



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

June 20, 2022

Conrad Webley
Director of Health, Safety & Environmental
Nammo Perry Inc.
10625 Puckett Road
Perry, Florida 32348

Conrad.webley@nammo.us

Re: Final Issuance of Permit
Nammo Perry, Inc
EPA ID Number: FLD 047 966 593
Operating Permit: 16099-014-HO
Taylor County, Perry, Florida

Dear Mr. Webley:

Enclosed is Permit Number 16099-014-HO for operation of a hazardous waste facility, operation of an Open Burn Unit (OBU), operation of an Open Detonation Unit (ODU) and continuation of facility-wide corrective action. This permit is being issued pursuant to Section 403.722, Florida Statutes (F.S.), and Chapters 62-4, 62-160, 62-730, and 62-780, Florida Administrative Code (F.A.C.).

Upon issuance of this final permit any party to this action has the right to seek judicial review of it under Section 120.68, F.S. by the filing of a notice of appeal under Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days after this order is filed with the Clerk of the Department.

Mr. Conrad Webley
June 20, 2022
Page 2 of 2

If you have any questions, please contact Amber Igoe by telephone at (850) 245-8783 or by e-mail at amber.igoe@floridadep.gov.

Sincerely,



Michell Mason Smith, Environmental Administrator
Hazardous Waste Program & Permitting

Enclosures

cc (with Enclosures):

Brian Bastek, EPA Region 4 bastek.brian@epa.gov
Carlos Merizalde, EPA Region 4, merizalde.carlos@epa.gov
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Ray Perry, Nammo Perry Inc. – ray.perry@nammo.us
Annie Dziergowski, U.S. Fish & Wildlife Service annie_dziergowski@fws.gov
Florida Fish & Wildlife Conservation Planning Services
FWCConservationPlanningServices@myfwc.com
Laura Olah, Citizens for Safe Drinking Water Around Badger – www.cswab.org
Frances Dunham, Open Door – francesdunham@opendoor.com



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PERMITTEE:
NAMMO PERRY INC.

I.D. NUMBER: FLD 047 966 593
PERMIT NUMBER: 0016099-14-HO
DATE OF ISSUE: JUNE 20, 2022
EXPIRATION DATE: March 12, 2026

ATTENTION:
CONRAD WEBLEY
DIRECTOR OF HEALTH, SAFETY
ENVIRONMENTAL

COUNTY: Taylor
PROJECT: OPERATION OF A HAZARDOUS WASTE FACILITY,
MISCELLANEOUS OPEN BURN UNIT (OBU), A
MISCELLANEOUS OPEN DETONATION UNIT (ODU) AND
CONTINUATION OF FACILITY-WIDE CORRECTIVE ACTION.

Pursuant to authorization obtained by the Florida Department of Environmental Protection (FDEP) under the Resource Conservation and Recovery Act [42 United States Code (U.S.C.) 6901, *et seq.*, commonly known as RCRA] and the Hazardous and Solid Waste Amendments of 1984 (HSWA), this permit is issued under the provisions of Section 403.722 Florida Statutes (F.S.), and Chapters 62-4, 62-160, 62-730, 62-777 and 62-780 Florida Administrative Code (F.A.C.). This permit replaces expired permit 16099-13-HO. The above-named Permittee is hereby authorized to perform the work or operate the facility shown on the application dated September 14, 2020 supplemented by submissions dated March 9, 2021, April 29, 2021, August 12, 2021, February 1, 2022 and April 8, 2022 that are incorporated herein and collectively referred to as the "permit application." The permit application also includes any approved drawing(s), plans, and other documents that are specifically identified and incorporated by reference. Solid waste management units (SWMUs) and areas of concern (AOCs) identified to date are listed in Appendix A. The RCRA-regulated units, permitted units or permitted activities are specifically described as follows:

Open Burn Unit

To operate a hazardous waste miscellaneous open-burn unit (OBU), consisting of four burn pads for thermal treatment of reactive and shock-sensitive hazardous wastes. The unit is constructed of a six-inch thick by 75' (foot) by 105' continuous monolithic 3,000 pounds-per-square-inch (psi) concrete pad with an eight-inch by eight-inch wide concrete curb along the perimeter. The concrete surface of the unit is coated with a chemical and heat-resistant sealant. The concrete pad is constructed on top of a six-inch thick, 85' by 115' lime rock base. Four six-inch thick 3000 psi concrete burn pads with dimensions of 15' by 30' are constructed on top of the concrete pad. Each burn pad has an eight-inch high berm along the perimeter. Elevated metal burn pans constructed of cold rolled steel with maximum dimensions of 26' by 11' by 1' are placed in each concrete pad.

When necessary, removable metal screens are positioned three inches from the top of each burn pan to contain ejected large particles from the burn pan. Similar to the burn pans, burn cages constructed of cold rolled steel with maximum dimensions of 13' by 8' by 6' may be used in place of burn pans. The burn pans will be kept covered with an aluminum cover mounted over an I-beam trolley rail, when the unit is not in operation. The design specifications and materials of construction for the miscellaneous unit are described in Attachment Section I.D.2 of the 2020 permit application.

Thermal treatment of the wastes will be in accordance with the procedures described in Attachment II.A.5 of the 2020 permit application. The permittee will operate the miscellaneous unit for the thermal treatment of reactive pyrotechnic powder/composite cuttings, shavings, residues, and unacceptable parts and contaminated industrials (EPA Hazardous Waste ID Code D003). The pyrotechnic powder/composite cuttings, shavings, residues, slurries and unacceptable parts and contaminated industrial materials may also carry EPA Hazardous Waste ID Codes D001, D005, D006, D007 and D008.

Open Detonation Unit

To operate a hazardous waste miscellaneous open-detonation unit (ODU), approximately 210 feet by 210 feet, and consisting of a single detonation station (location) where operations are conducted directly on the ground surface. The maximum net explosive weight (NEW) limit is 150 pounds of waste detonable scrap per day, and 5,000 pounds per year. Procedures for safe detonation, inspections following detonation and monitoring of soil and groundwater at the ODU are described in the 2020 permit renewal application and detailed in this permit.

Corrective Action Units

Solid waste management units (SWMUs) and areas of concern (AOCs) identified to date are listed in Appendix A.

The permit authorizes thermal treatment of only onsite-generate waste as specified above.

The Permittee is required to investigate any releases of contaminants to the environment at the facility regardless of the time at which waste was placed in a unit and to take appropriate corrective action for any such releases. Pursuant to 40 Code of Federal Regulations (CFR) 260.10 [as adopted by reference in Subsection 62-730.020(1), F.A.C.], the corrective action requirements of this RCRA permit extend to all property under control of the Permittee (see Attachment A, a map of the property boundaries of the land under the Permittee's control) and to all contamination that originated from discharges at the property under control of the Permittee.

This permit is based on the premise that information and reports submitted by the Permittee prior to issuance of this permit are accurate. Any inaccuracies found in this information or information submitted as required by this permit may be grounds for termination or modification of this permit

PERMITTEE: Nammo Perry Inc.
I.D. NUMBER: FLD 047 966 593

PERMIT NUMBER: 0016099-14-HO
EXPIRATION DATE: March 12, 2026

in accordance with Section 403.727(3)(a) F.S. and Rule 62-730.290, F.A.C., and potential enforcement action.

The facility is located at 10625 Puckett Road, in Perry, Florida.

The following documents were used in the preparation of this permit:

1. **EPA's Final RCRA Facility Assessment Report**, dated August 23, 1994.
2. **EPA's Final RCRA Facility Assessment Report**, dated August 23, 1994.
3. **RCRA Part B Permit Application Open Burn Unit Revision 1**, dated July 23, 2016.
4. **Draft RCRA Part B Permit Modification Application**, submitted June 13, .
5. Review of *draft RCRA Part B Permit Modification Application*, sent via email correspondence on July 7, 2017.
6. Email correspondence, Tom Brown (Chemring) to Dawn Cinquino (FDEP, dated July 20, 2017 (summary of changes to permit modification application).
7. **RCRA Part B Permit Modification Application**, dated August 1, 2017.
8. Email correspondence, Tom Brown (Chemring) to Dawn Cinquino (FDEP), dated August 18 and 23, 2017 (soil and groundwater sampling).
9. **August 30, 2017 Meeting Summary**, sent via email correspondence on August 31, 2017 (soil and groundwater sampling).
10. **First Request for Additional Information (RAI)**, dated September 7, 2017.
11. Email correspondence, Tom Brown (Chemring) to Dawn Cinquino (FDEP), dated September 20, 2017
12. **Citizens for Safe Water Around Badger (CSWAB) Comments on Chemring application**, sent via email on October 4, 2017.
13. **Addendum to CSWAB Comments on Chemring application**, sent via email on October 4, 2017.
14. **Response to First Request for Additional Information (RAI)**, dated October 5, 2017.
15. **RAI – Partial Response Received**, dated November 28, 2017.
16. **Response to Comments for Second RAI (Incomplete RAI Response)**, dated December 27, 2017.
17. Email correspondence, Tom Brown (Chemring) to Dawn Cinquino (FDEP), dated March 5, 2018 (clarifications
18. Email correspondence, Tom Brown (Chemring) to Dawn Cinquino (FDEP), dated April 10, 2018 (updated tables).
19. **Facility Name Change**, dated May 18, 2020

20. **RCRA Part B Permit Modification Application**, dated September 9, 2020.
21. **FDEP RAI**, dated October 16, 2020.
22. **EPA RAI** dated December 14, 2020.
23. **RAI – FDEP and EPA Partial Response Received**, dated March 29, 2021.
24. **RAI- FDEP and EPA Review of Nammo’s Responses to RAI** dated April 29, 2021
25. **Air Model** received February 1, 2022.
26. **Air Model** received April 8, 2022.

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PERMITTEE: Nammo Perry Inc.
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Permit Renewal (most recent)			
Effective Date	Duration	Permit Number	Brief Description
June 20, 2022	5 years	0016099-14-HO	Operating and Facility-Wide Corrective Action Permit
Table of Permit Modifications			
Effective Date	Class*	Permit Number	Brief Description
*40 CFR Part 270.42 Appendix I-Classification of Permit Modification and/or Chapter 62-730, Florida Administrative Code.			

PART I – GENERAL AND STANDARD CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are “permit conditions” and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The Permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Sections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the Permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The Permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the Permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. This permit or a copy thereof shall be kept at the work site of the permitted activity. In the event that there is no building or reasonable repository for such a copy at the work site, an alternate location must be approved by the Department in writing.
8. The Permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted for the activities below. Reasonable time may depend on the nature of the concern being investigated.

- a. Have access to and copy any records that must be kept under conditions of the permit.
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit.
 - c. Sample or monitor any substances or parameters at any time or location reasonably necessary to assure compliance with this permit or Department rules.
9. The conditions in this permit shall take precedence over the permit application documents where there are differences between those documents and the permit conditions.
10. In accepting this permit, the Permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of the permitted activity which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted activity arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
11. The Permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the Permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
12. The Permittee shall comply with the following notification and reporting requirements:
 - a. If for any reason the Permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the Permittee shall immediately provide the Department's RCRA Manager with the following information:
 - (1) A description of and cause of noncompliance.
 - (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
 - b. The Permittee will report any event requiring emergency response or noncompliance that may endanger human health or the environment from fires and explosions or releases of hazardous waste that may endanger public drinking water supplies. The Permittee will report to the Department's RCRA Manager verbally within 24 hours, and provide a written report of the incident to the Hazardous Waste Program & Permitting Section at the address in Part I.15 or by alternate means (*e.g.*, e-mail) as approved by the Department, within five calendar

days. It is the responsibility of the Permittee to ensure receipt of the written report. The Department of Environmental Protection's 24-hour emergency telephone number is (850) 413-9911 or (800) 320-0519. During normal business hours, the Hazardous Waste Program & Permitting Section in Tallahassee may be contacted at 850-245-8707, or the DEP District Office may be contacted at (904) 256-1700 (Jacksonville).

