term Storage" means the containment of hazardous waste for an indefinite period of time in a facility designed to be closed with the hazardous waste in place.

(5) "Off-site Recycling Facility" means any facility that receives shipments of hazardous waste from off-site to be recycled or processed for recycling through any process conducted at the facility, but does not include any facility owned or operated by a generator of hazardous waste to recycle their own waste.

History Note: *Authority G.S. 130A 294(c);*
Eff. September 1, 1979;
Amended Eff. June 1, 1989; June 1, 1988; February 1, 1987; October 1, 1986;
Transferred and Recodified from 10 NCAC 10F .0002 Eff. April 4, 1990;
Amended Eff. April 1, 1993; October 1, 1990; August 1, 1990;
Recodified from 15A NCAC 13A .0002 Eff. December 20, 1996;
Amended Eff. August 1, 2000;
Temporary Amendment Eff. January 1, 2009;
Amended Eff. July 1, 2010;
Temporary Amendment Eff. December 1, 2015;
Amended Eff. July 1, 2016;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readopted Eff. March 1, 2018.

15A NCAC 13A .0103 PETITIONS - PART 260

(a) All rulemaking petitions for changes in this Subchapter shall be made in accordance with 15A NCAC 02I .0501.
(b) In applying the federal requirements incorporated by reference in Paragraph (c) of this Rule, 15A NCAC 02I .0501 shall be substituted for references to 40 CFR 260.20.
(c) 40 CFR 260.21 through 260.43 (Subpart C), "Rulemaking Petitions" are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c);*
Eff. November 19, 1980;

Amended Eff. June 1, 1988; May 1, 1987; January 1, 1986; October 1, 1985;
Transferred and Recodified from 10 NCAC 10F .0028 Eff. April 4, 1990;
Amended Eff. April 1, 1993; November 1, 1991; October 1, 1990;
Recodified from 15A NCAC 13A .0003 Eff. December 20, 1996;
Amended Eff. August 1, 2000;
Temporary Amendment Eff. January 1, 2009;
Amended Eff. July 1, 2010;
Temporary Amendment Eff. December 1, 2015;
Amended Eff. July 1, 2016;
Readopted Eff. March 1, 2018.

15A NCAC 13A .0104 PUBLIC INFORMATION - PART 2

(a) The provisions concerning requests for information in 40 CFR 2.100 to 2.108 (Subpart A), "Procedures for Disclosure of Records Under the Freedom of Information Act" are incorporated by reference including subsequent amendments and editions, except that 40 CFR 2.107 is not incorporated by reference.

(b) The address: Hazardous Waste Section - Records Request, Division of Waste Management, 1646 Mail Service Center, Raleigh, NC 27699-1646 is substituted for the addresses of the Records, FOIA, and Privacy Branch, Office of Environmental Information, Environmental Protection Agency, 1200 Pennsylvania Ave., N.W., Washington, DC 20460 in 40 CFR 2.101(a) and the Headquarters Freedom of Information Operations (1105), 1200 Pennsylvania Ave., N.W., Washington, DC 20460 in 40 CFR 2.213(a).

(c) The provisions concerning confidentiality of business information in 40 CFR 2.201 to 2.311 (Subpart B), "Confidentiality of Business Information" are incorporated by reference including subsequent amendments and editions, except that 40 CFR 2.209 (b) and (c), 2.301, 2.302, 2.303, 2.304, 2.306, 2.307, 2.308, 2.309, 2.310 and 2.311 are not incorporated by reference.

History Note: *Authority G.S. 130A-294(c);*
Eff. January 1, 1986;
Amended Eff. June 1, 1988;
Transferred and Recodified from 10 NCAC 10F .0040 Eff. April 4, 1990;
Amended Eff. August 1, 1990;
Recodified from 15A NCAC 13A .0005 Eff. August 30, 1990;
Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0004 Eff. December 20, 1996;
Amended Eff. May 1, 2002; August 1, 2000;
Readopted Eff. March 1, 2018.

15A NCAC 13A .0105 RCRA / HAZARDOUS WASTE PERMIT REQUIREMENTS - PART 124

(a) 40 CFR 124.1 through 124.21 (Subpart A), "General Program Requirements" are incorporated by reference including subsequent amendments and editions.

(b) 40 CFR 124.31 through 124.33 (Subpart B), "Specific Procedures Applicable to RCRA Permits" are incorporated by reference including subsequent amendments and editions, except that 40 CFR 124.31(a), 124.32(a), and 124.33(a) are not incorporated by reference.

(1) The following shall be substituted for the provisions of 40 CFR 124.31(a) that are not incorporated by reference:

(A) Applicability. The requirements of this section shall apply to all RCRA part B applications seeking initial permits for hazardous waste management units and shall also apply to RCRA part B applications seeking renewal of permits for such units, where the renewal application is proposing a significant change in facility operations. For the purposes of this section, a "significant change" is any change that would qualify as a class 3 permit modification under 40 CFR 270.42.

(B) The requirements of this section shall not apply to permit modifications under 40 CFR 270.42 or to applications that are submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

(2) The following shall be substituted for the provisions of 40 CFR 124.32(a) that are not incorporated by reference:

(A) Applicability. The requirements of this section shall apply to all RCRA part B applications seeking initial permits for hazardous waste management units.

(B) The requirements of this section shall apply to RCRA part B applications seeking renewal of permits for such units under 40 CFR 270.51.

(C) The requirements of this section shall not apply to permit modifications under 40 CFR 270.42 or permit applications submitted for the sole purpose of conducting post-closure activities or post-closure activities and corrective action at a facility.

(3) The following shall be substituted for the provisions of 40 CFR 124.33(a) that is not incorporated by reference:
Applicability. The requirements of this section apply to all applications seeking RCRA permits for hazardous waste management units.

History Note: *Authority G.S. 130A-294(c);*
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Transferred and Recodified from 10 NCAC 10F .0035 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0006 Eff. August 30, 1990;
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Recodified from 15A NCAC 13A .0005 Eff. December 20, 1996;
Amended Eff. August 1, 1998;
Readopted Eff. March 1, 2018.

15A NCAC 13A .0106 IDENTIFICATION AND LISTING OF HAZARDOUS WASTES - PART 261

(a) 40 CFR 261.1 through 261.9 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.

(b) 40 CFR 261.10 through 261.11 (Subpart B), "Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste" are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 261.20 through 261.24 (Subpart C), "Characteristics of Hazardous Waste" are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 261.30 through 261.35 (Subpart D),"Lists of Hazardous Wastes" are incorporated by reference including subsequent amendments and editions.

(e) 40 CFR 261.38 through 261.41 (Subpart E), "Exclusions/Exemptions" are incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 261.140 through 261.151 (Subpart H), "Financial Requirements for Management of Excluded Hazardous Secondary Materials" are incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 261.170 through 261.179 (Subpart I), "Use and Management of Containers" are incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 261.190 through 261.200 (Subpart J), "Tank Systems" are incorporated by reference including subsequent amendments and editions.

(i) 40 CFR 261.400 through 261.420 (Subpart M), "Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials" are incorporated by reference including subsequent amendments and editions.

(j) 40 CFR 261.1030 through 261.1049 (Subpart AA), "Air Emission Standards for Process Vents" are incorporated by reference including subsequent amendments and editions.

(k) 40 CFR 261.1050 through 261.1079 (Subpart BB), "Air Emission Standards for Equipment Leaks" are incorporated by reference including subsequent amendments and editions.

