



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

PERMIT
FOR CORRECTIVE ACTION

Naval Research Laboratory
4555 Overlook Ave SW
Washington D.C. 20375-5320
EPA ID NO. DC8 170 024 311

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
PERMIT FOR CORRECTIVE ACTION;
PURSUANT TO THE RESOURCE CONSERVATION AND RECOVERY ACT
AS AMENDED BY
THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Permittee: United States Department of Navy
EPA ID NO. DC8 170 024 311
Facility: 4555 Overlook Ave SW
Washington D.C. 20375-5320

The United States Environmental Protection Agency (EPA), under the authority of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. § 6901 et seq., and the regulations promulgated thereunder and set forth at 40 C.F.R. Parts 260-271, is hereby issuing this permit for corrective action (Permit) to the United States Department of the Navy (Permittee) for the Naval Research Laboratory (NRL or Facility) located in Washington, District of Columbia (D.C.), at latitude 38° 49' 24" North and longitude 77° 01' 05" West.

The complete RCRA permit for purposes of Section 3005(c) of RCRA, 42 U.S.C. § 6925(c), consists of two portions: this Permit, issued by EPA, which addresses the provisions of HSWA, and the permit issued by the District of Columbia Department of the Environment (DDOE) on August 22, 2014, which addresses the provisions of the District of Columbia Hazardous Waste Management Act, D.C. Law 2-64, as amended, D.C. Official Code §§ 8-1301, et seq. The D.C. Department of Energy and Environment (DOEE) is authorized under Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), to carry out the hazardous waste program of D.C. in lieu of the federal hazardous waste program under RCRA. As of the date of issuance of this Permit, D.C. has not received authorization to administer the corrective action provisions of HSWA. This Permit, which addresses corrective action provisions of HSWA, will be enforced by EPA. The DDOE permit will be enforced by D.C., but EPA may also exercise its enforcement discretion if and when appropriate.

The Permittee must comply with all terms and conditions of this Permit. This Permit consists of the conditions contained herein (Parts I and II) and the applicable regulations contained in 40 C.F.R. Parts 124, 260 through 266, 268, and 270, as specified in the Permit or that are, by statute, self-implementing (40 C.F.R. § 270.32(c)). The Permittee shall comply with all terms and conditions set forth in this Permit. Nothing in this Permit shall limit EPA's authority to undertake, or require any person to undertake, response action or corrective action under any law, including, but not limited to, Sections 104 and 106 of CERCLA, 42 U.S.C. §§ 9604 and 9606, and Section 7003 of RCRA, 42 U.S.C. § 6973. Nor shall any permit condition

relieve the Permittee of any obligations under any law, including, but not limited to, Section 103 of CERCLA, 42 U.S.C. § 9603, to report releases of hazardous wastes, constituents, or substances to, at, or from the Facility.

This Permit is based on information provided to EPA by the Permittee and DOEE. Section 3005(c)(3) of RCRA provides EPA the authority to review and amend the Permit at any time. Any inaccuracies found in the information submitted by the Permittee may be grounds for the termination, modification or revocation and reissuance of this Permit (see 40 C.F.R. §§ 270.41, 270.42 and 270.43). The Permittee must inform EPA of any deviation from or changes in the submitted information that would affect the Permittee's ability to comply with the applicable statutes, regulations or permit conditions.

The requirements of this Permit supersede the work to be conducted under the Facility Lead Agreement signed by NRL on August 19, 2003. This Permit is effective on June 20, 2019 and shall remain in effect until June 20, 2029 unless revoked and reissued, modified or terminated in accordance with 40 C.F.R. §§ 270.41, 270.42, and 270.43, or continued in accordance with 40 C.F.R. § 270.51(a).

TABLE OF CONTENTS

| | |
|--|----|
| PART I – STANDADARD CONDITIONS..... | 6 |
| A. PERMIT ACTIONS..... | 6 |
| B. DUTIES AND REQUIREMENTS..... | 6 |
| C. APPROVAL OF SUBMISSIONS; INCORPORATION INTO PERMIT..... | 12 |
| D. DISPUTE RESOLUTION..... | 13 |
| E. EFFECT OF PERMIT..... | 13 |
| F. PERMIT MODIFICATION, REVOCATION AND REISSUANCE..... | 14 |
| G. PERMIT EXPIRATION AND CONTINUANCE..... | 14 |
| H. DUTY TO SUBMIT CERTIFIED DOCUMENTS..... | 15 |
| I. TRANSFER OF PERMIT..... | 15 |
| J. SEVERABILITY..... | 15 |
| PART II - SPECIFIC FACILITY CONDITIONS..... | 16 |
| A. CORRECTIVE ACTION FOR CONTINUING RELEASES; PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT..... | 16 |
| B. INTERIM MEASURES (IM)..... | 17 |
| C. RCRA FACILITY INVESTIGATION..... | 18 |
| D. CORRECTIVE MEASURES STUDY..... | 20 |
| E. PUBLIC COMMENT AND PARTICIPATION..... | 20 |
| F. CORRECTIVE MEASURES IMPLEMENTATION..... | 20 |
| G. EVALUATION OF THE FINAL REMEDY..... | 22 |
| H. EMERGENCY RESPONSE; RELEASE REPORTING..... | 22 |
| I. SOLID WASTE MANAGEMENT UNIT ASSESSMENT..... | 23 |
| J. GUIDANCE DOCUMENTS..... | 24 |
| K. RECORDKEEPING..... | 24 |
| L. ACCESS FOR CORRECTIVE ACTION OVERSIGHT..... | 25 |
| M. COMPLETION OF REMEDY..... | 25 |

LIST OF ATTACHMENTS

The following Attachments are incorporated, in their entirety, by reference into this Permit.
These incorporated attachments are enforceable conditions of this Permit.

Attachment A Site Map
Attachment B Final Decision and Response to Comments

PART I – STANDARD CONDITIONS

A. PERMIT ACTIONS

This Corrective Action Permit may be modified, revoked and reissued, or terminated for cause as specified in 40 C.F.R. §§ 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition (40 C.F.R. § 270.30(f)).

Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations and laws.