- (1) The verbal report shall include the following information:
 - (a) The name, address, I.D. number, e-mail address, and telephone number of the facility and its owner or operator.
 - (b) The date, time, and type of incident.
 - (c) The identity and quantity of materials involved.
 - (d) The extent of any injuries.
 - (e) An assessment of actual or potential hazards.
 - (f) The estimated quantity and disposition of recovered materials.
- (2) The written report shall include all of the information in the verbal report and the following information:
 - (a) A description and cause of the noncompliance.
 - (b) If not corrected, the expected time of correction, and the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.
- c. Within 15 calendar days of discovery per Part V.A.1.b, the Permittee shall notify the Department's RCRA Manager in writing of any newly discovered release(s) of contaminant(s) to the environment resulting in a de Minimis cleanup (Part V.A.4) or a suspected new AOC(s) and/or SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means.
 - (1) The notification shall include, at a minimum, the location of the release, AOC or SWMU (hereinafter referred to collectively as "site"), and all relevant information (*e.g.*, location of site(s) on a map of appropriate scale; general dimensions of affected area; media affected; hazardous constituents released; and magnitude of release).
 - (2) The Department may conduct, or require that the Permittee conduct, confirmatory sampling in order to determine whether contamination is present (Part V.A.3). The Department will notify the Permittee in writing of the final determination as to the status of the newly discovered or suspected site.
 - (3) Depending upon the type of discovery, notification requirements of Part I.12.b may also be required.
- d. The Permittee shall comply with the "Notices" provisions of Rules 62-780.220, F.A.C., and 62-730.225, F.A.C.
 - (1) Prior to performing field activities.

- (2) When contamination beyond the facility boundary is confirmed by laboratory analysis.
 - (3) When a Temporary Point of Compliance (TPOC) is established beyond the boundary of the source property in conjunction with monitored natural attenuation or active remediation.
 - (4) When a fifth year update to the status of a TPOC is issued.
 - (5) By placing warning signs at facilities where there may be a risk of exposure to the public of environmental media contaminated with hazardous waste.
- e. The Permittee shall give written notice to the Department's RCRA manager at least 15 days prior to physical alterations or additions to the facility that could affect activities covered by this permit. The notice shall include a summary description of the project, an evaluation of the effect it will have on: the operation of a hazardous waste facility, postclosure care, the ability to investigate contamination at or from a contaminated site, and an evaluation of the effect it might have on the known or suspected contamination.
- f. Operating and Postclosure Permittees that generate hazardous waste, and all HSWA Corrective Action Permittees that are also a large quantity generator (LQG) of hazardous waste, shall submit a Biennial Report covering facility activities during the previous calendar year by March 1 of each even numbered year pursuant to Chapter 62-730, F.A.C.

13. The Permittee shall comply with the following recordkeeping requirements:

- a. Upon request, the Permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The Permittee shall hold all information required by the permit at the facility or other location designated by this permit. This includes records of all monitoring information (including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation); copies of all reports; records of all data used to complete the permit application; and all monitoring data required by 40 CFR Part 264 and Part IV and when applicable, Part VI of this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. Any Remedial Action Plan as applicable for each contaminated site and associated cost estimate(s) shall be held until a Site Rehabilitation Cleanup Order is issued.
- c. Records of monitoring information shall include all required items in Chapter 62-160, F.A.C., and the following information:
 - (1) The date, exact place, and time of sampling or measurements.
 - (2) The person responsible for performing the sampling or measurements.
 - (3) The dates that analyses were performed.
 - (4) The person responsible for performing the analyses.
 - (5) The analytical techniques or methods used.

- (6) The results of such analyses.
- d. If the Permittee generates hazardous waste, the Permittee shall retain a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced to comply with land disposal restrictions (40 CFR Part 268 and Rule 62-730.183, F.A.C.) for at least three years from the date that the waste which is the subject of such documentation was last sent to an on-property or off-property facility for treatment, storage, or disposal, or until remedial activity 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.
14. Within the timeframe requested by the Department, the Permittee shall furnish any information required by law which is needed to determine compliance with the permit. If the Department's request does not include a timeframe, the time of response is 30 days. If the Permittee becomes aware that the relevant facts were not submitted or were incorrect in the permit application or any report submitted to the Department, such facts or information shall be corrected promptly.
15. Except as otherwise specifically provided in this permit, all submittals in response to permit conditions shall be provided as described below. Submittals may be directed to alternative addresses (*i.e.* electronic submittal) and will not require a permit modification. Technical submittals (*e.g.* workplans, reports) provided in digital format must be in optical media format (Cd or DVD) or through a secured internet port (*i.e.* username/password encryption) when one is available.
- Environmental Administrator
Hazardous Waste Program and Permitting, M.S. 4560
Department of Environmental Protection
2600 Blair Stone Road, Tallahassee, Florida 32399-2400
- In addition to copies sent to Hazardous Waste Program and Permitting in Tallahassee, submittals in response to postclosure or operating permit conditions shall be sent to:
- Hazardous Waste Supervisor
Department of Environmental Protection
Northeast District Office, 8800 Baymeadows Way West, Suite 100, Jacksonville,
Florida 32256
16. All documents submitted pursuant to the conditions of this permit shall be accompanied by a cover letter stating the name and date of the document submitted, the number(s) of the Part(s) and Condition(s) of the permit affected, the E.P.A. I.D. number, and the permit number and project name of the permit involved.
17. All documents proposing modifications to the approved permit and involving the practice of engineering must be submitted to the Department for review and be signed, sealed, and certified by a Professional Engineer registered in the State of Florida, in accordance with

Chapter 471, F.S., and Subsection 62-730.220(9), F.A.C. All submittals incorporating interpretation of geological data shall be signed and sealed by a Professional Geologist registered in the State of Florida in accordance with Chapter 492, F.S., and Subsection 62-730.220(10), F.A.C.

18. All work plans, reports, schedules and other documents (“submittals”) required by this permit are subject to approval by the Department prior to implementation. The Department will review the submittals and respond in writing. Upon written approval by the Department, the Permittee shall implement all work plans, reports and schedules as provided in the approved submittal. If the Department disapproves a submittal, the Department will do one of the following:
 - a. The Department will notify the Permittee in writing of the reason(s) why the submittal does not contain information adequate to support the conclusion, alternative, plan, proposal or recommendation, or why the conclusion, alternative, plan, proposal or recommendation is not supported by the applicable criteria. In this case, the Permittee shall submit a revised submittal within 60 days of receipt of the Department’s disapproval unless an alternative deadline is approved in writing by the Department.
 - b. The Department will revise the submittal, or approve the submittal with conditions, and notify the Permittee of the revisions or conditions. In the case of work plans, the Department may notify the Permittee of the start date of the schedule within the revised or conditionally approved work plan.
19. The Permittee shall revise “Part I – General” of the Application for a Hazardous Waste Facility Permit [DEP Form 62-730.900(2)(a)] and submit the revised form to the Department within 30 days of any changes in the Part I information. Changes in the Part I information may also require changes to the Department’s 8700-12FL form.
20. The Permittee may claim that any information required to be submitted by this permit is confidential in accordance with Chapter 403.73, F.S.
21. This permit is transferable only upon written Department approval in accordance with Rule 62-4.120 and Subsection 62-730.290(6), F.A.C., as applicable. The Permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. Before transferring ownership or operation of this facility during the term of this permit, the Permittee must notify the new owner or operator in writing of the requirements of 40 CFR Part 264 and Chapter 62-730, F.A.C.
22. The following conditions apply to renewal, modification and revocation of this permit:
 - a. The Permittee shall submit a complete application for the renewal of this permit a minimum of 180 calendar days before the expiration of the permit. The permit renewal application shall be submitted in accordance with Rules 62-4 and 62-730, F.A.C.
 - b. The Department may modify, revoke, reissue, or terminate for cause this permit in accordance with Chapters 62-4 and 62-730, F.A.C.

- c. The Permittee may submit any permit modification to the Department for approval. The filing of a request for a permit modification, revocation, reissuance, termination, notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.
 - d. The Permittee shall submit the application for a permit renewal or modification to the addresses in Part I.15.
 - (1) The Permittee shall submit a fee with the permit renewal or modification application that meets the requirements of Rule 62-730.293, F.A.C. A Permittee choosing to pay the fee on an annual basis shall submit the annual fee payment no later than the anniversary date of permit issuance.
 - (2) The Permittee shall submit a copy of the cover letter accompanying the permit renewal or modification application and the fee to the following address:

Florida Department of Environmental Protection
Hazardous Waste Program and Permitting
Post Office Box 3070, Tallahassee, Florida 32315-3070
 - (3) The Permittee shall also submit notification of fee submittal, or notification of annual fee submittal, to the addresses in Part I.15.a., or by an alternate means (e.g., e-mail) as approved by the Department.
 - (4) The permit renewal or modification application fee may alternately be submitted electronically. If the Permittee intends to submit the application fee electronically, the Permittee shall obtain instructions from the Department on the proper procedures, and shall follow such instructions in making the electronic submittal. Notification per Part I.22.d.(3) is still required.
 - e. The timeframes for permit review begin on the date when the Department has received both the permit renewal or modification application and the application fee.
 - f. If the Permittee allows this permit to expire prior to Department acceptance of the certification of postclosure and termination of all corrective action, the Permittee must reapply for a permit in accordance with DEP Form 62-730.900(2), F.A.C.
 - g. Any request to modify a permit for the treatment, storage, or disposal of hazardous waste generated off-site shall include an evaluation of the applicability of, and Permittee's compliance with, the siting criteria of Section 403.7211, F.S., and Rule 62-730.182, F.A.C.
23. If and when the Permittee intends to transfer parcels to third parties, the Permittee may remove a parcel from the Facility covered by this permit, and the Department will approve the removal of the parcel so long as the parcel never contained a contaminated site, or so long as any contamination associated with the contaminated site has been addressed to the satisfaction of the Department. The Department will approve the transfer or removal of a parcel in writing.