(l) 40 CFR 261.1080 through 261.1090 (Subpart CC), "Air Emission Standards for Tanks and Containers" are incorporated by reference including subsequent amendments and editions.

(m) The Appendices to 40 CFR Part 261 are incorporated by reference including subsequent amendments and editions.

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Recodified from 15A NCAC 13A .0006 Eff. December 20, 1996;
Amended Eff. April 1, 2007; August 1, 2000;
Temporary Amendment Eff. January 1, 2009;
Amended Eff. July 1, 2010;
Temporary Amendment Eff. December 1, 2015;
Amended Eff. July 1, 2016;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readopted Eff. March 1, 2018.

15A NCAC 13A .0107 STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE - PART 262

(a) 40 CFR 262.1 through 262.18 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions. In addition, a small quantity generator shall maintain aisle space of at least two feet in a central accumulation area to allow the unobstructed movement of personnel, fire prevention equipment, spill control equipment, and decontamination equipment.

(b) 40 CFR 262.20 through 262.27 (Subpart B), "Manifest Requirements Applicable to Small and Large Quantity Generators" are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 262.30 through 262.35 (Subpart C), "Pre-Transport Requirements Applicable to Small and Large Quantity Generators" are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 262.40 through 262.44 (Subpart D), "Recordkeeping and Reporting Applicable to Small and Large Quantity Generators" are incorporated by reference including subsequent amendments and editions. In addition, a generator shall keep records of inspections and results of inspections required by Section 40 CFR 262.16 and 262.17 for three years from the date of the inspection.

(e) 40 CFR 262.70 (Subpart G), "Farmers" is incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 262.80 through 262.89 (Subpart H), "Transboundary Movements of Hazardous Waste for Recovery or Disposal" are incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 262.200 through 262.216 (Subpart K), "Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities" are incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 262.230 through 262.233 (Subpart L), "Alternative Standards for Episodic Generation" are incorporated by reference including subsequent amendments and editions.

(i) 40 CFR 262.250 through 262.265 (Subpart M), "Preparedness, Prevention, and Emergency Procedures for Large Quantity Generators" are incorporated by reference with subsequent amendments and editions. In addition, a large quantity generator shall maintain aisle space of at least two feet in a central accumulation area to allow the unobstructed movement of personnel, fire prevention equipment, spill control equipment, and decontamination equipment.

(j) The Appendix to 40 CFR Part 262 is incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c);*
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Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0007 Eff. December 20, 1996;
Amended Eff. July 1, 2016; April 1, 2010; November 1, 2007; January 1, 2007; April 1, 2001; August 1, 1998;
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15A NCAC 13A .0108 STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE - PART 263

(a) 40 CFR 263.10 through 263.12 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.
(b) 40 CFR 263.20 through 263.25 (Subpart B), "Compliance with the Manifest System and Recordkeeping" are incorporated by reference including subsequent amendments and editions.
(c) Upon discovering a significant manifest discrepancy, the transporter shall attempt to reconcile the discrepancy with the waste generator (e.g. with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the transporter on the 16th day shall submit to the Department a letter describing the discrepancy and attempts to reconcile it with a copy of the manifest or shipping paper at issue.
(d) "Manifest discrepancies" means differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a transporter actually transports. Significant discrepancies in quantity shall be as follows: for bulk waste, variations greater than 10 percent in weight; and, for batch waste, any variation in piece count (e.g. a discrepancy of one drum in a truckload). Significant discrepancies in type are obvious differences that may be discovered by inspection or waste analysis (e.g. waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper).
(e) 40 CFR 263.30 through 263.31 (Subpart C), "Hazardous Waste Discharges" are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c);*
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Recodified from 15A NCAC 13A .0009 Eff. August 30, 1990;
Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0008 Eff. December 20, 1996;
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15A NCAC 13A .0109 STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES - PART 264

(a) Any person who treats, stores, or disposes of hazardous waste shall comply with the requirements set forth in this Section. The treatment, storage, or disposal of hazardous waste is prohibited except as provided in this Section.
(b) 40 CFR 264.1 through 264.4 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.
(c) 40 CFR 264.10 through 264.19 (Subpart B), "General Facility Standards" are incorporated by reference including subsequent amendments and editions.
(d) 40 CFR 264.30 through 264.37 (Subpart C), "Preparedness and Prevention" are incorporated by reference including subsequent amendments and editions.
(e) 40 CFR 264.50 through 264.56 (Subpart D), "Contingency Plan and Emergency Procedures" are incorporated by reference including subsequent amendments and editions.
(f) 40 CFR 264.70 through 264.77 (Subpart E), "Manifest System, Recordkeeping, and Reporting" are incorporated by reference including subsequent amendments and editions.
(g) 40 CFR 264.90 through 264.101 (Subpart F), "Releases From Solid Waste Management Units" are incorporated by reference including subsequent amendments and editions. For the purpose of this incorporation by reference, "January 26, 1983" shall be substituted for "July 26, 1982" contained in 40 CFR 264.90(a)(2).
(h) 40 CFR 264.110 through 264.120 (Subpart G), "Closure and Post-Closure" are incorporated by reference including subsequent amendments and editions.
(i) 40 CFR 264.140 through 264.151 (Subpart H), "Financial Requirements" are incorporated by reference including subsequent amendments and editions, except that 40 CFR 264.143(a)(3), (a)(4), (a)(5), (a)(6), 40 CFR 264.145(a)(3), (a)(4), (a)(5), (a)(6), and Section 15 of 40 CFR 264.151(a)(1) are not incorporated by reference.

(1) The following shall be substituted for the provisions of 40 CFR 264.143(a)(3) that are not incorporated by reference:
The owner or operator shall deposit the full amount of the closure cost estimate at the time the fund is established.

(2) The following shall be substituted for the provisions of 40 CFR 264.143(a)(6) and 264.145(a)(6) that are not incorporated by reference:

After the trust fund is established, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator within 60 days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(3) The following shall be substituted for the provisions of 40 CFR 264.145(a)(3) that are not incorporated by reference:

(A) Except as otherwise provided in Part (i)(3)(B) of this Rule, the owner or operator shall deposit the full amount of the post-closure cost estimate at the time the fund is established.

(B) If the Department finds that the owner or operator of an inactive hazardous waste disposal unit is unable to provide financial assurance for post-closure through any other option (e.g. surety bond, letter of credit, or corporate guarantee), a plan for annual payments to the trust fund over the term of the RCRA post-closure permit shall be established by the Department as a permit condition.

(4) The following shall be substituted for Section 15 of 40 CFR 264.151(a)(1) that is not incorporated by reference:

Section 15. Notice of Payment. The trustee shall notify the Department of payment to the trust fund, by certified mail within 10 days following said payment to the trust fund. The notice shall contain the name of the Grantor, the date of payment, the amount of payment, and the current value of the trust fund.

(5) Concerning financial assurance for corrective action, the owner or operator shall choose from the financial instrument options provided in 40 CFR 264.145 Subpart H, or any combination of the financial instruments allowed by the Section to satisfy corrective action financial assurance requirements of 40 CFR 264.100 and 264.101. The wording of the financial assurance instrument or instruments shall be consistent with the wording provided in 40 CFR 264.151. The wording of the instrument used shall be modified to include the term "corrective action," as applicable.

(j) 40 CFR 264.170 through 264.179 (Subpart I), "Use and Management of Containers" are incorporated by reference including subsequent amendments and editions.