B. 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 C.F.R. § 270.61 or the analogous provisions of the authorized hazardous waste management regulations of the District of Columbia (D.C.). Any other permit noncompliance, except under the terms of an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application (40 C.F.R. § 270.30(a)).

2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must apply for and obtain a new permit (40 C.F.R. § 270.30(b)).

3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit (40 C.F.R. § 270.30(c)).

4. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment (40 C.F.R. § 270.30(d)).

5. Duty to Properly Operate and Maintain

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance include 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 facilities or similar systems only when necessary to achieve compliance with the conditions of the Permit (40 C.F.R. § 270.30(e)).

6. Duty to Monitor and Record Results

Pursuant to 40 C.F.R. § 270.30(j), the Permittee shall comply with the following requirements:

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All sampling and analyses shall be of adequate quality, scientifically valid, of known precision and accuracy, and of acceptable completeness, representativeness and comparability. Laboratory analysis of each sample must be performed using an appropriate method for testing the parameter(s) of interest taking into account the sample matrix. The test methods found in the EPA publication Test Methods for Evaluating Solid Waste. Physical/Chemical Methods (SW-846), 3rd Edition, as updated, shall be used for: the Toxicity Characteristic analytes (40 C.F.R. § 261.24); the Free Liquids Test (Method 9095) used to determine if free liquid is a component of a waste as a specific requirement for bulk and containerized wastes (40 C.F.R. § 264.314(c)); and the chemical analysis of wastes for hazardous waste incineration permits (40 C.F.R. § 270.62(b)(2)(i)(C)).
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this Permit, the certification required by 40 C.F.R. § 264.73(b)(9) 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, certification or application. This period may be extended by request of the Regional Administrator at any time and is automatically extended during the course of any unresolved enforcement action regarding the Facility (40 C.F.R. § 264.74). The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the active life of the Facility, and for

disposal facilities, for the post-closure care period as well (40 C.F.R. § 270.30(j)).

- c. Records of monitoring information shall specify the following:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.

7. Duty to Provide Information

The Permittee shall furnish, within a reasonable specified time, any relevant information which the EPA 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 EPA upon request, copies of records required to be kept by this Permit (40 C.F.R. §§ 270.30(h) and 264.74(a)).

8. Duty to Allow Inspection and Entry

Pursuant to 40 C.F.R. § 270.30(i), the Permittee shall allow the Regional Administrator, 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 facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Duty to Submit Certified Documents

- a. Except for submissions for which the Permittee is asserting a business confidentiality claim pursuant to Permit Condition I.B.9.d, below, at least one electronic copy of draft documents and one electronic copy of all final plans, reports, notifications or other documents that are required by this Permit to be submitted to the Regional Administrator or EPA, shall be sent via electronic mail to Oduwale. Moshood @epa.gov or on compact disc to:

Moshood Oduwale
Office of Remediation
U.S. Environmental Protection Agency (EPA)
Region III
1650 Arch Street
Mail Code 3LC10
Philadelphia, PA 19103

- b. Each report, notification or other submission shall reference the Permittee's name, permit number and Facility location. In addition, one electronic copy of such submission shall be sent to:

Barbara R. Williams
barbara.williams@dc.gov
Chief, Hazardous Waste Branch
Toxic Substances Division
Environmental Services Administration
Department of Energy and Environment (DOEE)
Government of the District of Columbia
1200 First Street, NE
5th Floor
Washington, D.C. 20002

- c. All applications, reports or other information submitted to the EPA shall be signed and certified as described in 40 C.F.R. §§ 270.11 and 270.30(k).
- d. The Permittee may assert a business confidentiality claim covering all or part of any information submitted to EPA pursuant to this Permit in the manner described in 40 C.F.R. § 2.203(b). Any assertion of confidentiality shall be adequately substantiated by the Permittee when the assertion is made in accordance with 40 C.F.R. § 2.204(e)(4). Information subject to a confidentiality claim shall be disclosed only to the extent allowed by, and in accordance with, the procedures set forth in 40 C.F.R.

Part 2, Subpart B. If no such confidentiality claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA without further notice to the Permittee. The Permittee shall not assert any confidentiality claim with regard to any physical, sampling, monitoring, or analytical data.

- e. One hard copy of all submissions for which the Permittee is asserting a business confidentiality claim pursuant to Permit Condition I.B.9.d, above, shall be sent Certified Mail, Return Receipt Requested, overnight mail, or hand-carried to:

Office of Remediation
U.S. Environmental Protection Agency (EPA)
Region III
1650 Arch Street
Mail Code 3LC10
Philadelphia, PA 19103

Information the Permittee claims to contain RCRA Confidential Business Information (RCRA CBI) shall be marked as RCRA CBI. The Permittee shall place the RCRA CBI information in an envelope labeled "RCRA CBI - To Be Opened by Addressee Only." The sealed envelope shall then be placed into another envelope which is normally addressed and sealed with no indication that it contains RCRA CBI.

10. Duty to Maintain Documents at the Facility

Pursuant to 40 C.F.R. § 264.73, the Permittee shall maintain at the Facility (or other location approved by the Regional Administrator) during the term of this Permit, including any reissued permit, all documents and raw data, such as laboratory reports, drilling logs, and other supporting information generated from investigations required by this Permit including amendments, revisions and modifications to these documents.

11. Duty to Minimize Waste

The Permittee shall certify no less often than annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that the Permittee generates to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage or disposal is the practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment. The Permittee shall maintain each such certification of waste minimization at the Facility until closure of such Facility (40 C.F.R. §264.73(b)(9)).

12. Duty to Comply with the Land Disposal Restrictions

All activities of the Permittee which involve the land disposal of hazardous waste are subject to the provisions of RCRA Section 3004(b)-(m), 42 U.S.C. § 6924(b)-(m), and applicable regulations thereunder at 40 C.F.R. Part 268.