- a. The satisfaction of the Department may be conditioned on a sale with certain legal restrictions on the future use and/or remedial activity requirements on the parcel being transferred.
 - b. Following the legal transfer of the property, a permit modification request to transfer the parcel from the permit must be made per Part I.22 within 30 days. A new facility map denoting the current property boundary and new property boundary legal description shall be submitted with the permit modification request.
 - c. Even though a parcel is no longer defined as part of the facility as a result of the permit modification (using the minor modification requirements of Subsection 62-730.290(4), F.A.C.), in the event that a previously unknown contaminated site is found on the parcel, and such contamination resulted from activities which occurred prior to the sale, the Permittee will be responsible for any corrective action along with any other persons who may have legal responsibility for the contamination (see Part V.A.1.b. regarding discovery of a new SWMU).
24. The following conditions apply to land disposal (placement) of hazardous wastes:
- a. 40 CFR Part 268 and Rule 62-730.183, F.A.C., identify hazardous wastes that are restricted from land disposal and defines those limited circumstances under 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 Part 268. Where the Permittee has applied for an extension, waiver, or variance under 40 CFR Part 268, the Permittee shall comply with all restrictions on land disposal under this Part pending final written approval of such application.
 - b. Waste identified in 40 CFR Part 268 Subpart C may not be placed in a land disposal unit without treatment unless the requirements of 40 CFR Part 268 Subparts C and/or D are met.
 - c. The storage of hazardous wastes restricted from land disposal in 40 CFR Part 268 is prohibited unless the requirements of 40 CFR Part 268 Subpart E are met.
25. The Permittee is not relieved of responsibility to clean up a release that has migrated beyond the facility boundary where off-property access is denied or revoked.
- a. The Permittee shall use all reasonable efforts, including but not limited to correspondence, telephone calls, personal contacts, drafting and redrafting agreements, and payment of a fee, to obtain access to real property necessary for work to be performed in the implementation of this permit.
 - b. If necessary access cannot be obtained by the Permittee, or if obtained, is revoked by owners or entities controlling access to the properties to which access is necessary, the Permittee shall notify the Department within five business days of such refusal or revocation. The Department may at any time thereafter seek to obtain such access as is necessary to implement the terms of this permit.
 - c. The Permittee shall reimburse the Department for any expenses that the Department is ordered to pay, or that the Department incurs in connection with its efforts to obtain necessary access to said property. The Permittee shall pay these

sums to the Department, or arrange a payment schedule with the Department, within 30 days of demand by the Department. Payments shall be performed in accordance to Part I.22.d.

26. The Permittee shall maintain compliance with 40 CFR Part 264, Subpart H - Financial Requirements and Subsection 62-730.180(6), F.A.C. Financial assurance shall be based on estimates of the costs to close the facility and to implement postclosure care and/or corrective action (including the assessment phase and interim measures - collectively referred to hereinafter as “remedial activities”) for a continuing (rolling) period of 30 years, unless this period is shortened or increased by the Department in a permit renewal or modification. Federal and State of Florida facilities are exempt from financial assurance requirements.

- a. The cost estimates must be based on the cost to the owner or operator of hiring a third party to conduct remedial activities.
- b. The Permittee shall include cost estimates with every work plan required by this permit. Cost estimates are subject to review and written approval by the Department
- c. In the event the total cost estimate for all remedial activities exceeds the amount provided by Permittee, the financial assurance instrument(s) must be increased accordingly within 60 days of the exceedance, or, for those facilities using a financial test, in the next scheduled submittal.
- d. If the cost estimate increase causes the inability of the facility to provide financial assurance through its currently selected mechanism, alternate financial assurance must be provided within 60 days.
- e. All submittals relating to financial assurance shall be submitted to the following address. Where financial institutions allow digital submissions, alternate submittal mechanisms may be used without requiring a permit modification.

Financial Assurance Working Group
Hazardous Waste Program and Permitting
Permitting & Compliance Assistance Program
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

27. Any dispute resolution will be conducted in accordance with Chapter 120, F.S. (Administrative Procedure Act), Chapter 28-106, F.A.C., and the Department’s existing rules and procedures.

PART II – OPERATING CONDITIONS

Part II Subpart A – General Operating Conditions

1. The Permittee shall comply with those sections of 40 CFR Part 124 specified in Subsection 62-730.200(3), F.A.C., 40 CFR Parts 260 through 268, and 40 CFR Part 270

as adopted in Chapter 62-730, F.A.C., until all hazardous waste permitting operations have ceased and the facility has been closed and released from postclosure care requirements and all facility-wide corrective action requirements.

2. The Permittee shall comply with the manifest requirements of 40 CFR 264.71 and 264.72. All manifests, both electronic and paper, must be submitted to EPA's Hazardous Waste Electronic Manifest (e-Manifest) System. The Permittee must document the reconciliation of any manifest discrepancies.
3. The Permittee shall comply with the import and export provisions of 40 CFR 262 Subpart H, the notification requirements of 40 CFR 264.12, and maintain all applicable records for Department inspection.
4. The owner or operator of a facility that is authorized by the Department to receive hazardous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping.
 - a. The Permittee that receives hazardous waste from an off-site source shall comply with the following notification and reporting requirements:
 - (1) Unmanifested Waste Report: The Permittee shall submit an Unmanifested Waste Report to the Department within 15 days of receipt of unmanifested waste.
 - (2) Manifest Discrepancy Report: If a significant discrepancy in a manifest is discovered, the Permittee shall attempt to rectify the discrepancy. If not resolved within 15 days after the waste is received, the Permittee shall immediately submit a letter report, including a copy of the manifest, to the Department.
5. Sampling and analysis of permitted and new hazardous wastes shall be conducted in accordance with the Waste Analysis Plan of the permit application.
 - a. The Permittee is liable for waste profiles supplied by generators.
 - b. Prior to acceptance of new waste codes, a permit modification per Condition I.22 is required. The need for a substantial modification should be evaluated using the criteria in Subsection 62-730.182(4), F.A.C.
6. The Permittee shall comply with 40 CFR 264.17, 264.176, and 264.198, with respect to ignitable and reactive wastes. The Permittee shall comply with 40 CFR 264.17, 264.177 and 264.199, with respect to incompatible wastes.
7. If this facility has suspected or confirmed environmental contamination where there may be a risk of exposure to the public, then upon direction from the Department the Permittee must comply with the warning sign requirements of Section 403.7255, F.S. and Rule 62-780.220, F.A.C. The Permittee is responsible for supplying, installing and maintaining the warning signs.

8. The Permittee shall comply with the security provisions of 40 CFR 264.14 and the facility security provisions of the permit application.
9. Facility personnel must successfully complete the approved training program indicated in the permit application, within six months of employment or assignment to a facility or to a new position at the facility. Verification of this training must be kept with the personnel training records and maintained at the facility. Personnel shall not work unsupervised until training has been completed. The training must be reviewed by facility personnel at least annually. The Permittee shall maintain an updated list of personnel handling hazardous waste and their respective job titles at the facility.
10. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
11. The Permittee shall comply with the following conditions concerning preparedness and prevention:
 - a. At a minimum, the Permittee shall have the equipment available at the facility which is described in the Prevention and Preparedness Plan (PPP) of the permit application. The Permittee shall visually inspect and maintain the facility emergency and safety equipment (40 CFR 264.32) listed in the PPP, in accordance with 40 CFR 264.15, 40 CFR 264.33 and the permit application, during permitted activities. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, in accordance with the requirements of 40 CFR 264.15(c). A schedule for the inspection of the facility emergency and safety equipment must be maintained in the operating record of the facility. Changes, additions, or deletions to the schedule must be approved in writing by the Department.
 - b. The Permittee shall maintain immediate access to an internal communications or alarm system, fire protection equipment, spill control equipment and decontamination equipment.
 - c. The Permittee shall maintain arrangements with State and local authorities as required by 40 CFR 264.37, and with local medical facilities and emergency response personnel. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record. Authorities/facilities include local fire and police departments, sheriff's office, state police, hospitals, ambulance services and emergency medical technicians, and state and local emergency response centers.
 - d. The Permittee shall maintain aisle space, as required pursuant to 40 CFR 264.35, to allow the unobstructed movement of personnel, fire protection, and emergency response equipment to any area of the facility.
12. The Permittee shall comply with the following conditions concerning the Contingency Plan (CP):

- a. The Permittee shall immediately carry out the provisions of the permit application, and follow the emergency procedures described by 40 CFR 264.56, whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which threatens or could threaten human health or the environment. The Permittee shall give proper notification if an emergency situation arises and, within five calendar days, must submit to the Department's RCRA Manager a written report which includes all information required in Condition I.12.b.
 - b. The Permittee shall comply with the requirements of 40 CFR 264.53. Electronic copies of the CP must be submitted to the authorities/facilities in Condition II.A.11.c., provided the entity has the capability to receive electronic submittals.
 - c. Within seven calendar days of meeting any criterion listed in 40 CFR 264.54(a), (b) or (c), the Permittee shall amend the plan and submit the amended plan for Department approval. Any other changes to the plan must be submitted to the Department within seven days of the change. Amendments to the plan must be approved in writing by the Department. All approved amendments or plans must be distributed to the State and local authorities in Condition II.A.11.c.
 - d. The Permittee shall comply with the requirements of 40 CFR 264.55, concerning the emergency coordinator.
 - e. The Permittee shall perform at a minimum, an annual review of the Contingency Plan to ensure that it is up to date and contains current information. The date of review should be noted in the written operating record at the facility.
13. The Permittee shall develop and maintain a Waste Minimization Program Plan. The Permittee shall maintain copies of the certification required by this Condition in the facility operating record for a minimum of three years. The Permittee must certify, no less often than annually, the following per 40 CFR 264.73(b)(9):
 - a. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable.
 - b. The proposed method of treatment, storage or disposal is the most practicable method available to the Permittee, which minimizes the present and future threat to human health and the environment.
14. The Permittee shall keep a written operating record at the facility that includes the following:
 - a. The results of any waste analysis.
 - b. Copies of hazardous waste manifests for three years. For e-manifests, this condition is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided such copies are readily available for viewing and production if requested by the Department inspector.
 - c. The results of inspections.
 - d. The closure plan, postclosure plan, and remedial action (corrective measures) plans as applicable for each contaminated site, along with cost estimates for each plan.

- e. Inspections of emergency and safety equipment.
 - f. Biennial reports.
 - g. Personnel training records.
 - h. The Waste Minimization Program Plan and annual certification of waste minimization.
 - i. The description and quantity of each hazardous waste received or generated.
 - j. The location and quantity of each hazardous waste within the facility.
 - k. Notices to generators as specified in 40 CFR 264.12(b).
 - l. A log of dates of operations and unusual events.
 - m. A summary report and details of incidents that require implementation of the contingency plan.
 - n. The date of annual review of the Contingency Plan.
 - o. Monitoring and test data for 40 CFR 264 Subparts AA, BB, and CC requirements.
 - p. Documentation that local officials have refused to enter into preparedness prevention arrangements with the Permittee, when applicable.
15. Where a provision in Chapter 62-780, F.A.C., conflicts with a specific, applicable requirement of 40 C.F.R. Part 264, the C.F.R. provision controls (Paragraph 62-730.225(1)(a), F.A.C.).

Part II Subpart B.1 – Specific Operating Conditions – Open Burn Unit

1. The Permittee is only allowed to thermally treat the burn pads and burn cages the following hazardous wastes generated at the facility listed in Attachment II.A.5, Table II-A.5-1 in the 2020 permit application and in accordance with Work Instruction ID No. WI-TT-1003, Title: Thermal Treatment of Reactive Waste:
 - a. Pyrotechnic powder/composite cuttings, shavings, residues, slurries, and unacceptable parts (EPA Waste Code D003 which may also carry EPA Hazardous Waste ID Codes D005, D006, D007, and D008; and
 - b. Industrial materials contaminated with reactive wastes (EPA Hazard Waste Codes D005, D006, D007 and D008).
2. The Permittee shall not thermally treat more than 500 pounds of hazardous waste on any single day, and no more than 50,000 pounds of hazardous waste per year at the OBU. The Permittee shall not accept any hazardous waste for thermal treatment, or any other purpose, that is generated off-property without receiving written permission from the Department.
3. The Permittee shall comply with the waste compatibility requirements of 40 CFR 264.17(b).
4. The Permittee is prohibited from:
 - a. Treating on the burn pad(s) waste streams not identified and described in condition 1 of this Subpart.