(k) 40 CFR 264.190 through 264.200 (Subpart J), "Tank Systems" are incorporated by reference including subsequent amendments and editions.

(l) The following are requirements for Surface Impoundments:

(1) 40 CFR 264.220 through 264.232 (Subpart K), "Surface Impoundments" are incorporated by reference including subsequent amendments and editions.

(2) The following are additional standards for surface impoundments:

(A) the liner system shall consist of at least two liners;

(B) artificial liners shall be equal to or greater than 30 mils in thickness;

(C) clayey liners shall be equal to or greater than five feet in thickness and have a maximum permeability of 1.0×10^{-7} cm/sec;

(D) clayey liner soils shall have the same characteristics as described in Subparts (r)(4)(B)(ii), (iii), (iv), (vi), and (vii) of this Rule;

(E) a leachate collection system shall be constructed between the upper liner and the bottom liner;

(F) a leachate detection system shall be constructed below the bottom liner; and

(G) surface impoundments shall be constructed in such a manner to prevent landsliding, slippage, or slumping.

(m) 40 CFR 264.250 through 264.259 (Subpart L), "Waste Piles" are incorporated by reference including subsequent amendments and editions.

(n) 40 CFR 264.270 through 264.283 (Subpart M), "Land Treatment" are incorporated by reference including subsequent amendments and editions.

(o) 40 CFR 264.300 through 264.317 (Subpart N), "Landfills" are incorporated by reference including subsequent amendments and editions.

(p) A long-term storage facility shall meet groundwater protection, closure and post-closure, and financial requirements for disposal facilities as specified in Paragraphs (g), (h), and (i) of this Rule.

(q) 40 CFR 264.340 through 264.351 (Subpart O), "Incinerators" are incorporated by reference including subsequent amendments and editions.

(r) The following are additional location standards for facilities:

(1) In addition to the location standards set forth in Paragraph (c) of this Rule, the Department, in determining whether to issue a permit for a hazardous waste management facility, shall consider the risks posed by the proximity of the facility to: water table levels; flood plains; water supplies; public water supply watersheds; mines; population centers; natural resources such as wetlands, endangered species habitats, parks, forests, wilderness areas, and historical sites; and shall consider whether provisions have been made for buffer zones. The Department shall also consider ground water travel time, soil pH, soil cation exchange capacity, soil characteristics, composition, and permeability; slope; climate; local land use; transportation factors such as proximity to waste generators, route, route safety, and method of transportation; aesthetic factors such as the visibility, appearance, and noise level of the facility; potential impact on air quality; and existence of seismic activity and cavernous bedrock. The basis for issuing or denying the permit are found in 40 CFR 264 as adopted by reference in this Rule.

(2) The following minimum separation distances shall be required of all hazardous waste management facilities except that existing facilities shall be required to meet these minimum separation distances to the maximum extent feasible:

(A) All hazardous waste management facilities shall be located at least 0.25 miles from institutions including but not limited to schools, health care facilities and prisons, unless the owner or operator demonstrates that no risks shall be posed by the proximity of the facility.

(B) All hazardous waste treatment and storage facilities shall comply with the following separation distances: all hazardous waste shall be treated and stored a minimum of 50 feet from the property line of the facility; except that all hazardous waste with ignitable, incompatible, or reactive characteristics shall be treated and stored a minimum of 200 feet from the property line of the facility if the area adjacent to the facility is zoned for any use other than industrial or is not zoned.

(C) All hazardous waste landfills, long-term storage facilities, land treatment facilities, and surface impoundments shall comply with the following separation distances:

(i) all hazardous waste shall be located a minimum of 200 feet from the property line of the facility;

(ii) each hazardous waste landfill, long-term storage, or surface impoundment facility shall be constructed so that the bottom of the facility is 10 feet or more above the historical high ground water level. The historical high ground water level shall be determined by measuring the seasonal high ground water levels and predicting the long-term maximum high ground water level from published data on similar North Carolina topographic positions, elevations, geology, and climate; and

(iii) all hazardous waste shall be located a minimum of 1,000 feet from the zone of influence of any existing off-site ground water well used for drinking water, and outside the zone of influence of any existing or planned on-site drinking water well.

(D) Hazardous waste storage and treatment facilities for liquid waste that is classified as hazardous waste due to the Toxicity Characteristic, as defined in 40 CFR 261.24, or is classified as Acute Hazardous Waste or Toxic Waste, as defined in 40 CFR 261.30(b), and is stored or treated in tanks or containers shall not be located:

(i) in the recharge area of an aquifer that is designated as an existing sole drinking water source as defined in the Safe Drinking Water Act, Section .1424(e) [42 U.S.C. 300h-3(e)] unless an adequate secondary containment system, as described in 40 CFR 264, is constructed, and after consideration of applicable factors in Subparagraph (r)(3) of this Rule, the owner or operator demonstrates no risk to public health;

(ii) within 200 feet of surface water impoundments or surface water stream with continuous flow as defined by the United States Geological Survey;

(iii) in an area that will allow direct surface or subsurface discharge to WS-I, WS-II or SA waters or a Class III Reservoir as defined in 15A NCAC 02B .0200 and 15A NCAC 18C .0102;

(iv) in an area that will allow direct surface or subsurface discharge to the watershed for a Class I or II Reservoir as defined in 15A NCAC 18C .0102;

(v) within 200 feet horizontally of a 100-year floodplain elevation;

(vi) within 200 feet of a seismically active area; and

(vii) within 200 feet of a mine, cave, or cavernous bedrock.

(3) The Department shall require any hazardous waste management facility to comply with greater separation distances or other protective measures when necessary to avoid risks posed by the proximity of the facility to: water table levels; flood plains; water supplies; public water supply watersheds; mines; population centers; natural resources such as wetlands, endangered species habitats, parks, forests, wilderness areas, and historical sites; or to provide a buffer zone as required by this Rule. The Department shall also require protective measures when necessary to avoid unreasonable risks posed by the soil pH, soil cation exchange capacity, soil characteristics, composition, and permeability; slope; climate; local land use; transportation factors such as proximity to waste generators, route, route safety, and method of transportation; aesthetic factors such as the visibility, appearance, and noise level of the facility; potential impact on air quality; and the existence of seismic activity and cavernous bedrock. In determining whether to require greater separation distances or other protective measures, the Department shall consider the following factors:

(A) all proposed hazardous waste activities and procedures to be associated with the transfer, storage, treatment, or disposal of hazardous waste at the facility;

(B) the type of hazardous waste to be treated, stored, or disposed of at the facility;

(C) the volume of waste to be treated, stored, or disposed of at the facility;

(D) land use issues including the number of permanent residents in proximity to the facility and their distance from the facility;

(E) the adequacy of facility design and plans for containment and control of sudden and non-sudden accidental events in combination with adequate off-site evacuation of potentially impacted populations;

(F) other land use issues including the number of institutional and commercial structures such as airports and schools in proximity to the facility, their distance from the facility, and the particular nature of the activities that take place in those structures;

(G) the lateral distance and slope from the facility to surface water supplies or to watersheds draining into surface water supplies;

(H) the vertical distance, and type of soils and geologic conditions separating the facility from the water table;

(I) the direction and rate of flow of ground water from the sites and the extent and reliability of on-site and nearby data concerning seasonal and long-term groundwater level fluctuations;

(J) potential air emissions including rate, direction of movement, dispersion and exposure, whether from planned or accidental, uncontrolled releases; and

(K) any other relevant factors.