13. Reporting Requirements

a. Planned Changes

The Permittee shall give notice to the Regional Administrator, as soon as possible, of any planned physical alterations or additions to the Facility (40 C.F.R. §270.30(l)(1)).

b. Anticipated Noncompliance

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the Facility or activity which may result in noncompliance with permit requirements (40 C.F.R. § 270.30(l)(2)).

c. Monitoring Reports

Monitoring reports shall be reported at the intervals specified elsewhere in this Permit (40 C.F.R. § 270.30(l)(4)).

d. Noncompliance with Schedules for Interim and Final Requirements

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than fourteen (14) days following each schedule date (40 C.F.R. § 270.30(l)(5)).

e. Twenty-Four Hour Reporting

The Permittee shall report to the Regional Administrator any noncompliance which may endanger health or the environment within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. The report shall contain the information listed in 40 C.F.R. § 270.30(l)(6).

f. Manifest Discrepancy Report

If a significant discrepancy in a manifest is discovered, the Permittee must attempt to reconcile the discrepancy. If not resolved within fifteen (15)

days, the Permittee shall submit a letter report including a copy of the manifest, to the Regional Administrator (40 C.F.R. § 270.30(1)(7)).

g. Unmanifested Waste Report

The Permittee shall submit a report to the Regional Administrator within 15 days of receipt of unmanifested waste (40 C.F.R. § 270.30(1)(8)).

h. Biennial Report

The Permittee shall submit a biennial report covering Facility activities during odd numbered calendar years (40 C.F.R. § 270.30(1)(9)).

i. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports are submitted. The reports shall contain the information listed in 40 C.F.R. § 270.30(1)(6) (40 C.F.R. § 270.30(1)(10)).

j. Failure to Submit Relevant and/or Accurate Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application or submitted incorrect information in a permit application or in any report to the Regional Administrator, the Permittee shall notify the Regional Administrator of such failure within seven (7) days of becoming aware of such deficiency or inaccuracy. The Permittee shall submit the correct or additional information to the Regional Administrator within fourteen (14) days of becoming aware of the deficiency or inaccuracy (40 C.F.R. § 270.30(1) (11)). Failure to submit the information required in this Permit or misrepresentation of any submitted information is grounds for termination of this Permit (40 C.F.R. § 270.43).

14. Information Repository

The Regional Administrator may require the Permittee to establish and maintain an information repository at any time, based on factors set forth in 40 C.F.R. § 124.33(b). The information repository will be governed by the provisions in 40 C.F.R. § 124.33(c) through (f).

C. APPROVAL OF SUBMISSIONS; INCORPORATION INTO PERMIT

EPA will review the plans, reports, schedules and other documents (hereinafter collectively referred to as "submissions") submitted by the Permittee which require EPA

approval. EPA will notify the Permittee in writing of EPA's approval or disapproval of each submission.

Each submission required by this Permit is, upon approval by EPA, incorporated into this Permit. Any noncompliance with such EPA-approved submission shall be deemed noncompliance with this Permit.

In the event of unforeseen circumstances beyond the control of the Permittee which could not be overcome by due diligence, the Permittee may request a change, subject to EPA approval, in the previously approved plans, reports, schedules, or other submissions. This request may result in a modification of the Permit.

D. DISPUTE RESOLUTION

Except as otherwise provided in this Permit in the event the Permittee disagrees, in whole or in part, with EPA disapproval of any submission required by this Permit, the Permittee shall notify EPA in writing of its objections, and the basis therefore, within twenty-one (21) days of receipt of EPA's disapproval. Such notice shall set forth the specific matters in dispute, the basis for the Permittee's belief that its position is consistent with the permit requirements, and any supporting documentation.

EPA and the Permittee shall have an additional twenty-one (21) days from EPA receipt of the notification to meet or confer to resolve any dispute. In the event agreement is reached, the Permittee shall submit the revised submission and implement the same in accordance with such agreement.

In the event EPA and the Permittee are not able to reach agreement within this twenty-one (21) day period, the Permittee shall have the opportunity to submit written comments regarding EPA's disapproval, and receive a written decision from the EPA Regional Administrator or his delegate (e.g., the Division Director or the Office Director) regarding the Permittee's objection. EPA will notify the Permittee in writing of its decision and the Permittee shall comply with the terms and conditions of EPA's decision. The Permittee does not waive its right to assert any and all available defenses in a proceeding to enforce this Permit, nor does it waive any statutory or regulatory rights it may have, if any, to affirmatively challenge EPA's decision in the dispute.

E. EFFECT OF PERMIT

1. This Permit authorizes only the management of hazardous waste expressly described in this Permit and does not authorize any other management of hazardous waste.
2. 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, or invasion of other private rights, or any infringement of State or local laws or

regulations. (40 C.F.R. §§ 270.30(g) and 270.4(b) and (c)). Compliance with this Permit during its term constitutes compliance with Subtitle C of RCRA, except for those requirements not included in the Permit which are described in 40 C.F.R. § 270.4(a)(1)(i)-(iv). However, compliance with the terms of this Permit does not constitute a defense to any action brought under Section 7003 of RCRA, 42 U.S.C. § 6973, Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, 42 U.S.C. § 9606(a) (commonly known as Superfund), or any other law governing protection of public health or welfare or the environment.

3. Nothing contained herein shall in any way be deemed to waive the Permittee's obligation to comply with 40 C.F.R. Part 270, Subpart C, and applicable regulations set forth at 40 C.F.R. Part 124.

F. PERMIT MODIFICATION, REVOCATION AND REISSUANCE

1. This Permit may be modified, revoked and reissued, or terminated for cause. This Permit is based on information provided to EPA by the Permittee and D.C. Section 3005(c)(3) of RCRA provides EPA the authority to review and amend the Permit at any time. Any inaccuracies found in the information submitted by the Permittee may be grounds for the termination, modification or revocation and reissuance of this Permit (see 40 C.F.R. §§ 270.41, 270.42 and 270.43). The Permittee must inform EPA of any deviation from or changes in the Permittee-submitted information that would affect the Permittee's ability to comply with the applicable statutes, regulations or permit conditions.
2. In the event that information becomes available to EPA identifying solid waste management units that require corrective measures, EPA will modify this Corrective Action Permit. This paragraph does not limit EPA's authority to otherwise modify this Corrective Action Permit in accordance with 40 C.F.R. Part 270, Subpart D.