- b. Treating on the burn pad(s) any waste solvents in any form other than propellant or oxidizer contaminated with solvents and the solvents necessary to prevent detonation and facilitate safe burning of certain high explosives.
 - c. Treating inert (i.e. nonhazardous) waste on the burn pad(s) except for the group 5- Contaminated Industrial Materials, listed in Attachment II.A.5 of the 2020 permit application and are necessary for the safe handling of DOD/DOT Class 1.3 material.
 - d. Boiling off any water/liquid phase, except incidental evaporation of moisture or stormwater, on the burn pad.
 - e. Performing simultaneous treatment at multiple burn pans. Thermal treatment shall only be performed at one burn pan at a time.
5. The Permittee shall comply with the following requirements prior to thermal treatment:
- a. Waste may be placed within the pans on the pad only when a thermal treatment event is planned within four hours.
 - b. Waste shall not be placed on the burn pans unless the burn pans, containment pad, and the ground surface immediately around the pad has been cleared of residue from the previous thermal treatment event, per Condition II.B.1.7 of this permit.
 - c. The following meteorological conditions must be met before thermal treatment shall occur:
 - i. An absence of thunderstorms and lightning within two hours of thermal treatment.
 - ii. The surface wind shall be less than fifteen miles per hour for the period two hours before and after thermal treatment.
 - iii. For treatment of lead azide, and MK 46 igniter components, the wind speed shall be between 4.5 and 1 miles per hour for the period two hours before and after thermal treatment.
 - iv. Relative humidity shall be greater than 35%.
 - d. Thermal treatment shall take place only during the time period between 8:00 am and 5:00 pm, Monday through Fridays, and excluding holidays.
 - e. All hazardous waste destined for thermal treatment shall be collected, transported, placed on the burn pad(s) in accordance with the Thermal Treatment of Hazardous Waste, Work Instruction ID No: WI-TT-003.
 - f. On the day of each scheduled thermal treatment event and prior to transporting the waste to burn pad(s) the Permittee shall:
 - i. Verify and record the meteorological conditions listed in conditions in condition 5.c of this Subpart;
 - ii. Inspect the concrete pads for hot spots, cracks and loose or broken floor or berms;
 - iii. Inspect burn pans/burn cages for hot spots or loose parts;
 - iv. Remove all unauthorized personnel and vehicles within a 1,250-foot radius of the perimeter of the burn pad;
 - (1) Inspect the water truck for sufficient water quantity;
 - (2) Check the water pump on the water truck to see if it is operational;and

- (3) Maintain written records of all information observed per the requirement of this condition and keep them as part of the operating records.
6. If unexpected meteorological conditions arise or if technical difficulties (such as a hangfire) develop, the Permittee may allow the material to remain on the pad under the following conditions:
 - a. The pad is covered as soon as safety conditions allow;
 - b. The waste is treated in compliance with condition 5 of this Subpart as soon as conditions become safe; and
 - c. No additional waste is laced on the pad.
 - d. The Permittee shall remove the waste from the burn pad(s) within four hours if the Permittee determines that meteorological conditions or technical difficulties will prevent the treatment on the same day, and the waste can be removed safely from the burn pad(s). The cause for the postponement shall be recorded in the operating record.
7. The Permittee shall complete the removal of ash, spilled or leaked waste and other residues from the burn pan(s), concrete surfaces and surrounding soils on the same day of the thermal treatment in accordance with the POST THERMAL TREATMENT PROCEDURE, Work Instruction ID No.: WI-TT-1004 and management of M228 and M213 Fuse Burn Residue, Work Instruction ID No.: WI-TT-1011, contained in the 2020 permit application. The residue may be removed the next day if the Permittee determines at the end of the day the residue is too hot to manage. Any accumulated precipitation within the burn pad must be removed within twenty-four hours and handled as appropriate.
8. The Permittee shall manage ash and other residues removed from the burn pad(s) in accordance with the procedures described in Attachments II.A.5, II.A.6, and II.I.1 of the 2020 permit application.
9. The Open Burn operations shall be performed in accordance with the procedures outlined in the Product Work Instructions in the 2020 permit renewal application, a copy of which shall be maintained at the facility. Minor modifications to the Product Work Instructions for the OBU may be made with written Department approval; major revisions will require a permit modification. Thermal treatment of the hazardous waste shall be conducted by qualified personnel experienced in handling such reactive material under the supervision of a law enforcement official, Department official, bomb squad official, or other agency personnel or Nammo Perry, Inc. who has received a Blaster Permit as issued by the Bureau of Explosives and Fire Equipment, Division of State Fire Marshal's Office, Department of Financial Services.
10. The Permittee shall provide adequate fire protection to ensure confinement and control of any fire resulting from operation as specified in the Contingency Plan, Subattachment II.A.4.b-1 of the 2020 permit application. The Permittee shall notify the local fire department of the on-going nature of on-property thermal treatment of reactive waste and

shall allow local fire officials (Florida Forest Service or Taylor County Fire Marshal) to observe and provide additional fire protections.

11. All the burn pads and cages that are determined by the Permittee to be no longer useable for thermal treatment shall be decontaminated and disposed of within 30 days of such determination in accordance with the decontamination and disposal procedures described in Attachment II.I.1 of the 2020 permit application. A report describing all the decontamination activities must be developed within fifteen days of completion of decontamination and kept as part of the operating records.
12. The Permittee shall conduct inspections of the OBU on each day of the thermal treatment and weekly when the OBU is not in operation to detect precipitation, stains, residues from incomplete combustion, accumulation of stormwater and integrity of burn pads and concrete pads including berms. If a significant deterioration of the concrete pads or joint sealant material is noted during inspections, the Permittee shall reevaluate the need for repairing the OBU and the need for protective coating on the burn pad. All of the inspection reports, including corrective actions, must be recorded and kept as part of the operating records. [40 CFR 264.15]
13. The Permittee shall implement appropriate remedial actions for the problems discovered during the inspections conducted pursuant to Condition 12 of this Subpart. For problems that cannot be remediated within forty-eight hours, the Permittee shall notify the Department within three working days and follow up with a written report within fourteen days of discovering such problems. The report must include descriptions of the remedial actions taken. The Permittee shall cease operation of the burn pad(s) until completion of the necessary repairs.
14. The Permittee shall keep a quarterly report describing the activities at the burn pad(s) as described in the Open Burn Operating Record, Work Instruction No.: WI-TT-1005 of the 2020 permit application. These reports shall be completed by the twentieth of the month following the quarter and be available for review upon the Department's request. The quarterly report shall include the following information:
 - a. Description and quantity of each hazardous waste received and treated at the OBU, including quantity burned per pan per day.
 - b. Dates and time of its treatment.
 - c. Location and quantity of each hazardous waste at each location with the accumulation's areas material storage buildings and the end of the reporting period as shown in Figures I.B.3-2 and I.B.3-3 of the 2020 permit application.
 - d. Summary reports and details of all incidents that require implementation of the contingency plan at the OBU.
 - e. List of personnel present at each event.
 - f. Weather conditions including humidity, weather forecast, wind speed and wind direction at each event.
 - g. If treatment was postponed due to weather conditions, the date of postponement and quantity of the waste.

- h. Copies of manifests showing disposition of burn residues and/or the quantity of burn residues on the property at the end of the reporting period.
 - i. Details of any problems discovered during inspections conducted pursuant to condition 12 of this Subpart, any complaints received from the public, and any remedial actions taken.
- 15. The Permittee shall maintain compliance with the Environmental Performance Standards listed in 40 CFR 264.601.

Part II Subpart B.2 – Specific Operating Conditions – Open Detonation Unit

- 1. The Permittee is only allowed to thermally treat by open detonation the following hazardous wastes generated at the facility listed in Attachment II.A.5, Table II.A.5-1 in the 2020 permit application and in accordance with Work Instruction ID No.: WI-TT-1003, Title: Thermal Treatment of Reactive Waste:
 - a. Pyrotechnic powder/composite cuttings, shavings, residues, slurries and unacceptable parts (EPA Hazardous Waste ID Code D003 which may also carry EPA Hazardous Waste ID Codes D005, D006, D007, and D008); and
 - b. Industrial materials contaminated with reactive wastes (EPA Hazardous Waste Code D003 which may also carry EPA Hazardous Waste Codes D005, D006, D007, and D008).
- 2. The Permittee shall only treat at the ODU detonable scrap that are generated during the NPI manufacturing process and which cannot be burned at the OBU solely because of its detonability. These waste scraps may contain hazardous waste codes D001, D003, D005, D006, D007 and D008 as noted in Condition II.B.2.1. Energetic wastes items such as detonation cord, scrap composition, and grain that are allowed to be burned at the OBU may also be treated by detonation at the ODU. Department approval shall be obtained prior to performing thermal treatment on new waste streams.
- 3. The Permittee shall conduct Open Detonation Treatment operations only at the ODU depicted on Attachment B. Operation of the ODU shall be conducted in accordance with the procedures detailed in the 2020 permit modification application.
- 4. The ODU shall be located at least 1,250 feet from the property boundary in accordance with 40 CFR 265.382.
- 5. The ODU consists of a clear, graded, square surface, approximately 210 feet by 210 feet, as shown on Attachment C. A single detonation station, or point (denoted as a “detonation pit” in the 2017 permit modification application), is located in the center of the ODU. A small berm with the crest at an elevation of 35-feet NAVD is located about 80 feet from the center of the ODU on the east and south sides of the unit shown on Attachment C. Prior to each treatment operation, the location of the detonation station within the ODU shall not be moved without written approval of the Department.
- 6. The Open Detonation operations shall be performed in accordance with the procedures outlined in the Product Work Instructions, contained in the 2020 permit modification

application, a copy of which shall be maintained at the Facility. Minor modifications to the Product Work Instructions for the ODU may be made with written Department approval; major revisions will require a permit modification. Thermal treatment of the hazardous waste shall be conducted by qualified personnel experienced in handling such reactive material under the supervision of a law enforcement official, Department of Defense official, or other agency or NPI personnel who has received a Blaster Permit as issued by the Bureau of Explosives and Fire Equipment, Division of State Fire Marshal's office, Department of Financial Services.

7. The Permittee shall treat no more than 150 pounds in Net Explosive Weight (NEW) of waste detonable scrap per day, and no more than 5,000 pounds per year NEW of waste detonable scrap at the ODU. Multiple detonations may occur on the same day so long as the 150-pound daily limit for NEW is not exceeded. The total combined NEW for each treatment shall consist of the explosive weight of all energetics contained in the munitions item, along with the donor material, shall not exceed 300 pounds at any time.
8. Detonations with total NEW (munitions plus donor) exceeding 200 pounds may be buried with two feet of cover sand to absorb excess energy. Adequate sand reserves shall be kept in the ODU for such events.
9. The Permittee shall maintain an operating record describing the open detonation activities. The record shall include the following information:
 - a. Description and quantity of each hazardous waste received and treated at the unit;
 - b. Dates and time of its treatment;
 - c. Summary reports and details of all incidents that require implementation of the contingency plan at the unit;
 - d. Weather conditions to include humidity, weather forecast, wind speed and wind direction at each event;
 - e. Copies of manifests showing disposition of all residues disposed of as hazardous waste and/or the quantity of the residues on site; and
 - f. Details of any problems or unexploded energetic materials discovered during inspections, any complaints received from the public, and details of remedial actions taken.
10. The Permittee shall implement the management procedures for the ODU outlined in the 2020 permit renewal application.
11. The Permittee shall inspect the ODU on each day of thermal treatment, and weekly when the unit is not in operation, to detect precipitation, stains, residues from incomplete combustion, accumulation of stormwater and integrity of the detonation station. Logs of the inspections shall be kept as part of the operating record for the facility.
12. The following meteorological conditions must be met before thermal treatment in the ODU shall occur:
 - a. An absence of thunderstorms and lightning within two hours of thermal treatment.