(4) The following are additional location standards for hazardous waste landfills, hazardous waste long-term storage facilities, and hazardous waste surface impoundments:

(A) A hazardous waste landfill, long-term storage, or a surface impoundment facility shall not be located:

(i) in the recharge area of an aquifer that is an existing sole drinking water source;

(ii) within 200 feet of a surface water stream with continuous flow;

(iii) in an area that will allow direct surface or subsurface discharge to WS-I, WS-II or SA waters or a Class III Reservoir as defined in 15A NCAC 02B .0200 and 15A NCAC 18C .0102;

(iv) in an area that will allow direct surface or subsurface discharge to a watershed for a Class I or II Reservoir as defined in 15A NCAC 18C .0102;

(v) within 200 feet horizontally of a 100-year flood hazard elevation;

(vi) within 200 feet of a seismically active area; and

(vii) within 200 feet of a mine, cave, or cavernous bedrock.

(B) A hazardous waste landfill or long-term storage facility shall be located in geologic formations with the following soil characteristics:

(i) the depth of the unconsolidated soil materials shall be equal to or greater than 20 feet;

(ii) the percentage of fine-grained soil material shall be equal to or greater than 30 percent passing through a number 200 sieve;

(iii) soil liquid limit shall be equal to or greater than 30;

(iv) soil plasticity index shall be equal to or greater than 15;

(v) soil compacted hydraulic conductivity shall be a maximum of 1.0×10^{-7} cm/sec;

(vi) soil Cation Exchange Capacity shall be equal to or greater than 5 milliequivalents per 100 grams;

(vii) soil Potential Volume Change Index shall be equal to or less than 4; and

(viii) soils shall be underlain by a geologic formation having a rock quality designation equal to or greater than 75 percent.

(C) A hazardous waste landfill or long-term storage facility shall be located in areas of low to moderate relief to the extent necessary to prevent landsliding or slippage and slumping. The site may be graded to comply with this standard.

(5) All new hazardous waste impoundments that close with hazardous waste residues left in place shall comply with the standards for hazardous waste landfills in Subparagraph (r)(4) of this Rule.

(6) The owners and operators of all new hazardous waste management facilities shall construct and maintain a minimum of two observation wells, one upgradient and one downgradient of the proposed facility; and shall establish background groundwater concentrations and monitor annually for all hazardous wastes that the owner or operator proposes to store, treat, or dispose at the facility.

(7) The owners and operators of all new hazardous waste facilities shall demonstrate that the community has had an opportunity to participate in the siting process by complying with the following:

(A) The owners and operators shall hold at least one public meeting in the county in which the facility is to be located to inform the community of all hazardous waste management activities including: the hazardous properties of the waste to be managed; the type of management proposed for the wastes; the mass and volume of the wastes; the source of the wastes; and to allow the community to identify specific health, safety and environmental concerns or problems expressed by the community related to the hazardous waste activities associated with the facility. The owners and operators shall provide a public notice of this meeting at least 30 days prior to the meeting. Public notice shall be documented in the facility permit application. The owners and operators shall submit as part of the permit application a complete written transcript of the meeting, all written material submitted that represents community concerns, and all other relevant written material distributed or used at the meeting. The written transcript and other written material submitted or used at the meeting shall be submitted to the local public library closest to and in the county of the proposed site with a request that the information be made available to the public.

(B) For the purposes of this Rule, public notice shall include: notification of the boards of county commissioners of the county where the proposed site is to be located and all contiguous counties in North Carolina; a legal advertisement placed in a newspaper or newspapers serving those counties; and provision of a news release to at least one newspaper, one radio station, and one TV station serving these counties. Public notice shall include the time, place, and purpose of the meetings required by this Rule.

(C) No less than 30 days after the first public meeting transcript is available at the local public library, the owners and operators shall hold at least one additional public meeting in order to attempt to resolve community concerns. The owners and operators shall provide public notice of this meeting at least 30 days prior to the meeting. Public notice shall be documented in the facility permit application. The owners and operators shall submit as part of the permit application a complete written transcript of the meeting, all

written material submitted that represents community concerns, and all other relevant written material distributed or used at the meeting.

(D) The application, written transcripts of all public meetings, any additional material submitted or used at the meetings, and any additions or corrections to the application, including any responses to notices of deficiencies shall be submitted to the local library closest to and in the county of the proposed site, with a request that the information be made available to the public until the permit decision is made.

(E) The Department shall consider unresolved community concerns in the permit review process and impose final permit conditions based on sound scientific, health, safety, and environmental principles as authorized.

(s) 40 CFR 264.550 through 264.555 (Subpart S), "Special Provisions for Cleanup" are incorporated by reference including subsequent amendments and editions.

(t) 40 CFR 264.570 through 264.575 (Subpart W), "Drip Pads" are incorporated by reference including subsequent amendments and editions.

(u) 40 CFR 264.600 through 264.603 (Subpart X), "Miscellaneous Units" are incorporated by reference including subsequent amendments and editions.

(v) 40 CFR 264.1030 through 264.1049 (Subpart AA), "Air Emission Standards for Process Vents" are incorporated by reference including subsequent amendments and editions.

(w) 40 CFR 264.1050 through 264.1079 (Subpart BB), "Air Emission Standards for Equipment Leaks" are incorporated by reference including subsequent amendments and editions.

(x) 40 CFR 264.1080 through 264.1091 (Subpart CC), "Air Emission Standards for Tanks, Surface Impoundments, and Containers" are incorporated by reference including subsequent amendments and editions.

(y) 40 CFR 264.1100 through 264.1110 (Subpart DD), "Containment Buildings" are incorporated by reference including subsequent amendments and editions.

(z) 40 CFR 264.1200 through 264.1202 (Subpart EE), "Hazardous Waste Munitions and Explosives Storage" are incorporated by reference including subsequent amendments and editions.

(aa) Appendices to 40 CFR Part 264 are incorporated by reference including subsequent amendments and editions.

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Recodified from 15A NCAC 13A .0010 Eff. August 30, 1990;
Amended Eff. July 1, 1995; October 1, 1993; April 1, 1993; October 1, 1992;
Recodified from 15A NCAC 13A .0009 Eff. December 20, 1996;
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15A NCAC 13A .0110 INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES - PART 265

(a) 40 CFR 265.1 through 265.4 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.

(b) 40 CFR 265.10 through 265.19 (Subpart B), "General Facility Standards" are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 265.30 through 265.37 (Subpart C), "Preparedness and Prevention" are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 265.50 through 265.56 (Subpart D), "Contingency Plan and Emergency Procedures" are incorporated by reference including subsequent amendments and editions.

(e) 40 CFR 265.70 through 265.77 (Subpart E), "Manifest System, Recordkeeping, and Reporting" are incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 265.90 through 265.94 (Subpart F), "Ground-Water Monitoring" are incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 265.110 through 265.121 (Subpart G), "Closure and Post-Closure" are incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 265.140 through 265.150 (Subpart H), "Financial Requirements" are incorporated by reference including subsequent amendments and editions, except that 40 CFR 265.143(a)(3), (a)(4), (a)(5), (a)(6), and 40 CFR 265.145(a)(3), (a)(4), (a)(5), and (a)(6) are not incorporated by reference.

(1) The following shall be substituted for the provisions of 40 CFR 265.143(a)(3) that are not incorporated by reference:

The owner or operator shall deposit the full amount of the closure cost estimate at the time the fund is established.