G. PERMIT EXPIRATION AND CONTINUANCE

1. Pursuant to 40 C.F.R. § 270.50, this Permit shall be effective for a fixed term not to exceed ten years. Pursuant to 40 C.F.R. § 270.51, this Permit and all conditions herein will remain in effect beyond the Permit's expiration date if the Permittee has submitted a timely and complete application for a new permit (see 40 C.F.R. §§ 270.10 and 270.13 - 270.29) and, through no fault of the Permittee, EPA has not issued a new permit under 40 C.F.R. § 124.15 on or before the expiration date of this Permit. In addition, each permit for a land disposal facility shall be reviewed by the Regional Administrator five years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in 40 C.F.R. § 270.41 (40 C.F.R. § 270.50(d)).
2. If the Permittee wishes to continue an activity regulated by this Permit after the

expiration date of this Permit, the Permittee must submit a complete application for a new permit at least 180 days before this Permit expires, unless permission for a later date has been granted by the Regional Administrator (40 C.F.R. §§ 270.10(h) and 270.30(b)).

3. The corrective action obligations contained in this Permit shall continue regardless of whether the Permittee continues to operate or ceases operation and closes the Facility. The Permittee is obligated to complete Facility-wide corrective action under the conditions of a RCRA permit regardless of the operational status of the Facility. The Permittee must submit an application for a new permit at least 180 days before this Permit expires pursuant to 40 C.F.R. § 270.10(h), unless the Permit has been modified to terminate the corrective action schedule of compliance and the Permittee has been released from the requirements for financial assurance for corrective action.

H. DUTY TO SUBMIT CERTIFIED DOCUMENTS

All reports or other information submitted to EPA shall be signed and certified as required by 40 C.F.R. §§ 270.11 and 270.30(k).

I. TRANSFER OF PERMIT

1. This Permit is not transferable to any person, except after notice to EPA (40 C.F.R. § 270.30(1)(3)). The Permit may be transferred by the Permittee to a new owner or operator only if the Permit has been modified or revoked and reissued under 40 C.F.R. § 270.40(b) or 270.41 to identify the new Permittee and incorporate such other requirements as may be necessary under the appropriate Act. The Regional Administrator may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under RCRA (40 C.F.R. § 270.30(1)(3)).
2. Before transferring ownership or operation of the Facility during its operating life, the Permittee transferring its interest in the Facility shall notify the new owner or operator in writing of the requirements of 40 C.F.R. Parts 264 and 270 (40 C.F.R. § 264.12(c)).

J. 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 (40 C.F.R. § 124.16(a)(2)).

PART II – SPECIFIC FACILITY CONDITIONS

Permittee has conducted numerous investigations and submitted multiple reports to EPA under the RCRA Corrective Action Facility Lead Agreement (FLA) signed by Permittee on August 19, 2003. EPA acknowledges that Permittee has completed some of the tasks required by this Permit and that Permittee has available some of the information and data required under this Permit. To the extent that this previous work has been performed by Permittee it may be used to meet the requirements of this Permit upon review and written approval by EPA.

On September 26, 2017, EPA issued a Final Decision and Response to Comments (FDRTC) in which it selected a final remedy for fifty-seven (57) solid waste management units (SWMUs) and fifty-five (55) areas of concern (AOCs) at the Facility (Attachment B). For SWMUs 26 through 30, EPA determined that corrective action was complete for soils and that further investigation for groundwater was necessary. The groundwater at those five SWMUs will be investigated as required under this Permit. The FDRTC also requires land use controls for SWMUs 1, 22, 31 and 36. EPA determined that the other SWMUs and AOCs addressed in the FDRTC do not require additional corrective action. Three (3) SWMUs (4, 12 and 42) and six (6) AOCs (4, 22, 25, 26, 31 and 38) were not addressed in the FDRTC.

This Permit requires Permittee to conduct additional RCRA investigations at the SWMUs and AOCs listed below:

- SWMU 4: Former Oil House
- SWMU 12: Building 2 Former Plating Shop
- SWMU 26: Groundwater at Building 36 Fuel Underground Storage Tank
- SWMU 27: Groundwater at Building 36 Used Oil Underground Storage Tank
- SWMU 28: Groundwater at Building 36 Parts Washer
- SWMU 29: Groundwater at Building 36 Used Oil Area
- SWMU 30: Groundwater at Building 36 Oil/Water Separator
- SWMU 42: Groundwater at Substation A – For PCB Storage Area
- AOC 4: Bomb Testing Butt
- AOC 22: Original Explosion Pit
- AOC 25: Fire Pit
- AOC 26: Pistol Range
- AOC 31: Relocation Explosion Pit
- AOC 38: Incinerator

A. CORRECTIVE ACTION FOR CONTINUING RELEASES; PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

1. Section 3004(u) of RCRA, 42 U.S.C. § 6924(u), and regulations codified at 40 C.F.R. § 264.101, provide that all permits issued after November 8, 1984 must require corrective action as necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any SWMU, regardless of when waste was placed in the unit.

2. Under Section 3004(v) of RCRA, 42 U.S.C. § 6924(v), and 40 C.F.R. § 264.101(c), EPA may require that corrective action at a permitted facility be taken beyond the facility boundary where necessary to protect human health and the environment, unless the owner or operator of the facility concerned demonstrates to the satisfaction of EPA that, despite the owner or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action.
3. Section 3005(c)(3) of RCRA, 42 U.S.C. § 6925(c)(3), and 40 C.F.R. § 270.32(b) provide that each permit shall contain such terms and conditions as EPA determines necessary to protect human health and the environment.
4. This Permit requires the Permittee to conduct a RCRA Facility Investigation (RFI). The RFI will determine the nature and extent of releases of hazardous waste and constituents from regulated units, solid waste management units, and any other area of concern at the Facility and to gather all data necessary for EPA to determine whether stabilization and/or interim measures (IM) are necessary. The RFI includes the collection of site-specific data and an evaluation of potential impacts to human health and/or the environment from potential or suspected contamination from the Facility. The RFI will gather all data necessary for EPA to determine whether a Corrective Measures Study (CMS) is required. If, on the basis of the RFI and any other relevant information, EPA determines that a CMS is necessary, the Permittee will be required to conduct a CMS for those releases from SWMUs and/or areas of concern (AOCs) which threaten human health or the environment. The Permittee may have completed some of the tasks required by this Permit and may have some of the information and data required by this Permit. This previous work may be used to meet the requirements of this Permit, upon submission to and approval by EPA in accordance with Permit Conditions I.C (Approval of Submissions; Incorporation in Permit) and I.D (Dispute Resolution).