- b. The surface wind speed shall be less than fifteen miles per hour for the period two hours before and after thermal treatment.
 - c. For treatment of lead-containing compositions that might contain lead azide, lead styphnate, lead dioxide, lead tetraoxide, and lead chromate), the wind speed shall be between 4,5 and 15 miles per hour before and after thermal treatment.
 - d. Relative humidity shall be greater than 35%.
- 13. If any of the meteorological conditions in Condition 12 change after a detonation has been set and wired, treatment may proceed if it is determined by the explosive specialist that it would be unsafe to either leave the explosive in-place without detonating, or remove the explosives for later treatment. Waste slated for detonation shall be set at the detonation station no more than one (1) hour prior to treatment. Delays to ensure safe treatment may extend the time before detonation up to an additional three (3) hours. If meteorological conditions delay the treatment, or if technical difficulties arise delaying the treatment, the waste may remain on the detonation station provided the following are met:
 - a. The waste is covered with a secure water-proof tarp as soon as safety conditions allow.
 - b. No additional waste is placed at this detonation station during the day.
 - c. The waste is treated, in compliance with this permit, as soon as the conditions become safe.
 - d. If treatment cannot be accomplished the same day, the Permittee shall remove the waste from the detonation station after four hours provided the waste can safely be moved. The Permittee shall record in the operating record a description and quantity of the waste that is removed.
 - e. The Permittee shall record in the operating record the cause of the delay.
- 14. Thermal treatment shall take place only during the time period between 8:00 a.m. and 5:00 p.m., Mondays through Fridays, and excluding holidays. Open detonation shall not occur on the same days as Open burn treatment operations.
- 15. The Permittee shall provide adequate fire protection to ensure confinement and control of any fire resulting from the operation as specified in the Contingency Plan, Subattachment II.A.4.b-1 of the 2020 permit application. The Permittee shall notify the local fire department of the on-going nature of on-property thermal treatment of reactive waste, and shall allow local fire officials (Florida Forest Service or Taylor County Fire Marshal) to observe and provide additional fire protections.
- 16. On the day of each scheduled thermal treatment event and prior to transporting the waste from to the open detonation location, the Permittee shall:
 - a. Verify and record the meteorological conditions listed in Condition 12 of this Subpart.
 - b. Inspect the ODU for fragments, soil staining, residues, and standing water;
 - c. Ensure that the ODU has been cleared and graded from previous treatment events;

- d. Remove all unauthorized personnel and vehicles from the ODU/OBU area and:
 - i. Inspect the water truck for sufficient water quantity;
 - ii. Check the water pump on the water truck to see if it is operational; and
 - iii. Check the water truck to see if it is in position to extinguish any secondary fires that might occur.
 - e. Maintain written records of all information observed per the requirement of this condition and keep them as part of the operating records.
17. At the conclusion of each open detonation operation, the Permittee shall visually inspect the ODU for unexploded ordnance (UXO), shrapnel fragments (metallic or plastic), and ash residues to determine if energetic material remains.
- a. If discovered materials are unsafe due to their energetic nature, those materials shall be collected for immediate treatment.
 - b. All non-explosive scrap metal produced during the open detonation operation shall be collected and disposed of or recycled.
 - c. Any depression or crater created by the detonation operation shall be filled in and regarded to a flat surface with soil from the ODU.
 - d. Subsequent detonations may not begin until fugitive dust generated by the detonation or regarding activities have settled.
18. If a problem is identified during the inspections, the Permittee will implement appropriate remedial actions. If the issue cannot be resolved within 48 hours, the Permittee shall notify the Department within three business days and follow up with a written report within 14 business days of discovery. The report shall include a description of the issue and any remedial actions taken. The Permittee shall cease thermal treatment in the ODU until necessary repairs are completed.
19. If energetic materials, having been ejected from open detonation activities, are identified beyond the boundaries of the ODU, the Permittee must notify the Department immediately.
20. Based on the ambient air modeling as part of the 2020 permit renewal application is currently under review. At the time of permit issuance, additional air monitoring may be required.
21. Upon subsequent renewals (i.e., every five years), the Permittee shall re-examine new and existing alternative technologies to open detonation and submit an updated alternative technologies report with the permit application.

Part II Subpart C – Closure Conditions

- 1. The Permittee shall close the OBU and ODU in a manner that minimizes or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous waste constituents, hazardous waste decomposition products,

contaminated leachate or run-off to the groundwater, surface waters, or to the atmosphere (40 CFR Part 264.111).

2. The Permittee shall have a written Closure Plan as required by 40 CFR 264.112(a). The Closure Plan and all revisions to the plan must be kept at the facility until closure is completed, certified in accordance with 40 CFR 264.115, and accepted by the Department.
3. Modifications to the approved Closure Plan shall be in accordance with the requirements of 40 CFR 264.112(c) and Rule 62-730.290, F.A.C.
4. The Permittee shall notify the Department within seven calendar days of any determination that actions undertaken as part of closure or associated monitoring programs no longer satisfy the requirements set forth in this permit. If the Department determines that a modification of the permit is required, the Permittee shall, within 60 calendar days of notice by the Department, submit an application for a permit modification in accordance with Part II.C.3.
5. Within 90 days after receiving the final volume of hazardous waste or upon notification by the Department that closure of a unit is required, the owner or operator must treat or remove from the unit all hazardous waste.
6. The Permittee shall complete closure activities within 180 days after notification to the Department of closure and in accordance with the closure schedule in the permit application. Any changes in the time allowed for closure activities or reporting requirements shall require prior written Department approval. At least 30 calendar days prior to initiating physical closure activities, the Permittee shall prepare and submit a Closure Activities Report.
 - a. The Closure Activities Report will be in columnar format (*i.e.* a table or spreadsheet) with columns for "closure activity," "schedule date," and "completed date."
 - b. The Closure Activities Report shall be maintained and updated by the Permittee throughout the closure period, with copies submitted monthly to the Department, unless an alternate submittal schedule is approved by the Department in writing. Each report must be submitted to the Department by the tenth day of each month for the preceding month until the acceptance of physical closure by the Department. These reports can be submitted electronically.
 - c. Any deviation from the schedule or described tasks shall be fully documented in the Closure Activities Report.
7. The Permittee shall notify the Department 45 days prior to the date on which the Permittee expects to begin partial or final closure of a unit(s).
8. The Permittee shall properly decontaminate or dispose of all equipment, structures, and residues used during or resulting from the closure activities.

9. The Permittee shall manage all hazardous wastes, residues, sludges, spilled or leaked waste, or contaminated liquids and soils removed during closure of the unit(s) in accordance with the applicable provisions of 40 CFR Parts 260 through 268, including the manifest requirements. A copy of each manifest required as a result of closure activities shall be submitted to the Department with the Closure Certification.
10. The Permittee shall provide opportunities for site inspections by the Department by informing the Department at least seven days in advance of any major physical closure activity (*e.g.*, unit decontamination or removal, cap installation, soil sampling, soil removal, etc.).
11. Within 30 days of determining that all contaminated soil cannot be practically removed or decontaminated, the Permittee shall notify the Department of such determination. Within 90 days of the determination the Permittee shall submit an application for permit modifications to close the facility as a landfill (land disposal unit) and perform postclosure care as required by 40 CFR 264.
12. Within 60 calendar days of the completion of closure, the Permittee shall submit to the Department, by certified mail or hand delivery, a Closure Certification Report signed by the Permittee and an independent Professional Engineer registered in the State of Florida, stating that the unit has been closed in compliance with the Closure Plan and the conditions of this permit. The Closure Certification must be based on the Professional Engineer's own observation and knowledge of the closure activities. The Closure Certification Report must include, but not be limited to the following:
 - a. Environmental sampling data to verify closure activities.
 - b. Decontamination data.
 - c. Copies of manifests or other appropriate shipping documents for removal of all hazardous wastes and all contaminated residues.
 - d. A description of final closure activities.
 - e. A final Closure Activities Report (Condition II.C.6 of this Subpart).
13. Within 30 calendar days of submitting a Closure Certification Report for a land disposal unit, including a land disposal unit identified under Part II.C.11, the Permittee shall submit to the Department and to the local zoning authority, or the authority with jurisdiction over local land use, a survey plat indicating the type, location, and quantity of hazardous wastes disposed of within the unit with respect to permanently surveyed benchmarks in accordance with 40 CFR 264.116. For hazardous wastes disposed of before January 12, 1981 the owner or operator must identify the type, location, and quantity of the hazardous wastes to the best of the Permittee's knowledge and in accordance with any existing records. This notice is in addition to the requirement to execute a formal land use control (*e.g.*, a restrictive covenant) in order to obtain a site rehabilitation completion order based on restricted exposure risk assumptions under Chapter 62-780, F.A.C.

PART III – POSTCLOSURE CONDITIONS

Part III Subpart A – General Postclosure Conditions

Not applicable at this time.

PART IV – ENVIRONMENTAL MONITORING CONDITIONS

Part IV Subpart A – General Environmental Monitoring Conditions

1. Environmental monitoring is performed to conduct detection monitoring, ensure that the extent of contamination remains delineated, or to track the progress of corrective action. Monitoring is a dynamic activity and decisions on future actions are dependent upon prior results and site-specific conditions. The ability to alter a monitoring plan based on results and site-specific conditions is essential to a comprehensive and efficient monitoring program. Changes to the Environmental Monitoring Plan (EMP) conditions that follow can be made with written Department approval and will not require a permit modification. The Permittee shall continue to implement the approved EMP as Attachments D and E.
2. Part IV.A.3 identifies the required elements of a comprehensive EMP. An EMP is comprised of both relatively static and more frequently changing components. EMP components that may frequently change are described in Part IV.A.11 and are to be reported in Environmental Monitoring Reports (EMRs); the most current EMR represents the most current EMP. The Permittee shall ensure that all remaining EMP components are included in the EMR or clearly identified and referenced in the EMR. Note that some items may be more dynamic in nature on a site-specific basis, *e.g.*, some items in Part IV.A.3.e.
3. The EMP must address all environmental media as necessary, including groundwater, sediment, soil, and surface water. The EMP, including future revisions, must include the following elements at a minimum. Facilities with a monitoring program in place, but lacking a provision below, will submit identified provisions within 60 days of notification by the Department, or in the next Environmental Monitoring Report as directed.
 - a. The EMP shall include a map(s) showing all contaminated sites, any SWMUs and AOCs in detection monitoring, and associated monitoring wells and piezometers (including recovery or extraction, point of compliance, Temporary Point of Compliance, and background wells), surface water features pertinent to the contaminated site and surface water sampling locations, and any areas subject to soil or sediment sampling. Contaminated sites are the SWMUs and AOCs listed in Appendices A.2, A.3, and A.4.
 - b. A map(s) showing all SWMUs and AOCs shall be submitted to the Department and incorporated by reference into the EMP. The map shall be updated within 60 days of the discovery of a new SWMU or AOC (Part V.A.1.b.).
 - c. Well construction information for each well and piezometer in the EMP shall be submitted to the Department and incorporated by reference into the EMP. Well construction information shall also be submitted in an electronic format (*e.g.*,