(2) The following shall be substituted for the provisions of 40 CFR 265.143(a)(6) and 265.145(a)(6) that are not incorporated by reference:

After the trust fund is established, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator within 60 days after the change in the cost estimate, shall either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this Section to cover the difference.

(3) The following shall be substituted for the provisions of 40 CFR 265.145(a)(3) that are not incorporated by reference:

(A) Except as otherwise provided in Part (h)(3)(B) of this Rule, the owner or operator shall deposit the full amount of the post-closure cost estimate at the time the fund is established.

(B) If the Department finds that the owner or operator of an inactive hazardous waste disposal unit is unable to provide financial assurance for post-closure through any other option (e.g. surety bond, letter of credit, or corporate guarantee), a plan for annual payments to the trust fund during the interim status period shall be established by the Department by use of an order.

(i) 40 CFR 265.170 through 265.178 (Subpart I), "Use and Management of Containers" are incorporated by reference including subsequent amendments and editions.

(j) 40 CFR 265.190 through 265.202 (Subpart J), "Tank Systems" are incorporated by reference including subsequent amendments and editions.

(k) 40 CFR 265.220 through 265.231 (Subpart K), "Surface Impoundments" are incorporated by reference including subsequent amendments and editions.

(l) 40 CFR 265.250 through 265.260 (Subpart L), "Waste Piles" are incorporated by reference including subsequent amendments and editions.

(m) 40 CFR 265.270 through 265.282 (Subpart M), "Land Treatment" are incorporated by reference including subsequent amendments and editions.

(n) 40 CFR 265.300 through 265.316 (Subpart N), "Landfills" are incorporated by reference including subsequent amendments and editions.

(o) 40 CFR 265.340 through 265.369 (Subpart O), "Incinerators" are incorporated by reference including subsequent amendments and editions.

(p) 40 CFR 265.370 through 265.383 (Subpart P), "Thermal Treatment" are incorporated by reference including subsequent amendments and editions.

(q) 40 CFR 265.400 through 265.406 (Subpart Q), "Chemical, Physical, and Biological Treatment" are incorporated by reference including subsequent amendments and editions.

(r) 40 CFR 265.440 through 265.445 (Subpart W), "Drip Pads" are incorporated by reference including subsequent amendments and editions.

(s) 40 CFR 265.1030 through 265.1049 (Subpart AA), "Air Emission Standards for Process Vents" are incorporated by reference including subsequent amendments and editions.

(t) 40 CFR 265.1050 through 265.1079 (Subpart BB), "Air Emission Standards for Equipment Leaks" are incorporated by reference including subsequent amendments and editions.

(u) 40 CFR 265.1080 through 265.1091 (Subpart CC), "Air Emission Standards for Tanks, Surface Impoundments, and Containers" are incorporated by reference including subsequent amendments and editions.

(v) 40 CFR 265.1100 through 265.1110 (Subpart DD), "Containment Buildings" are incorporated by reference including subsequent amendments and editions.

(w) 40 CFR 265.1200 through 265.1202 (Subpart EE), "Hazardous Waste Munitions and Explosives Storage" are incorporated by reference including subsequent amendments and editions.
(x) Appendices to 40 CFR Part 265 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c);*
Eff. November 19, 1980;
Amended Eff. June 1, 1989; December 1, 1988; June 1, 1988; February 1, 1988;
Transferred and Recodified from 10 NCAC 10F .0033 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0011 Eff. August 30, 1990;
Amended Eff. July 1, 1995; April 1, 1993; October 1, 1992; February 1, 1992;
Recodified from 15A NCAC 13A .0010 Eff. December 20, 1996;
Amended Eff. November 1, 2005; August 1, 2000; April 1, 1999;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readoption Eff. March 1, 2018.

15A NCAC 13A .0111 STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES - PART 266

(a) 40 CFR 266.20 through 266.23 (Subpart C), "Recyclable Materials Used in a Manner Constituting Disposal" are incorporated by reference including subsequent amendments and editions.
(b) 40 CFR 266.70 (Subpart F), "Recyclable Materials Utilized for Precious Metal Recovery" is incorporated by reference including subsequent amendments and editions. Off-site recycling facilities that receive materials described in 40 CFR 266.70(a) shall mark or label each container and tank holding recyclable materials at off-site precious metal recycling facilities with the words "Recyclable Material."
(c) 40 CFR 266.80 (Subpart G), "Spent Lead-Acid Batteries Being Reclaimed" is incorporated by reference including subsequent amendments and editions.
(d) 40 CFR 266.100 through 266.112 (Subpart H), "Hazardous Waste Burned in Boilers and Industrial Furnaces" are incorporated by reference including subsequent amendments and editions.
(e) 40 CFR 266.200 through 266.206 (Subpart M), "Military Munitions" are incorporated by reference including subsequent amendments and editions.
(f) 40 CFR 266.210 through 266.360 (Subpart N), "Conditional Exemption for Low-Level Mixed Waste Storage, Treatment, Transportation and Disposal" are incorporated by reference including subsequent amendments and editions.
(g) 40 CFR 266.500 through 266.510 (Subpart P), "Hazardous Waste Pharmaceuticals" are incorporated by reference including subsequent amendments and editions.
(h) Appendices to 40 CFR Part 266 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c);*
Eff. July 1, 1985;
Amended Eff. June 1, 1990; June 1, 1988; February 1, 1988; December 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0039 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0012 Eff. August 30, 1990;
Amended Eff. January 1, 1995; April 1, 1993; August 1, 1991; October 1, 1990;
Recodified from 15A NCAC 13A .0011 Eff. December 20, 1996;
Amended Eff. April 1, 2006; April 1, 2003; April 1, 1999; August 1, 1998;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readopted Eff. March 1, 2018;
Amended Eff. July 1, 2020.

15A NCAC 13A .0112 LAND DISPOSAL RESTRICTIONS - PART 268

(a) 40 CFR 268.1 through 268.9 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.
(b) 40 CFR 268.10 through 268.14 (Subpart B), "Schedule for Land Disposal Prohibition and Establishment of Treatment Standards" are incorporated by reference including subsequent amendments and editions.
(c) 40 CFR 268.20 through 268.39 (Subpart C), "Prohibitions on Land Disposal" are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 268.40 through 268.49 (Subpart D), "Treatment Standards" are incorporated by reference including subsequent amendments and editions.
(e) 40 CFR 268.50 (Subpart E), "Prohibitions on Storage" is incorporated by reference including subsequent amendments and editions.
(f) Appendices to 40 CFR Part 268 are incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c);*
Eff. August 1, 1987;
Amended Eff. June 1, 1990; June 1, 1989; June 1, 1988; February 1, 1988;
Transferred and Recodified from 10 NCAC 10F .0042 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0013 Eff. August 30, 1990;
Amended Eff. April 1, 1995; January 1, 1995; April 1, 1993; February 1, 1991;
Recodified from 15A NCAC 13A .0012 Eff. December 20, 1996;
Amended Eff. November 1, 2005; August 1, 2000; August 1, 1998;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readopted Eff. March 1, 2018.