B. INTERIM MEASURES (IM)

- I. In the event Permittee identifies a newly discovered SWMU or new releases of hazardous waste and/or hazardous constituents at or from the Facility not previously identified, or discovers an immediate or potential threat to human health and/or the environment at the Facility, Permittee shall notify the EPA Project Coordinator orally within forty-eight (48) hours of discovery and notify EPA in writing within three (3) days of such discovery summarizing the potential for the migration or release of hazardous wastes, solid wastes and/or hazardous constituents at and/or from the Facility, and the immediacy and magnitude of the potential threat(s) to human health and/or the environment, as applicable. Upon written request of EPA, Permittee shall submit to EPA for approval an IM Workplan in accordance with the IM Scope of Work, which identifies interim measures that will mitigate the migration or release of hazardous wastes, solid

wastes and/or hazardous constituents at and/or from the Facility and mitigate any threat to human health and/or the environment. If EPA determines that immediate action is required, the EPA Project Coordinator may orally authorize Permittee to act prior to EPA's receipt of the IM Workplan.

2. If EPA identifies a newly discovered SWMU or new releases of hazardous waste and/or hazardous constituents at or from the Facility not previously identified or discovers an immediate or potential threat to human health and/or the environment at the Facility, EPA will notify Permittee in writing. Within ten (10) days of receiving EPA's written notification, Permittee shall submit to EPA for approval an IM Workplan in accordance with the IM Scope of Work, which identifies interim measures that will mitigate the migration or release of hazardous wastes, solid wastes and/or hazardous constituents at and/or from the Facility and mitigate any threat to human health and/or the environment. If EPA determines that immediate action is required, the EPA Project Coordinator may orally require Permittee to act prior to Permittee's receipt of EPA's written notification.
3. All IM Workplans shall ensure that the interim measures are designed to mitigate the migration or release of hazardous wastes, solid wastes and/or hazardous constituents at and/or from the Facility and mitigate any immediate or potential threat(s) to human health and/or the environment, and should be consistent with the objectives of, and contribute to the performance of any long-term remedy which may be required at the Facility.
4. Each IM Workplan shall include the following sections as appropriate and approved by EPA: IM Objectives, Public Involvement Plan, Data Collection Quality Assurance (QA), Data Management, Design Plans and Specifications, Operation and Maintenance, Project Schedule, IM Construction QA, and Reporting Requirements.
5. Concurrent with submission of an IM Workplan, Permittee shall submit to EPA an IM Health and Safety Plan.
6. Nothing in this Permit shall limit EPA's authority to undertake or require any person to undertake response action or corrective action under any law. Nothing in this Permit shall relieve the Permittee of any obligation it may have under any Federal or local law, including, but not limited to, Section 103 of CERCLA, to report releases of hazardous waste, hazardous constituents or hazardous substances to, at, or from the Facility.

C. RCRA FACILITY INVESTIGATION

1. Within thirty (30) days of the effective date of this Permit, the Permittee shall submit to EPA a workplan for the RCRA Facility Investigation (RFI Workplan). The RFI Workplan shall be developed as appropriate and approved by EPA in

accordance with, at a minimum, the RFI Scope of Work, RCRA, its implementing regulations, and relevant EPA guidance documents.

2. The RFI Workplan shall be designed to determine the presence, magnitude, extent, direction, and rate of movement of all hazardous wastes within and beyond the Facility boundary. The RFI Workplan shall document the procedures Permittee shall use to conduct those activities necessary to: (A) characterize the source(s) of contamination; (B) characterize the potential pathways of contaminant migration; (C) define the degree and extent of contamination; (D) identify actual or potential human and/or ecological receptors; and (E) support the development of alternatives from which corrective measures will be selected by EPA. EPA may require that the RFI Workplan be implemented in a phased approach. A specific schedule for expeditious implementation of all activities shall be included in the RFI Workplan.
3. The RFI Workplan shall include: (A) a Project Management Plan; (B) a Data Collection QA Plan; (C) a Data Management Plan; and (D) a Community Relations Plan and shall provide for the submission of a draft and final RFI Report.
4. Concurrent with the submission of the RFI Workplan, Permittee shall submit an RFI Health and Safety Plan.
5. Upon receipt of EPA approval of the RFI Workplan, Permittee shall implement the EPA-approved RFI Workplan in accordance with the terms and schedules contained therein.
6. RCRA Facility Reporting Requirements
 - a. The Permittee shall also submit quarterly (i.e., every three months) progress reports to EPA beginning two months after EPA's approval of the RFI Workplan and continuing until the RFI Report is submitted. The quarterly reporting shall include, at a minimum: activities completed within the reporting period, any deviations from the RFI Workplan, and the identification and schedule of remaining activities. EPA shall include any other specifications in its approval of the RFI Workplan.
 - b. The Permittee may submit in writing justification for a request for an alternate progress-reporting schedule for EPA approval. This alternate progress-reporting schedule may be approved by EPA without requiring a permit modification to Permit Condition II.C.6.
7. RCRA Facility Investigation Report
 - a. Within thirty (30) days of receipt of EPA's written determination that implementation of the RFI Workplan is complete, Permittee shall submit

to EPA for approval a draft RFI Report in accordance with the schedule set forth in the EPA-approved RFI Workplan. The RFI Report shall include an analysis, summary and results of all investigations performed pursuant to the RFI Workplan. The RFI Report shall be designed to ensure that the investigation data are sufficient in scope (e.g., quality assurance procedures have been followed) and quantity to characterize the nature and extent of contamination, potential threat to human health and the environment, and to support the CMS. The RFI Report shall conform to the RFI requirements.