- spreadsheet) for inclusion in the Department's WACS database (or its successor). Location of each well or piezometer shall be provided in latitude and longitude. Information on new wells and piezometers shall be submitted within 30 days of installation.
- d. The EMP shall include a table or tables listing all wells and piezometers to be sampled (or potentially sampled based on results) or measured, surface water sampling locations, and soil or sediment sampling locations (or methods for choosing locations such as grid-based) and the following information for each:
- (1) Well or piezometer depth, screened interval, surveyed ground surface elevation and surveyed top of casing elevation; surface water sampling depth(s), and soil and sediment sampling intervals.
 - (2) The regulatory status of each well or piezometer, such as assessment, extraction or recovery, point of compliance, Temporary Point of Compliance, or background well.
 - (3) The frequency of sampling for each location (in all media), such as annual, semiannual, bi-annual, not currently sampled.
 - (4) Wells where groundwater level elevations will be measured (but not sampled).
 - (5) Contaminants of concern to be sampled.
- e. The EMP shall include the following information concerning quality assurance and the laboratory practices:
- (1) A statement that all sampling and analysis activities will comply with Rule 62-160.110(5), F.A.C.
 - (2) A statement that all analyses will be conducted by a laboratory accredited by the National Environmental Laboratory Accreditation Program (NELAP) and certified by the Florida Department of Health.
 - (3) A table of proposed constituents, matrices, and analytical methods.
 - (4) A table of proposed purging and sampling methods.
 - (5) A statement that all records of monitoring information shall include all required items in Chapter 62-160, F.A.C., and Part I.13.c.
 - (6) A statement that all laboratory data will be submitted using the ADaPT quality assurance software.
 - (7) A statement that the sampling crew will follow the Department's most recent Standard Operating Procedures (SOPs) or other sampling program approved pursuant to Chapter 62-160, F.A.C.
- f. The EMP must describe how investigation derived wastes will be managed.
- g. The EMP shall include provisions for maintaining well integrity (well repair and redevelopment) and well security including locks for each well. The Permittee may demonstrate that facility security provisions negate the need for locks at a well(s), subject to Department written approval. All wells beyond the facility property boundary must be kept secure and locked when unattended.
- h. The EMP shall include a schedule for periodic submission of Environmental Monitoring Reports.

4. Wells used as part of an approved EMP may be abandoned with Department approval. The Permittee shall abandon wells in accordance with the requirements of Subsection 62-532.500(5), F.A.C.
5. The Permittee shall measure groundwater elevations every time any well is sampled as part of the approved EMP. All groundwater elevations must be measured within the same 24-hour period and prior to the sampling event. These data shall be used to determine the horizontal and vertical groundwater flow direction and flow rate for each monitoring period.
6. Total depths of all sampled wells must be determined by physical measurement to the closest 0.01-foot increment in October of each year to determine if siltation has occurred in any well. Wells are to be redeveloped as necessary.
7. The Permittee shall provide the Department with opportunities to observe groundwater sampling and split samples by providing notification either by telephone, letter, or electronically at least seven calendar days prior to each sampling event.
8. In the event a well is damaged and requires repair (not maintenance), the well shall be repaired or replaced within 30 days, or before the next sampling event, whichever occurs first.
9. All groundwater analyses shall be performed on unfiltered groundwater samples. Analyses on filtered samples may be performed by the facility, but only for its own use, unless shown to be more representative of groundwater conditions [Subsection 62-520.310(5), F.A.C.].
10. All laboratory data will be submitted using the ADaPT quality assurance software. All laboratory datasheets shall be submitted only in electronic format. ADaPT files shall accompany the electronic copy of the EMP, and shall be included in a separate folder labeled ADaPT files. The folder will contain a single Laboratory electronic data deliverable (EDD), a Field EDD, and a copy of the error log that contains all data covered by the Report. Additional information on ADaPT is available at the Department's website: <http://www.dep.state.fl.us>.
11. The Permittee shall submit Environmental Monitoring Reports (EMR) in accordance with the schedule in the approved EMP. This report can be submitted in a combined document with any Remedial Action Status Report required in Part VI of this permit. The EMR should contain the following elements:
 - a. A map showing all contaminated sites and associated monitoring wells and piezometers (including recovery or extraction, point of compliance, Temporary Point of Compliance, and background wells), surface water features pertinent to the contaminated site and surface water sampling locations, and any areas subject to soil or sediment sampling (*i.e.*, Part IV.A.3.a.).
 - b. Reports of any necessary repairs or redevelopment of the wells since the last report.

- c. Maps of groundwater flow direction(s) and plume delineation(s) (if any) on a scaled site map(s) illustrating the degree and extent of groundwater contamination using sufficient isoconcentration lines (Subparagraph 62-780.600(8)(a)(28), F.A.C.), and tables of groundwater elevation and water chemistry data.
- d. An analysis and evaluation of the current analytical results, including maps, figures, graphs and tables.
- e. Field sampling logs and associated notes, calibration logs for field equipment, and chain of custody forms.
- f. Laboratory analytical data sheets for the sampling event(s) (electronic copy only).
- g. An analysis and evaluation of the comprehensive effectiveness of the environmental monitoring program including recommendations to enhance and refine the EMP (*e.g.*, the addition or deletion of wells from the plan, changes in sampling frequency at a well, or changes in contaminants of concern).
- h. An updated table(s) containing the information in Part IV.A.3.d. The table shall also indicate the recommendations made in Part IV.A.11.g.
- i. ADaPT quality assurance electronic files per Part IV.A.10.

Part IV Subpart B – Specific Monitoring Conditions

1. The current approved EMP for soil is enclosed with this permit as Attachment D.
2. The current EMP for groundwater is enclosed with this permit as Attachment E.

Part IV Subpart C – Specific Groundwater Monitoring Requirements for RCRA Regulated Units

1. The Permittee shall comply with the detection and compliance monitoring requirements of 40 CFR 264.98, 264.99 and 264.100. The Permittee shall determine the nature and composition of groundwater contamination by determining the concentration of each constituent from 40 CFR 264 Appendix IX, less those demonstrated by affidavit to not be present, derived from or resulting from the wastestream. This sampling shall be conducted at the point-of-compliance well or wells most representative of groundwater quality, as approved by the Department based on the groundwater monitoring conducted pursuant to this part.
2. The Waste Management Area for the OBU shall be designated by an imaginary line circumscribing the OBU, the extent of the soil sampling area, and the adjacent Point of Compliance as depicted in Attachment B. The Waste Management Area for the ODU shall be designated by an imaginary line circumscribing the ODU, the extent of the soil sampling area, and the adjacent Point of Compliance as depicted in Attachments B and C.
3. The Point of Compliance shall be the south and west edge(s) of the Waste Management Area.
4. The Point-of-Compliance (POC) wells and background wells for each unit shall be as specified in the table of monitoring wells required by Condition IV.A.3. If groundwater elevations indicate a change in groundwater flow direction of the surficial or any other

affected aquifer, the Department may require the installation of additional monitoring wells and revisions to the groundwater monitoring program.

5. Upon permit issuance, the facility shall be in compliance monitoring for the OBU in accordance with 40 CFR 264.99 and detection monitoring for the ODU in accordance with 40 CFR 264.98.
6. The Compliance Period for the OBU is the number of years equal to the active life of the OBU including any waste management activity prior to permitting, and the closure period. Compliance monitoring began upon detection of RDX and aluminum above GCTLs. If the Permittee is engaged in a corrective action program at the end of the Compliance Period, the Compliance Period is extended until the Permittee can demonstrate that the applicable cleanup target levels have not been exceeded for a period of three consecutive years.
7. All POC wells and background wells shall be sampled, analyzed, and results reported in accordance with the schedule as specified in the approved Environmental Monitoring Plan required by Subpart A of this Part until the Department accepts the Certification of closure.
8. The Permittee shall abandon monitoring wells in accordance with Rule 62-532.500(5) F.A.C.

Part IV Subpart D – Cleanup Target Levels

1. Final cleanup target levels at each site are designated at the time a final remedy is approved in accordance with 62-730.225(b), F.A.C. For final remedies approved after issuance of this permit, the Permittee shall submit a permit modification per 62-730.290(1)(a), F.A.C., to update the final remedy with any new CTLs.
2. Where the PQL for a particular contaminant is greater than a calculated health-based protective concentration, the Permittee shall provide supporting documentation to request use of the PQL to serve as CTL. The Department will review and must approve prior to use. The PQL is the lowest level that can be reliably measured during routine laboratory operating conditions within specified limits of precision and accuracy. PQLs only represent final CTLs when analytical methods do not become more sensitive prior to completion of site rehabilitation. Where laboratory methods become more sensitive (to more closely approach or achieve the health-based CTL), the EMP must be modified according to General Condition I.22. The PQL is listed below if the Contaminant of Concern (COC) does not have a Groundwater Cleanup Target Level (GCTL).
3. Cleanup Target Levels
 - a. Soil CTLs

CAS #	Contaminant of Concern	Industrial SCTL (mg/kg)	Action Level (Res. SCTL) (mg/kg)
7429-90-5	Aluminum	†	80,000

7440-36-0	Antimony	370	27
7440-38-2	Arsenic	12	2.1
7440-39-3	Barium	130,000	120
7400-42-8	Boron	430,000	17,000
7440-43-9	Cadmium	1,700	82
7440-47-3	Chromium, Total	470	210
7440-48-4	Copper	89,000	150
7439-92-1	Lead	1,400	400
7439-95-4	Magnesium	†	†
7440-02-0	Nickel	35,000	340
7440-32-6	Titanium	2,038††	1,019††
7440-33-7	Tungsten	†	†
7440-66-6	Zinc	630,000	26,000
7440-67-7	Zirconium	7,500††	3,750††
No CAS	Total Recoverable Petroleum Hydrocarbons (TRPH)	2,700	460
2691-41-0	HMX	57,000††	28,500††
121-82-4	RDX	28	7.7
82-38-2	1-Methylaminoanthraquinone	PQL	PQL
7004-70-0	Nitrocellulose	PQL	PQL
100-425	Styrene	23,000	3,600
78-11-5	Pentaerythritol tetranitrate (PETN)	PQL	PQL
121-14-2	2,4-Dinitrotoluene	4.3	1.2
98-95-3	Nitrobenzene	140	18
†††	Tetrazine	PQL	PQL
122-39-4	Diphenylamine	40,000	2,000
55-63-0	Nitroglycerin	54	27
67-63-0	Isopropanol	PQL	PQL
67-64-1	Acetone	68,000	11,000
7601-89-0	Perchlorate	PQL	PQL

SCTLs are based on Table II, Rule 62-777, F.A.C., Commercial/Industrial Levels

Action Levels are based on Table II, Rule 62-777, F.A.C., Residential Levels

† No CTL - Contaminant is not a health concern.

†† No CTL listed in Rule 62-777, F.A.C. CTL is based on other sources.

Action level = ½ CTL

PQL Practical Quantitation Limit

††† Contains three isomers:

a. 1,2,3,4-tetrazine (CAS No.290-42-6)

b. 1,2,3,5-tetrazine (CAS No. 592-59-6)

c. 1,2,4,5-tetrazine (CAS No. 592-59-6)

Tetrazine will only be analyzed if a NELAP-certified laboratory is identified to perform the analysis.