15A NCAC 13A .0113 THE HAZARDOUS WASTE PERMIT PROGRAM - PART 270

(a) 40 CFR 270.1 through 270.6 (Subpart A), "General Information" are incorporated by reference including subsequent amendments and editions. For the purpose of this incorporation by reference, "January 26, 1983" shall be substituted for "July 26, 1982" contained in 40 CFR 270.1(c).
(b) 40 CFR 270.10 through 270.29 (Subpart B), "Permit Application" are incorporated by reference including subsequent amendments and editions.
(c) In addition to the specific Part B Permit Application information requirements for all hazardous waste facilities as defined in 40 CFR 270.14, the owners and operators of hazardous waste facilities shall provide the following information:

(1) description and documentation of the public meetings as required in 15A NCAC 13A .0109(r)(7);
(2) a description of the hydrological and geological properties of the site including flood plains, depth to water table, ground water travel time, seasonal and long-term groundwater level fluctuations, proximity to public water supply watersheds, consolidated rock, soil pH, soil cation exchange capacity, soil characteristics, composition, and permeability; existence of cavernous bedrock and seismic activity; slope; mines; climate; location and withdrawal rates of surface water users within the immediate drainage basin and well water users within a one mile radius of the facility; water quality information of both surface and groundwater within 1000 feet of the facility; and a description of the local air quality;
(3) a description of the facility's proximity to and potential impact on wetlands, endangered species habitats, parks, forests, wilderness areas, historical sites, mines, and air quality;
(4) a description of local land use including residential, industrial, commercial, recreational, agricultural, and the proximity to schools and airports;
(5) a description of: the proximity of the facility to waste generators and population centers; a description of the method of waste transportation; the comments of the local community and state transportation authority on the proposed route; and route safety. Comments shall include proposed alternative routes and restrictions necessary to protect the public health;
(6) a description of facility aesthetic factors including visibility, appearance, and noise level; and
(7) a description of any other objective factors that the Department determines are related and relevant to the proper siting and operation of the facility.

(d) In addition to the specific Part B Permit Application information requirements for hazardous waste disposal facilities as defined in 40 CFR 270.17 through 270.19 and 270.21, owners, and operators of hazardous waste landfills or longterm storage facilities shall provide the following information:

(1) design drawings and specifications of the leachate collection and removal system;
(2) design drawings and specifications of the artificial impervious liner;
(3) design drawings and specifications of the clay or clay-like liner below the artificial liner, and a description of the permeability of the clay or clay-like liner; and
(4) a description of how hazardous wastes will be treated prior to placement in the facility.

(e) In addition to the specific Part B Permit Application information requirements for surface impoundments as defined in 40 CFR 270.17, owners and operators of surface impoundments shall provide the following information:

(1) design drawings and specifications of the leachate collection and removal system;
(2) design drawings and specifications of all artificial impervious liners;
(3) design drawings and specifications of all clay or clay-like liners and a description of the clay or clay-like liner; and
(4) design drawings and specifications that show that the facility has been constructed in a manner that will prevent landsliding, slippage, or slumping.

(f) 40 CFR 270.30 through 270.33 (Subpart C), "Permit Conditions" are incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 270.40 through 270.43 (Subpart D), "Changes to Permit" are incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 270.50 through 270.51 (Subpart E), "Expiration and Continuation of Permits" are incorporated by reference including subsequent amendments and editions.

(i) 40 CFR 270.60 through. 270.66 (Subpart F), "Special Forms of Permits" are incorporated by reference including subsequent amendments and editions.

(j) 40 CFR 270.70 through 270.73 (Subpart G), "Interim Status" are incorporated by reference including subsequent amendments and editions. For the purpose of this incorporation by reference, "January 1, 1986" shall be substituted for "November 8, 1984" contained in 40 CFR 270.73(c).

(k) 40 CFR 270.235, (Subpart I), "Integration with Maximum Achievable Control Technology (MACT) Standards" is incorporated by reference including subsequent amendments and editions.

(l) The following are additional permitting requirements for hazardous waste facilities.

(1) An applicant applying for a permit for a hazardous waste facility shall submit a disclosure statement to the Department as a part of the application for a permit, a permit renewal, or a permit modification that involves a change in owner or operator. The disclosure statement shall be supported by an affidavit attesting to the truth and completeness of the facts asserted in the statement and shall include:
   (A) a brief description of the form of the business (e.g. partnership, sole proprietorship, corporation, association, or other);
   (B) the name and address of any hazardous waste facility constructed or operated after October 21, 1976 by the applicant or any parent or subsidiary corporation if the applicant is a corporation;
   (C) a list identifying any legal action taken against any facility identified in Part (l)(1)(B) of this Rule involving:
      (i) any administrative ruling or order issued by any state, federal, or local authority relating to revocation of any environmental or waste management permit or license, or to a violation of any state or federal statute or local ordinance relating to waste management or environmental protection;
      (ii) any judicial determination of liability or conviction under any state or federal law or local ordinance relating to waste management or environmental protection; and
      (iii) any pending administrative or judicial proceeding of the type described in this Part; and
   (D) the identification of each action described in Part (l)(1)(C) of this Rule shall include the name and location of the facility that the action concerns, the agency or court that heard or is hearing the matter, the title, docket or case number, and the status of the proceeding.

(2) In addition to the information set forth in Subparagraph (l)(1) of this Rule, the Department shall require from any applicant additional information as it deems necessary to satisfy the requirements of G.S. 130A-295. The information may include:
   (A) the names, addresses, and titles of all officers, directors, or partners of the applicant and of any parent or subsidiary corporation if the applicant is a corporation;
   (B) the name and address of any company in the field of hazardous waste management in which the applicant business or any of its officers, directors, or partners, hold an equity interest and the name of the officer, director, or partner holding such interest; and
   (C) a copy of any administrative ruling or order and of any judicial determination of liability or conviction described in Part (l)(1)(C) of this Rule, and a description of any pending administrative or judicial proceeding in that item.

(3) If the Department finds that any part or parts of the disclosure statement is not necessary to satisfy the requirements of G.S. 130A-295, the information shall not be required.

(m) An applicant for a new or modification to an existing commercial facility permit shall provide a description and justification of the need for the facility.

(n) Requirements for Off-site Recycling Facilities.

(1) The permit requirements of 15A NCAC 13A .0109 apply to owners and operators of off-site recycling facilities unless excluded in Subparagraph (n)(2) of this Rule.

(2) Requirements of Subpargraphs (n)(4), (5), (6), (7) and (8) of this Rule do not apply to owners and operators of off-site recycling facilities that recycle only precious metals as described in 40 CFR 40 CFR 266.70(a).

(3) Off-site facilities that recycle precious metals shall comply with the regulations as described in 15A NCAC 13A .0111(b).

(4) Notwithstanding any other statement of applicability, the following provisions of 40 CFR 264 shall apply to owners and operators of off-site recycling facilities except those excluded in Subparagraph (n)(2) of this Rule:

(A) Subpart B - General Facility Standards;
(B) Subpart C - Preparedness and Prevention;
(C) Subpart D - Contingency Plan and Emergency Procedures;
(D) Subpart E - Manifest System, Recordkeeping and Reporting;
(E) Subpart G - Closure and Post-closure;
(F) Subpart H - Financial Requirements;
(G) Subpart I - Use and Management of Containers;
(H) Subpart J - Tank Systems;
(I) 264.101 - Corrective Action for Solid Waste Management Units;
(J) Subpart X - Miscellaneous Units; and
(K) Subpart DD - Containment Buildings.

(5) The requirements listed in Subparagraph (n)(4) of this Rule apply to the entire off-site recycling facility, including all recycling units, staging and process areas, and permanent and temporary storage areas for wastes.

(6) The following provisions of 15A NCAC 13A .0109 shall apply to owners and operators of off-site recycling facilities:

(A) the substitute financial requirements of Rule .0109(i)(1), (2) and (4); and
(B) the additional standards of Rule .0109(r)(1), (2), (3), (6) and (7).