- b. The RFI Report shall include a discussion of the feasibility of implementing IM immediately; see Permit Conditions II.B (Interim Measures) and II.H (Emergency Response; Release Reporting).

D. CORRECTIVE MEASURES STUDY

1. Within ninety (90) days of receipt of EPA approval of the Final RFI Report, Permittee shall submit to EPA for approval a Draft CMS Report in accordance with the CMS Scope of Work.
2. Within thirty (30) days of receipt of EPA's comments on the Draft CMS Report, Permittee shall submit to EPA the Final CMS Report, revised to respond to all comments received from and/or remedy all deficiencies identified by EPA on the Draft CMS Report.

E. PUBLIC COMMENT AND PARTICIPATION

1. After approval of the Final CMS Report, EPA will make both the Final RFI Report and the Final CMS Report, a description of EPA's proposed corrective measures and EPA's justification for proposing selection of such corrective measures (the Statement of Basis) available to the public for review and comment for at least thirty (30) days.

Following the public review and comment period, EPA will notify Permittee of the corrective measures selected by EPA in a RCRA Final Decision and Response to Comments (FDRTC). If the corrective measures selected by EPA after consideration of public comments differs significantly from the corrective measures recommended in the Statement of Basis, EPA will explain in the FDRTC the basis for such difference.

F. CORRECTIVE MEASURES IMPLEMENTATION

1. Upon issuance of the FDRTC, said FDRTC shall be incorporated into and become enforceable under this Permit.

2. For the four (4) SWMUs where an FDRTC has been issued and corrective measures are required, the FDRTC shall also become enforceable under this Permit.
3. Corrective Measures Workplan and Design
 - a. Within thirty (30) days of the issuance of the FDRTC, Permittee shall submit to EPA a Corrective Measures Implementation Workplan (CMI Workplan) for implementation of the corrective measures selected in the FDRTC.
 - i. For selected Corrective Measures in the FDRTC that require the implementation of land and/or groundwater use restrictions, the Permittee shall include, as part of the CMI Workplan, an Institutional Controls Implementation and Assurance Plan (IC Plan). The IC Plan will establish, document, and report the methods that will be used to implement and monitor compliance with the land and/or groundwater use restrictions and ensure that they remain in place and effective and run with the land.
 - b. Within thirty (30) days of receipt of EPA approval of the CMI Workplan, Permittee shall submit to EPA for approval a CMI Design Report.
4. Corrective Measures Construction
 - a. Permittee shall commence, and complete construction of the Corrective Measures selected in the FDRTC in accordance with the Scope of Work for the CMI, the schedules and specifications set forth in the EPA-approved CMI Workplan and the EPA-approved CMI Design Report.
 - b. Within thirty (30) days of completion of construction of the Corrective Measures selected by EPA in the FDRTC, Permittee shall submit to EPA for approval a CMI Report. The CMI Report shall describe activities performed during construction, provide actual specifications of the implemented remedy, and provide a preliminary assessment of CMI performance.
 - c. EPA shall determine, on the basis of the CMI Report and any other relevant information, whether the constructed project is consistent with the EPA-approved CMI Design Report. If EPA determines that the constructed project is consistent with the EPA-approved CMI Design Report and that the Corrective Measures have achieved or are achieving all of the requirements set forth in the FDRTC and the performance criteria established in the CMI Design Report, EPA shall approve the CMI Report.
 - d. If EPA determines that the constructed project is inconsistent with the EPA-approved CMI Design Report and/or that the Corrective Measures have not achieved or are not achieving all of the requirements set forth in the FDRTC and the performance criteria established in the CMI Design Report, EPA shall notify

Permittee in writing of those activities that must be undertaken to complete the corrective measures requirements and shall set forth a schedule for the completion of those activities. Permittee shall complete the activities in accordance with the schedule set forth in the EPA notification.

5. Corrective Measures Assessment Reports

- a. Within ninety (90) days after approval of the CMI Report pursuant to Permit Conditions II.F.3.c or II.F.3.d, Permittee shall submit a CMI Assessment Report for EPA approval. The CMI Assessment Report shall provide an evaluation of the corrective measures' effectiveness in achieving the requirements set forth in the FDRTC and the performance criteria established in the EPA-approved CMI Design Report.
- b. If, based on the CMI Assessment Report or any other information, EPA determines that the Corrective Measures are not achieving the requirements set forth in the FDRTC and the performance criteria established in the EPA-approved CMI Design Report, EPA shall notify Permittee in writing of those activities that must be undertaken to meet the objectives of the Corrective Measures and shall set forth a schedule for the completion of those activities. Permittee shall complete the activities in accordance with the schedule set forth in the EPA notification.

G. EVALUATION OF THE FINAL REMEDY

Commencing one year from the submittal date of the final CMI Report, the Permittee shall submit an annual progress report on the Final Remedy performance. If EPA determines that the Final Remedy will not comply with the media clean-up requirements established in the FDRTC, EPA may require the Permittee to perform additional studies and/or perform modifications to the existing Final Remedy. If necessary, EPA or the Permittee may seek modification of this Permit pursuant to 40 C.F.R. § 270.41, § 270.42, and/or § 124.5 to implement modifications to the existing Final Remedy.

H. EMERGENCY RESPONSE; RELEASE REPORTING

1. If, at any time during the term of this Permit, the Permittee discovers that a release of hazardous waste or hazardous constituents at or from the Facility is presenting or may present an imminent and substantial endangerment to human health or the environment, the Permittee shall:
 - a. Notify EPA as soon as practicable of the source, nature, extent, location and amount of such release, the endangerment posed by such release and the actions taken and/or to be taken, to the extent known, to address such release. Such notification shall be confirmed in writing within three (3) days of discovery of such release and;

- b. Unless otherwise directed by EPA, immediately take such actions as are necessary and appropriate to address such release.
- 2. Releases
The Permittee shall notify EPA in writing of the nature, source, extent, and location of a release of hazardous waste or hazardous constituents at or from the Facility within five (5) days of discovery of such release if such release:
 - a. Is not being addressed by corrective measures at the time of such discovery, or
 - b. Is not being addressed pursuant to Permit Condition II.B (Interim Measures) or Permit Condition II.H (Emergency Response; Release Reporting).
- 2. If, based on the information submitted in Permit Condition II.H.2, a release has not been adequately remediated to be protective of human health and the environment, EPA may require the SWMU and/or AOC to be included in a RCRA Facility Investigation (Section II.C) or may require Interim Measures (Section II.B).
- 3. Nothing in this Permit shall limit EPA's authority to undertake or require any person to undertake response action or corrective action under any law, including but not limited to, Section 104 or 106 of CERCLA, 42 USC § 9604 or 9606, and Section 7003 of RCRA, 42 USC § 6973. Nothing in this Permit shall relieve the Permittee of any obligation it may have under any law, including, but not limited to, Section 103 of CERCLA, 42 USC § 9603, to report releases of hazardous waste, hazardous constituents or hazardous substances to, at or from the Facility.