F.A.C. Florida Administrative Code Mg/kg milligrams per kilogram

b. Groundwater CTLs

CAS #	Contaminant of Concern	GCTL (µg/l)
7429-90-5	Aluminum	200
7440-36-0	Antimony	6
7440-38-2	Arsenic	10
7440-39-3	Barium	2,000
7400-42-8	Boron	1,400
7440-43-9	Cadmium	5
7440-47-3	Chromium, Total	100
7440-48-4	Copper	1,000
7439-92-1	Lead	15
7439-95-4	Magnesium†	No GCTL†
7440-02-0	Nickel	100
7440-24-6	Strontium	4,200
7440-32-6	Titanium, as Titanium Dioxide*	28,000
7440-33-7	Tungsten	2,038
7440-66-6	Zinc	5,000
7440-67-7	Zirconium	175
7782-41-4	Fluoride	4,000
No CAS	Total Recoverable Petroleum Hydrocarbons (TRPH)	5,000
2691-41-0	HMX	350
121-82-4	RDX	0.3
82-38-2	1-Methylaminoanthraquinone	10
7004-70-0	Nitrocellulose	100
100-425	Styrene	100
78-11-5	Pentaerythritol tetranitrate (PETN)	11,900
121-14-2	2,4-Dinitrotoluene	0.05
98-95-3	Nitrobenzene	3.5
**	Tetrazine	PQL
116-1403	Tetrafluoroethene	43•
122-39-4	Diphenylamine	180
55-63-0	Nitroglycerin	17
67-63-0	Isopropanol	4,700***
67-64-1	Acetone	6,300
7601-89-0	Perchlorate	4
7713-14-0	Phosphorous	PQL

† Previous GCTLs for magnesium at this facility had been set at the PQL. Please see the 2020 permit modification application for more information.

PQL Practical Quantitation Limit

* The basis of this comes from the National Center for Environmental Assessment(NCEA).

** Contains three isomers:

- 1,2,3,4-tetrazine (CAS No.290-42-6)
- 1,2,3,5-tetrazine (CAS No. 592-59-6)
- 1,2,4,5-tetrazine (CAS No. 592-59-6)

Tetrazine will only be analyzed if a NELAP-certified laboratory is identified

to perform the analysis.

*** Occupational exposure value.

- No analytical method is currently available. This analyte will be monitored when a method is available and accepted by the Department.

PART V – CORRECTIVE (REMEDIAL) ACTION CONDITIONS

Part V Subpart A – General Corrective Action Conditions

1. The Conditions of this Part apply to the following:
 - a. The SWMUs and AOCs identified in Appendix A.
 - b. Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means. As used in this Part, the terms “discover”, “discovery”, or “discovered” refer to the following:
 - (1) The date the Permittee visually observes evidence of a new SWMU or AOC.
 - (2) The date the Permittee visually observes evidence of a previously unidentified release of contaminant(s) to the environment.
 - (3) The date the Permittee receives information from a credible source of the presence of a new release of contaminant(s) to the environment.
 - c. Contamination that has migrated beyond the facility boundary, if applicable.
2. The Permittee shall comply with the notification requirements for the discovery of a new SWMU in Part I.12.c.
3. Upon notification by the Department, the Permittee shall prepare and submit a Confirmatory Sampling (CS) Work Plan for known, suspected, or newly discovered sites. The Work Plan shall be submitted within 60 calendar days of notification by the Department unless the notification letter establishes a different time frame.
 - a. The CS Work Plan shall include schedules for implementation and completion of specific actions necessary to determine whether or not contamination has occurred in any potentially affected media. In order to partly or wholly satisfy the CS requirement, previously existing data may be submitted with the work plan for the Department’s consideration.
 - b. In accordance with the schedule in the approved CS Work Plan, or no later than 60 calendar days after Department’s written approval of a CS Work Plan, the Permittee shall submit a Confirmatory Sampling Report identifying those sites that are contaminated and those sites that are not contaminated. The CS Report shall include an analysis of the analytical data to support all determinations. Based on the results of the CS Report, the Department will determine the need for further investigation at sites covered in the CS Report and notify the Permittee in writing.

4. De Minimis discharge is a release of a contaminant(s) that is removed from the soil, sediment, surface water, and groundwater to cleanup target levels or Department approved site-specific background concentrations within 30 days of discovery of the release. If the Permittee intends to treat a discharge under the De Minimis discharge provision of Rule 62-780.550 or Rule 62-780.560 F.A.C., the Permittee must meet the notification requirements of Part I.12.c, and inform the Department's RCRA Manager that a De Minimis action is underway. A De Minimis Remediation Report must be submitted to the Department within 90 days of discovery of the release. The report must include a description of all actions taken in response to the discharge and the information required by the Interim Source Removal Report pursuant to paragraph 62-780.525(7)(a) F.A.C.
5. If contamination is confirmed by the Confirmatory Sampling Report, the Department will notify the Permittee to commence site rehabilitation in accordance with Rule 62-730.225 and Chapter 62-780, F.A.C., for all SWMUs and/or AOCs ("contaminated sites") identified in the notification. The Permittee shall commence and complete site assessment in the manner and within the time limits set forth in Rule 62-780.600, F.A.C., unless the notification letter specifically establishes a different time frame to commence or complete site assessment. An alternative schedule can be implemented with written Department approval.
6. The Permittee shall conduct Emergency Response Actions in accordance with Subsections 62-730.225 and 62-780.500, F.A.C. The Permittee may, or upon notification by the Department, shall conduct an Interim Source Removal action in accordance with Subsections 62-730.225 and 62-780.500 F.A.C. for any release, SWMUs, or AOCs determined necessary to minimize or prevent further migration of contaminants or to limit human or environmental exposure to contaminants.
7. If the Department or the Permittee at any time determines that any approved work plan no longer satisfies the requirements of Rule 62-730.225 or Chapter 62-780, F.A.C. or this permit for prior or continuing releases of contaminant(s) to the environment, the Permittee shall submit an amended work plan to the Department within 60 calendar days of such determination.

PART VI – REMEDY SELECTION AND IMPLEMENTATION

Part VI Subpart A – General Remedy Selection and Implementation Conditions

1. Within 90 calendar days of Department approval of a Site Assessment Report or Site Assessment Report Addendum the Permittee shall submit a Remedial Action Plan developed in accordance with Chapters 62-780 and 62-730, F.A.C. Remedial Action Plans may be performance based, including remediation options to be implemented based on changing conditions at the site.
2. The Permittee shall apply for a permit modification in accordance with Part I.22. of this permit within 30 days of a Department approved final remedy unless an alternative permit modification schedule has been approved by the Department. Final approval of

remedial action which is achieved through interim measures shall be in accordance with this condition.

3. The Remedial Action Plan shall include a provision for the Permittee to submit periodic Remedial Action Status Reports in accordance with Subsection 62-780.700(12), F.A.C. The intent to implement a different approved remedy in a performance based Remedial Action Plan can be provided in the Remedial Action Status Report. Proposals to modify a previously approved remedy in a performance based Remedial Action Plan can be provided in the Remedial Action Status Report and implemented with written Department approval. The Remedial Action Status Reports may be combined with any Environmental Monitoring Report required by Part IV.
4. When site rehabilitation (remedial action) is complete, the Permittee shall submit to the Department a Site Rehabilitation Completion Report in accordance with Subsection 62-780.750(6), F.A.C. Site Rehabilitation Completion Reports can be part of a combined document with the Remedial Action Status Report.
5. For site rehabilitation involving the cleanup of groundwater contaminated by a release from a designated regulated unit, the Permittee must demonstrate that the concentration of constituents of concern remain below cleanup goals for three consecutive years after active remediation has ceased as per 40 CFR 264.100(f).
6. When appropriate, the Department will approve completion of site rehabilitation by inclusion in a permit renewal, permit modification, or separate Site Rehabilitation Completion Order.

Part VI Subpart B – Selected Remedies

1. The selected remedy for SWMU/AOC 48, 70, 73, and 85 is Land Use Controls described in the EPA's March 26, 2001 **Approval of Final Report on Corrective Action**.
2. The selected remedy for SWMUs 19, 46, 47, 54, and 74 was excavation of contaminated soils.

A.1 List of SWMUs / AOCs requiring Confirmatory Sampling				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and Basis for Determination	Dates of Operation	Potentially Affected Media
There are no units identified as requiring Confirmatory Sampling at this time pursuant to this permit.				

A.2 List of SWMUs / AOCs requiring a Site Assessment (a/k/a RCRA Facility Investigation [RFI]) or a Risk Assessment				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and	Dates of Operation	Potentially Affected Media

		Basis for Determination		
There are no units identified at this time as requiring a Site or Risk Assessment.				

A.3 List of SWMUs / AOCs requiring a Remedial Action Plan or Natural Attenuation with Monitoring Plan (a/k/a RCRA Corrective Measures Study [CMS])				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and Basis for Determination	Dates of Operation	Potentially Affected Media
There are no units identified at this time requiring a Remedial Action Plan or a Natural Attenuation with Monitoring Plan.				

A.4 List of SWMUs / AOCs implementing a Remedial Action Plan or Natural Attenuation Monitoring Plan (a/k/a Corrective Measures Implementation [CMI])				
SWMU/AOC Number/Letter	SWMU/AOC Name	SWMU/AOC Comment and Basis for Determination	Dates of Operation	Potentially Affected Media
48	M-42 Primers Landfill	Land Use Controls - EPA March 26, 2001 Approval of Final Report on Corrective Action	1968 to approximately 1978	Soil
70	Former Sludge Drying Trenches	Land Use Controls - EPA March 26, 2001 Approval of Final Report on Corrective Action	1974 to 1983	Soil
73	Treated Wastewater Pipeline	Land Use Controls - EPA March 26, 2001 Approval of Final Report on Corrective Action	Approximately 1974 to present	Soil

85	Building 3A Discharge Area	Land Use Controls - EPA March 26, 2001 Approval of Final Report on Corrective Action	Approximately 1969 to 1992	Soil
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A.5 List of SWMUs / AOCs at which Site Rehabilitation Completion Determinations With Controls have been made

SWMU/AOC Number/Letter	SWMU/AOC Name	Unit Comment and Basis for NFA
There are no units identified at this time at which Site Rehabilitation Completion Determinations with controls have been made.		

A.6 List of SWMUs / AOCs at which Site Rehabilitation Completion Determinations Without Controls have been made

SWMU/AOC Number/Letter	SWMU/AOC Name	Unit Comment and Basis for NFA
19	Former Open Burn Unit/Test Area	EPA March 26, 2001 Approval of Final Report on Corrective Action
46	Zinc Dross/Fuse Disposal Area	EPA March 26, 2001 Approval of Final Report on Corrective Action
47	North Area Landfill	EPA March 26, 2001 Approval of Final Report on Corrective Action
54	Zinc Phosphating Line Containment	EPA March 26, 2001 Approval of Final Report on Corrective Action
74	Wastewater Treatment Ditch	EPA March 26, 2001 Approval of Final Report on Corrective Action

A.7 List of SWMUs / AOCs where No Further Action Determinations have been made based on no suspected or confirmed contamination (i.e. not 'contaminated sites' as defined by 62-780 F.A.C.)