(7) The owner or operator of an off-site recycling facility shall keep a written operating record at his facility.

(8) The following information shall be recorded and maintained in the operating record until closure of the facility:

(A) a description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or recycling at the facility;
(B) the location of all hazardous waste within the facility and the quantity at each location. This information shall include cross-references to specific manifest document numbers if the waste was accompanied by a manifest; and
(C) documentation of the fate of all hazardous wastes received from off-site or generated on-site. This shall include records of the sale, reuse, off-site transfer, or disposal of all waste materials.

(o) Permit Fees for Commercial Hazardous Waste Facilities.

(1) An applicant for a permit modification for a commercial hazardous waste facility shall pay an application fee for the Class of permit modification defined in 40 CFR 270.42 as follows:

(A) Class 1 permit modification $100;
(B) Class 2 permit modification $1,000; or
(C) Class 3 permit modification $5,000.

Class 1 permit modifications identified in Appendix I to 40 CFR 270.42 that do not require prior approval of the Division Director are excluded from the fee requirement.

(2) The application fee for a new permit, permit renewal, or permit modification shall accompany the application, and is non-refundable. The application shall be considered incomplete until the fee is paid. Checks shall be made payable to: Division of Waste Management.

History Note: *Authority G.S. 130A-294(c); 130A-294.1; 130A-295(a)(1),(2), (c);*
Eff. November 19, 1980;
Amended Eff. November 1, 1989; June 1, 1988; February 1, 1988; December 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0034 April 4, 1990;
Amended Eff. August 1, 1990;
Recodified from 15A NCAC 13A .0014 Eff. August 30, 1990;
Amended Eff. April 1, 1993; August 1, 1991; October 1, 1990;
Recodified from 15A NCAC 13A .0013 Eff. December 20, 1996;
Amended Eff. August 1, 2008; April 1, 2006; August 1, 2004; April 1, 2001; August 1, 2000;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readopted Eff. March 1, 2018.

15A NCAC 13A .0114 REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS - PART 271

40 CFR 271.17, "Sharing of Information" has been incorporated by reference including subsequent amendments and editions.

History Note: *Authority G.S. 130A-294(c);*
Eff. January 1, 1986;
Amended Eff. June 1, 1988; December 1, 1987; August 1, 1987; May 1, 1987;
Transferred and Recodified from 10 NCAC 10F .0041 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0015 Eff. August 30, 1990;
Amended Eff. April 1, 1993; October 1, 1990;
Recodified from 15A NCAC 13A .0014 Eff. December 20, 1996;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. June 24, 2017;
Amended Eff. March 1, 2018.

15A NCAC 13A .0115 ANNUAL REPORTS

History Note: *Authority G.S. 130A-294(c);*
Eff. January 1, 1984;
Transferred and Recodified from 10 NCAC 10F .0037 Eff. April 4, 1990;
Recodified from 15A NCAC 13A .0004 Eff. August 30, 1990;
Repealed Eff. May 1, 1991;
Recodified from 15A NCAC 13A .0015 Eff. December 20, 1996.

15A NCAC 13A .0116 COMMERCIAL HAZARDOUS WASTE FACILITY SCORING FOR CATEGORY DETERMINATION

(a) The Department shall evaluate all commercial hazardous waste facilities to determine a score for each facility in accordance with Paragraph (c) of this Rule.

(b) A commercial hazardous waste facility (other than an incinerator or a land disposal facility) with a volume of waste of 20,000 tons or less per year of hazardous waste and having a total score pursuant to Paragraph (c) of this Rule of equal to or less than 40 is designated as a "special purpose commercial hazardous waste facility." These facilities shall be classified as follows:

Total Score	Category
1-11	1
Greater than 11-18	2
Greater than 18-25	3
Greater than 25-32	4
Greater than 32-40	5

(c) A score for each facility shall be determined by adding the total score for Paragraphs (d) through (k) of this Rule and subtracting the score for Paragraph (l) of this Rule.

(d) A score shall be assigned for size of the facility by adding the applicable score for storage and the applicable score for treatment using Table 1.

TABLE 1

Size of Facility	Constructed Capacity	Score
Storage:	Less than 10,000	1
(gallons)	10,000-100,000	2
	Greater than 100,000	3
Treatment:	Less than 10,000	1
(gallons	10,000-100,000	2
per day)	Greater than 100,000	3

(e) A score shall be assigned for type of treatment permitted by adding the score for each type of treatment being performed by the facility using Table 2.

TABLE 2

Type of Treatment Being Performed	Score
Storage Only	1
Solvent Recovery	2
Metal Recovery	2
Energy Recovery	2
Fuel Blending	2
Aqueous Treatment	3
Stabilization	2
Incineration	5
Residuals Management	5
Other Treatment	2

(f) A score shall be assigned for the nature of hazardous waste being treated or stored by adding the score for each type of waste managed at the facility using Table 3. However, if the facility is permitted for storage only and no treatment is performed, the score for the nature of hazardous waste shall be reduced by one-half for each hazardous waste stream stored only.

TABLE 3

Nature of Hazardous Waste (from Annual Report as listed in the Permit)	Score
Corrosive	1
Ignitable	2
Reactive	3
Toxicity Characteristic	2
Listed Toxic	2
Acute	3

(g) A score shall be assigned for volume of hazardous waste by using the applicable score in Table 4.

TABLE 4

Volume of Waste (Tons from Annual Report)	Score
Less than 2,000	1
2,000-10,000	2
10,000-20,000	3

(h) A score shall be assigned for uniformity, similarity, and lack of diversity of waste streams by using the applicable score in Table 5.

TABLE 5

Uniformity, Similarity, Lack of Diversity of Waste Streams (Number of EPA Waste Codes) As Listed in the Permit	Score
Less than 5	1
5-75	2

Greater than 75	3

(i) A score shall be assigned for predictability and treatability of site specific waste streams by using the applicable score in Table 6.

TABLE 6

Predictability and Treatability of Waste Streams	Score
Simple Waste Streams and Treatment	1
Complex Waste Streams and Treatment (Incompatibles, highly toxic, or multicoded waste streams).	2

(j) A score shall be assigned for compliance history for the past two years by using the highest applicable score in Table 7.

TABLE 7

Compliance History for Past Two Years	Score
Class II Violations	1
Class I Violations	2
Penalties	3
Injunctions	5

(k) A score shall be assigned for annual changes, which increase or decrease "sensitive land use" within a ¼ mile radius of the commercial hazardous waste facility's property boundary by using the applicable score in Table 8. Each score shall be added together.

TABLE 8

Changes in "sensitive land use"	Score
Increases	
Greater than 5 percent – less than 10 percent increase in the number of residential housing units as compared to the baseline.	1
Greater than or equal to 10 percent increase in the number of residential housing units as compared to the baseline, or 30 percent increase in the number of total sensitive land uses over a period of the previous four years.	2
Greater than 50 percent increase in the number of non-residential sensitive land uses as compared to the baseline.	1
Decreases	
Greater than 5 percent – less than 10 percent decrease in the number of residential housing units as compared to the baseline.	-1
Greater than or equal to 10 percent decrease in the number of residential housing units as compared to the baseline, or 30 percent decrease in the number of total sensitive land uses over a period of the previous four years.	-2
Greater than 50 percent decrease in the number of non-residential sensitive land uses as compared to the baseline.	-1

"Sensitive land use," as defined in G.S. 130A-295.01(f), includes residential housing, places of assembly, places of worship, schools, day care providers, and hospitals. Sensitive land use does not include retail businesses.