I. SOLID WASTE MANAGEMENT UNIT ASSESSMENT

- 1. The Permittee shall notify EPA, in writing, of any newly identified SWMU at the Facility, no later than thirty (30) days after the date of discovery. The notification shall include, but is not limited to, the following known information:
 - a. A description of the SWMU type, function, dates of operation, location (including a map), design criteria, dimensions, materials of construction, capacity, ancillary systems (e.g., piping), release controls, alterations made to the unit, engineering drawings, and all closure and post-closure information available, particularly whether wastes were left in place.
 - b. A description of the composition and quantities of solid wastes processed by the units with emphasis on hazardous waste and hazardous constituents.
 - c. A description of any release (or suspected release) of hazardous waste or hazardous constituents originating from the unit. Include information on

- the date of release, type of hazardous waste or hazardous constituents, quantity released, nature of the release, extent of release migration, and cause of release (e.g., overflow, broken pipe, tank leak). Also, provide any available data that quantifies the nature and extent of environmental contamination, including the results of soil and/or groundwater sampling and analysis efforts. Likewise, submit any existing monitoring information that indicates releases of hazardous waste or hazardous constituents has not occurred or is not occurring.
- d. A discussion of the need for and feasibility of implementing interim measures immediately.
2. Upon receipt of the notification of any newly identified SWMU, EPA will determine the need for corrective action at such SWMU. If corrective action is necessary to protect human health or the environment, EPA will determine whether a supplemental RFI will be performed, and the need for and scope of any Interim Measures.
3. A supplemental RFI must be conducted within ninety (90) days of EPA's approval of the supplemental RFI Work Plan. EPA's determination shall either specify the media and/or parameters to be investigated or shall require the Permittee to propose and justify the selection of media and/or parameters.
4. Within the time specified in the approved supplemental RFI Work Plan, the Permittee shall submit the supplemental RFI Report.

In lieu of a supplemental RFI, the Permittee may propose either to incorporate any newly identified SWMU into an ongoing RFI or to submit a proposal for the performance of corrective measures at such newly identified SWMU. Any such proposal shall be submitted to EPA along with notification of the discovery of the SWMU. Incorporation of any newly identified SWMU into an ongoing RFI shall be through the submission of an RFI Work Plan Addendum by the Permittee. Any such RFI Work Plan Addendum shall receive approval by EPA prior to initiation of the related RFI work.

J. GUIDANCE DOCUMENTS

All work to be performed at the Facility pursuant to this Permit shall be in general accordance with applicable EPA RCRA corrective action guidance available at: http://www.epa.gov/reg3wcmd/ca/ca_resources.htm

K. RECORDKEEPING

Upon completion of closure of any current or future SWMU, the Permittee shall maintain in the Facility operating record, documentation of the closure measures taken.

EPA and its authorized representatives shall have access to the Facility at all reasonable times for monitoring compliance with the provisions of this Permit. The Permittee shall use its best efforts to obtain access to property beyond the boundaries of the Facility at which corrective action is required by this Permit (see Section 3004(v) of RCRA, 42 USC § 6924(v) and 40 C.F.R. § 264.101(c)); (1) for itself and any contractor of the Permittee for the purpose of taking corrective action required by this Permit, and (2) for EPA and its authorized representatives for the purposes described in this paragraph.

M. COMPLETION OF REMEDY

Within ten (10) days of receipt of notification by EPA that the Final Remedy is complete, the Permittee shall submit a written certification to EPA, by registered mail, stating that the remedy has been completed in accordance with the requirements of this Permit. The certification must be signed by the Permittee and by an independent registered professional engineer. In cases where no other Permit Conditions remain, the Permit may be modified not only to reflect the completion determination, but also to change the expiration date of the Permit to allow earlier permit expiration in accordance with 40 C.F.R. Part 124, § 270.41, and § 270.42, as applicable.