"Baseline" means:

(1) for existing "Special Purpose Commercial Hazardous Waste Facilities" as the January 2008 data collected from the local government that has planning jurisdiction over the site on which the facility is located; and

(2) for new "Special Purpose Commercial Hazardous Waste Facilities" as the data from the local government that has planning jurisdiction over the site on which the facility is located collected in the year in which the facility permit is first issued.

(l) A score shall be assigned for on-site reclamation by using the applicable score in Table 9.

TABLE 9

Reclamation (Credit Given)	Score

Pretreatment for Off-site Reclamation	1
On-site Reclamation	2

(m) The information referred to in Paragraphs (c) through (l) of this Rule shall be determined based on the facility's permit, the previous year's annual report, and compliance history. If no annual report was submitted, quarterly projections of waste volume shall be submitted to the Department by the facility. Each facility may be re-evaluated at any time new information is received by the Department concerning the factors in Paragraphs (c) through (l) of this Rule.

(n) The frequency of inspections at special purpose commercial hazardous waste facilities shall be determined by the facility's classification as follows:

Category	Minimum Inspections
1	2 per month
2	4 per month
3	6 per month
4	8 per month
5	10 per month

History Note: *Authority G.S. 130A-295.02(j);*
Temporary Adoption Eff. February 15, 1991 for a period of 180 days to expire on August 14, 1991;
ARRC Objection Lodged February 25, 1991;
ARRC Objection Removed March 21, 1991;
Eff. August 1, 1991;
Amended Eff. April 1, 1994;
Recodified from 15A NCAC 13A .0016 Eff. December 20, 1996;
Amended Eff. January 1, 2011;
Readopted Eff. March 1, 2018.

15A NCAC 13A .0117 FEE SCHEDULE FOR COMMERCIAL HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

(a) A commercial hazardous waste treatment, storage, or disposal facility other than a special purpose facility shall pay monthly, in addition to the fees applicable to all hazardous waste storage, treatment, or disposal facilities as required by G.S. 130A-294.1, a charge of forty-one dollars ($41.00) per hour of operation. The fee shall be paid for any time when hazardous waste is managed or during periods of maintenance, repair, testing, or calibration. Each facility shall submit an operational schedule to the Department on a quarterly basis.

(b) A special purpose commercial hazardous waste facility shall pay monthly, in addition to the fees applicable to all hazardous waste treatment, storage or disposal facilities as required by G.S. 130A-294.1, a charge per ton of hazardous waste received during the previous month and an additional charge based on the Category as determined in 15A NCAC 13A .0116. Effective January 1, 2013, a special purpose commercial hazardous waste facility shall pay four dollars and fifty cents ($4.50) per ton of hazardous waste received and:

Category	Monthly Fee
1	$1,332.00
2	$2,664.00
3	$3,996.00
4	$5,328.00
5	$6,660.00

History Note: *Authority G.S. 130A-295.02(h);*
Temporary Adoption Eff. February 15, 1991 for a period of 180 days to expire on August 14, 1991;
ARRC Objection Lodged February 25, 1991;
ARRC Objection Removed March 21, 1991;
Eff. August 1, 1991;
Recodified from 15A NCAC 13A .0017 Eff. December 20, 1996;
Amended Eff. April 1, 2011;
Readopted Eff. March 1, 2018.

15A NCAC 13A .0118 STANDARDS FOR THE MANAGEMENT OF USED OIL

(a) 40 CFR 279.1 (Subpart A), "Definitions" is incorporated by reference including subsequent amendments and editions, except that the Definition for "Used Oil" is defined by G.S. 130A-290(b) and is not incorporated by reference.

(b) 40 CFR 279.10 through 279.12 (Subpart B), "Applicability" are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 279.20 through 279.24 (Subpart C), "Standards for Used Oil Generators" are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 279.30 through 279.32 (Subpart D), "Standards for Used Oil Collection Centers and Aggregation Points" are incorporated by reference including subsequent amendments and editions.

(e) 40 CFR 279.40 through 279.47 (Subpart E), "Standards for Used Oil Transporter and Transfer Facilities" are incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 279.50 through 279.59 (Subpart F), "Standards for Used Oil Processors and Re-Refiners" are incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 279.60 through 279.67 (Subpart G), "Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery" are incorporated by reference including subsequent amendments and editions.

(h) 40 CFR 279.70 through 279.75 (Subpart H), "Standards for Used Oil Fuel Marketers" are incorporated by reference including subsequent amendments and editions.

(i) 40 CFR 279.80 through 279.81 (Subpart I), "Standards for Use as a Dust Suppressant and Disposal of Used Oil" are incorporated by reference including subsequent amendments and editions. G.S. 130A-309.15 provides additional information for prohibited acts regarding used oil, including used oil as a dust suppressant.

History Note: *Authority G.S. 130A-294(b),(c);*
Eff. October 1, 1993;
Recodified from 15A NCAC 13A .0018 Eff. December 20, 1996;
Amended Eff. August 1, 2000;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readopted Eff. March 1, 2018.

15A NCAC 13A .0119 STANDARDS FOR UNIVERSAL WASTE MANAGEMENT - PART 273

(a) 40 CFR 273.1 through 273.9 (Subpart A), "General" are incorporated by reference including subsequent amendments and editions.

(b) 40 CFR 273.10 through 273.20 (Subpart B), "Standards for Small Quantity Handlers of Universal Waste" are incorporated by reference including subsequent amendments and editions.

(c) 40 CFR 273.30 through 273.40 (Subpart C), "Standards for Large Quantity Handlers of Universal Waste" are incorporated by reference including subsequent amendments and editions.

(d) 40 CFR 273.50 through 273.56 (Subpart D), "Standards for Universal Waste Transporters" are incorporated by reference including subsequent amendments and editions.

(e) 40 CFR 273.60 through 273.62 (Subpart E), "Standards for Destination Facilities" are incorporated by reference including subsequent amendments and editions.

(f) 40 CFR 273.70 (Subpart F), "Import Requirements" is incorporated by reference including subsequent amendments and editions.

(g) 40 CFR 273.80 through 273.81 (Subpart G), "Petitions to Include Other Wastes Under 40 CFR Part 273" are incorporated by reference including subsequent amendments and editions, except that 40 CFR 273.80(a) and (b), are not incorporated by reference.

(1) The following shall be substituted for the provisions of 40 CFR 273.80(a) that are not incorporated by reference:
Any person seeking to add a hazardous waste or a category of hazardous waste to this Part may petition for a regulatory amendment under this Subpart, 15A NCAC 02I .0501 and 40 CFR 260.23.

(2) The following shall be substituted for the provisions of 40 CFR 273.80(b) that are not incorporated by reference:
To be successful, the petitioner shall demonstrate to the satisfaction of the Administrator that regulation under the universal waste regulations of 40 CFR Part 273 is:

(A) appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program;

(B) the petition shall include the information required by 15A NCAC 02I .0501; and

(C) the petition shall also address as many of the factors listed in 40 CFR 273.81 as are appropriate for the waste or waste category addressed in the petition.

History Note: *Authority G.S. 130A-294(c);*
Eff. January 1, 1996;
Recodified from 15A NCAC 13A .0019 Eff. December 20, 1996;
Amended Eff. April 1, 2001; August 1, 1998;
Temporary Amendment Eff. May 30, 2017 (replaced by the rule effective March 1, 2018);
Readopted Eff. March 1, 2018.