7.11.19

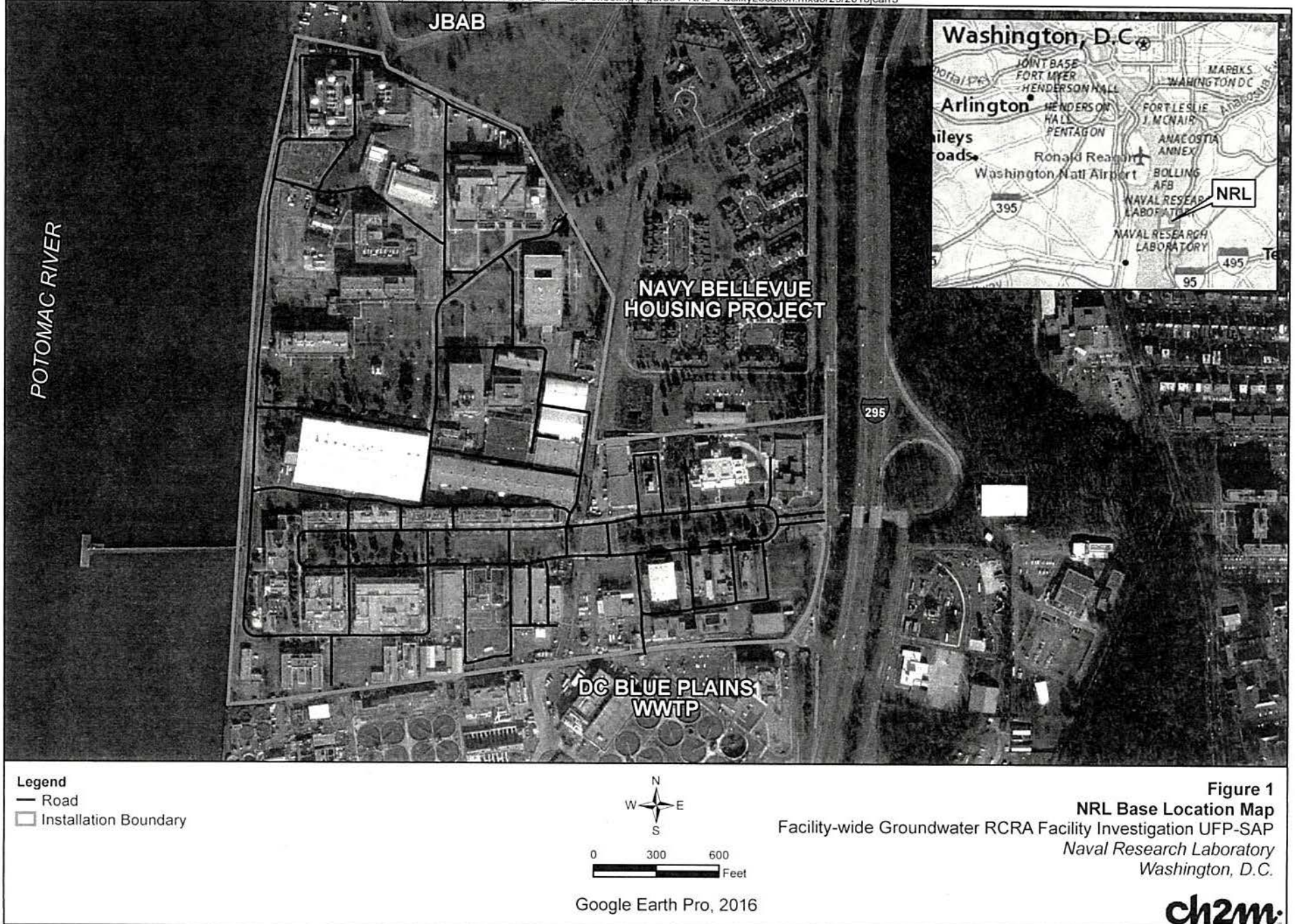
Date Signed



John A. Armstead, Director
Land, Chemicals, and Redevelopment Division
EPA Region III

ATTACHMENT A – Site Map

ATTACHMENT B - Final Decision and Response to Comments



ATTACHMENT B - Final Decision and Response to Comments

ATTACHMENT B - Final Decision and Response to Comments

**ENVIRONMENTAL PROTECTION AGENCY
REGION III**

**FINAL DECISION
NAVAL RESEARCH LABORATORY
4555 OVERLOOK AVE SW
WASHINGTON, D.C 20375-5320**

PURPOSE

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC or Final Decision) to the Naval Research Laboratory (NRL) located in Washington, D.C. (hereinafter referred to as the Facility).

The Facility is subject to the Corrective Action program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901 et seq. The Corrective Action program is designed to ensure that certain facilities subject to RCRA have investigated and addressed releases of hazardous waste and hazardous constituents that have occurred at their property.

NRL has conducted numerous investigations and submitted multiple reports to EPA under the RCRA Corrective Action Facility Lead Agreement (FLA) signed by NRL on August 19, 2003.

On July 25, 2017, EPA issued a Statement of Basis (SB) in which it described the information gathered during environmental investigations at the Facility, and proposed a Final Remedy for the Facility. The SB is hereby incorporated into this FDRTC by reference and made a part hereof as Attachment A.

PUBLIC COMMENT PERIOD

Consistent with the public participation provisions under RCRA, EPA solicited public comment on its proposed final remedy for the Facility. On July 25, 2017, notice of the SB was published on the EPA website and in The Washington Times newspaper. Comments on the proposed remedy were submitted by NRL. All the comments received by EPA during the public comment period are included and made a part hereof as Attachment B, EPA RESPONSE TO COMMENTS. Based on the comments received during the public comment period, EPA has determined it is not necessary to modify its proposed remedy as set forth in the SB; thus, the remedy proposed is the Final Remedy selected by EPA for the Facility.

FINAL DECISION

EPA's Final Remedy for the forty-eight (48) solid waste management units (SWMUs) and fifty-five (55) areas of concern (AOCs) listed on Table 1 of the SB is Corrective Action Complete without Controls.

EPA's Final Remedy for the five (5) SWMUs listed on Table 2 of the SB is Corrective Action Complete without Controls for Soils.

EPA's Final Remedy for the four (4) SWMUs listed on Table 3 of the SB is Corrective Action Complete with Controls.

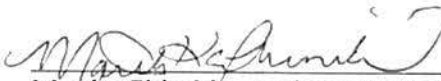
SWMUs 20 and 23 were not addressed in the SB. SWMU 20 (Former Open Burning Grounds) was ceded to the Washington DC Blue Plains Water Treatment Plant in the 1940s and has gone through significant improvements associated with the development of the Blue Plains Water Treatment Plant.

SWMU 23 (Building 82 Permitted Hazardous Waste Storage) is an active unit, which is managed under a permit issued by the District of Columbia Department of the Environment on August 22, 2014, under the District of Columbia Hazardous Waste Management Act. Environmental investigations for SWMU 23 will be conducted when the NRL identifies this SWMU for closure in accordance with its Hazardous Waste Permit.

DECLARATION

Based on the Administrative Record compiled for the corrective action at the Naval Research Laboratory in Washington, D.C., EPA has determined that the Final Remedy selected in this Final Decision and Response to Comments is protective of human health and the environment.

Date: 9-26-17


Martha Shimkin, Acting Director
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III

Attachment A: Statement of Basis, dated July 25, 2017
Attachment B: EPA Response to Comments
Attachment C: Revised Index to Administrative Record