SWMU/AOC Number/Letter	SWMU/AOC Name	Unit Comment and Basis for NFA
1	Bldg 93 Dust Collector	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
2	Bldg 95 Dust Collector	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
3	Bldg 113 Dust Collector	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
4	Reactive Waste Accumulation Bldg P28	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report

5	Reactive Waste Accumulation Bldg 77	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
6	Reactive Waste Accumulation Bldg 72	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
7	Reactive Waste Accumulation Bldg P35	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
8	Reactive Waste Accumulation Bldg P48	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
9	Reactive Waste Accumulation Bldg P23	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
10	Reactive Waste Accumulation Bldg P38	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
11	Reactive Waste Transport Trailers	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
12	Bldg 58 Weigh Station	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
13	Reactive Waste Storage Bldg P60	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
14	Reactive Waste Storage Bldg P61	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
15	Reactive Waste Storage Bldg P62	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
16	Reactive Storage Bldg P63	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
17	Reactive Waste Storage Bldg P116	EPA August 23, 1994 Final RCRA Facility Assessment (RFA) Report
20	Former Residue Drum Storage Area	EPA March 2, 1999 Final Approval of August 1998 Confirmatory Sampling (CS) Report and RFI Report Status
21	Former Residue Storage Area	EPA August 23, 1994 Final RFA Report
22	Less Than 90-day Drum Storage Pad	EPA March 2, 1999 Final Approval of August 1998 CS Report and RFI Report Status
23	Trailer TR-5	EPA August 23, 1994 Final RFA Report
24	Bldg 63 Casings Accumulation Area	EPA August 23, 1994 Final RFA Report
25	Bldg 21 Waste Accumulation Area	EPA August 23, 1994 Final RFA Report

26	NCZ Skimming Satellite Accumulation Area	EPA August 23, 1994 Final RFA Report
27	Compressor Blowdown Drums	EPA August 23, 1994 Final RFA Report
28	Residual Developer/Fixer Satellite Accumulation Area	EPA August 23, 1994 Final RFA Report
29	Bldg 113 Waste Collection	EPA August 23, 1994 Final RFA Report
30	Flare Leak Test Drum	EPA August 23, 1994 Final RFA Report
31	Flare Soapy Water Drums	EPA August 23, 1994 Final RFA Report
32	MK124 Testing Waste Drums	EPA August 23, 1994 Final RFA Report
33	Blending Operations Waste Containers	EPA August 23, 1994 Final RFA Report
34	Bldg 51 Satellite Accumulation Area	EPA August 23, 1994 Final RFA Report
35	Bldg 18 Satellite Accumulation Area	EPA August 23, 1994 Final RFA Report
36	Paint Room Satellite Accumulation Area	EPA August 23, 1994 Final RFA Report
37	Bldg 112 Floor	EPA August 23, 1994 Final RFA Report
38	Blg 112 Mop Water Drum	EPA August 23, 1994 Final RFA Report
39	M201 Waste Collection Drum (A- H)	EPA August 23, 1994 Final RFA Report
40	Used Oil Collection Drum	EPA August 23, 1994 Final RFA Report
41	Dip Tank Skimmings Drum	EPA August 23, 1994 Final RFA Report
42	Dip Tank Containment Area	EPA August 23, 1994 Final RFA Report
43	Sand Blasting Sand Drum	EPA August 23, 1994 Final RFA Report
44	Waste Dumpsters (Wooden Dumpsters and Scrap Metal Dumpsters	EPA August 23, 1994 Final RFA Report
45	Dump Truck	EPA August 23, 1994 Final RFA Report
49	Former Detonator Disposal Area	EPA August 23, 1994 Final RFA Report

50	Plating Area Floor Drain	EPA August 23, 1994 Final RFA Report
51	Bldg 21 Containment Sumps	EPA August 23, 1994 Final RFA Report
52	Chromate Line Containment	EPA August 23, 1994 Final RFA Report
53	Zinc Electroplating Line Containment	EPA August 23, 1994 Final RFA Report
55	Zinc Wastewater Sump	EPA August 23, 1994 Final RFA Report
56	Chromium Wastewater Sump	EPA August 23, 1994 Final RFA Report
57	Former Chromium Reduction Tank	EPA August 23, 1994 Final RFA Report
58	Chromium Reduction Tanks (Tanks No.5, No, 6 and No. 7	EPA August 23, 1994 Final RFA Report
59	Temporary Sludge Holding Tank	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
60	Interim Zinc Wastewater Holding Tanks (Tanks No. 1 and 2)	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
61	Zinc Wastewater Treatment Tank	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
62	Wastewater Treatment Piping	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
63	Filter Press	EPA August 23, 1994 Final RFA Report
64	Sludge Dryer	EPA August 23, 1994 Final RFA Report
65	Sludge Accumulation Areas (Bldg 114 and Asphalt Area)	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
66	Bldg 114 Floor Sump	EPA August 23, 1994 Final RFA Report
67	Filtrate Return Tank	EPA August 23, 1994 Final RFA Report
68	Spent Alkaline Cleaner Tank	EPA August 23, 1994 Final RFA Report
69	Former Sludge Tanker	EPA August 23, 1994 Final RFA Report
71	Sludge Drying Beds	EPA August 23, 1994 Final RFA Report
72	Filtrate Return Sumps	EPA August 23, 1994 Final RFA Report

76	Laboratory Septic Drainfield	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
77	Laboratory Accumulation Drums	EPA August 23, 1994 Final RFA Report
78	Building 12 Septic Drainfield	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
79	Blending Screens Washing Area	EPA August 23, 1994 Final RFA Report
80	X-ray Septic Drainfield	EPA April 15, 1998 Approval to February 5, 1998 Response to Review Comments on the (Revised) CS Report; the CS Workplan and RFI Work Plan
81	X-Ray Rinsewater Sump	EPA August 23, 1994 Final RFA Report
82	X-Ray Rinsewater Area	EPA August 23, 1994 Final RFA Report
83	Laundry Discharge Area	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
84	Compressor Discharge Area	EPA April 15, 1998 Approval to February 5, 1998 Response to Review Comments on the (Revised) CS Report; the CS Workplan and RFI Work Plan
86	Discharge Collection Area	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
87	Bldg 28 Loading/Unloading Area	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
AOC B	MK124 Testing Areas	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
AOC C	Test Grid Area	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
AOC D	Bldg 94 Loading/Unloading Area	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
AOC E	Bldg 25 Loading/Unloading Area	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status

AOC F	Paint Room	EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status
Study Area		EPA March 2, 1999 Final Approval of the August 1998 CS Report and RFI Report Status

A.8 List of RCRA Regulated Unit(s) Undergoing Compliance Monitor / List of SWMUs / AOCs referred to another program for management / List of SWMUs / AOCs referred to another program for management and considered No Further Action under RCRA

SWMU/AOC Number/Letter	SWMU/AOC Name	Unit Comment and Basis for NFA	Dates of Operation
75	Percolation Pond	This SWMU is being addressed by the Department's Industrial Waste Program	
18	Open Burn Unit	This SWMU is currently handled under the Department's Base Program Permit. In Compliance Monitoring.	
88	Open Detonation Unit	This SWMU is currently handled under the Department's Base Program Permit. In Detection Monitoring.	

PERMITTEE: Nammo Perry Inc.
I.D. NUMBER: FLD 047 966 593

PERMIT NUMBER: 0016099-14-HO
EXPIRATION DATE: March 12, 2026

EXECUTION AND CLERKING

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

**Kimberly A.
Walker**

Digitally signed by
Kimberly A. Walker
Date: 2022.06.20 16:10:42
-04'00'

Kimberly A. Walker, Program Administrator
Permitting & Compliance Assistance Program
2600 Blair Stone Road, MS 4550
Tallahassee, Florida 32399-2400

FILING AND ACKNOWLEDGMENT

FILED on this date pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Tamela Starling
Clerk

6/20/22
Date

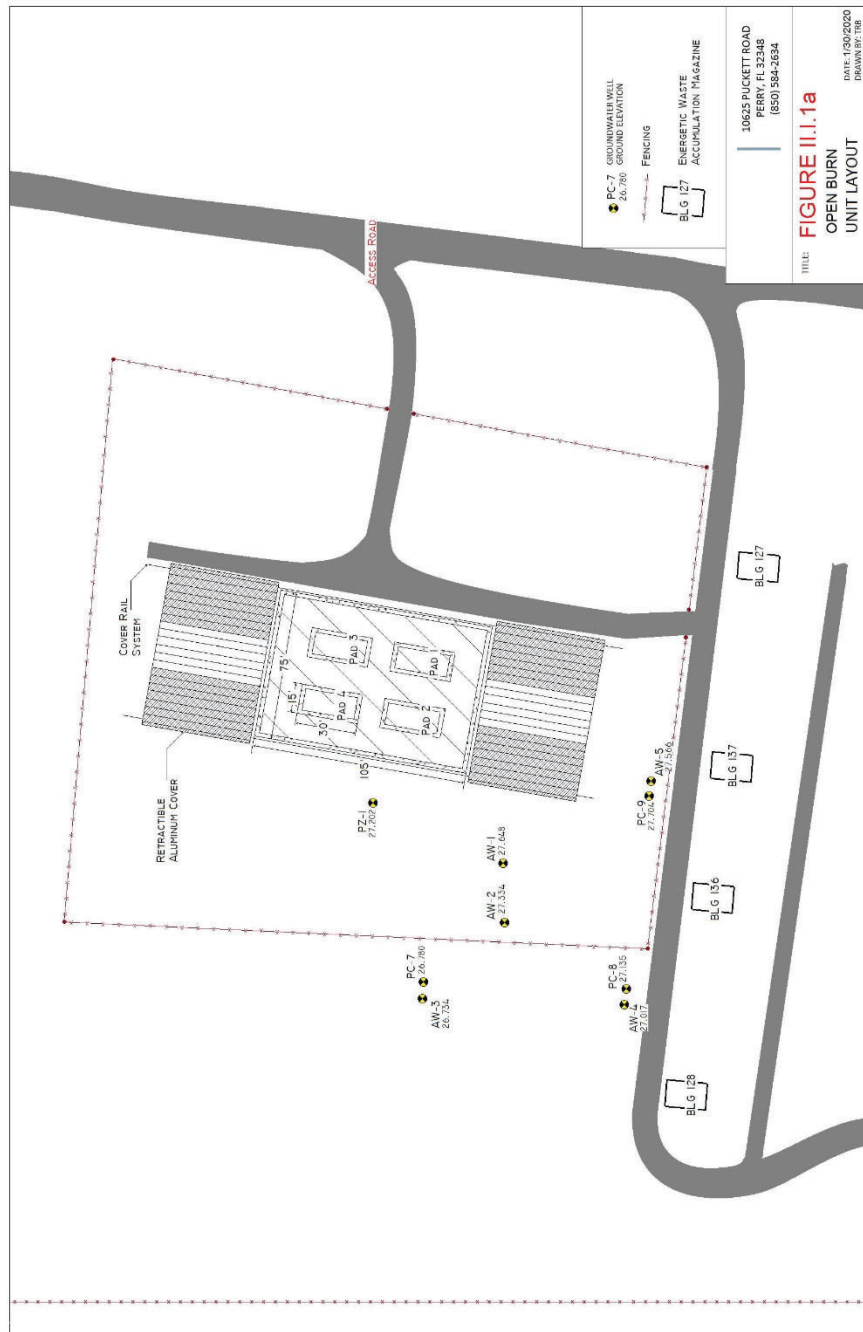
ATTACHMENT A - FACILITY MAP

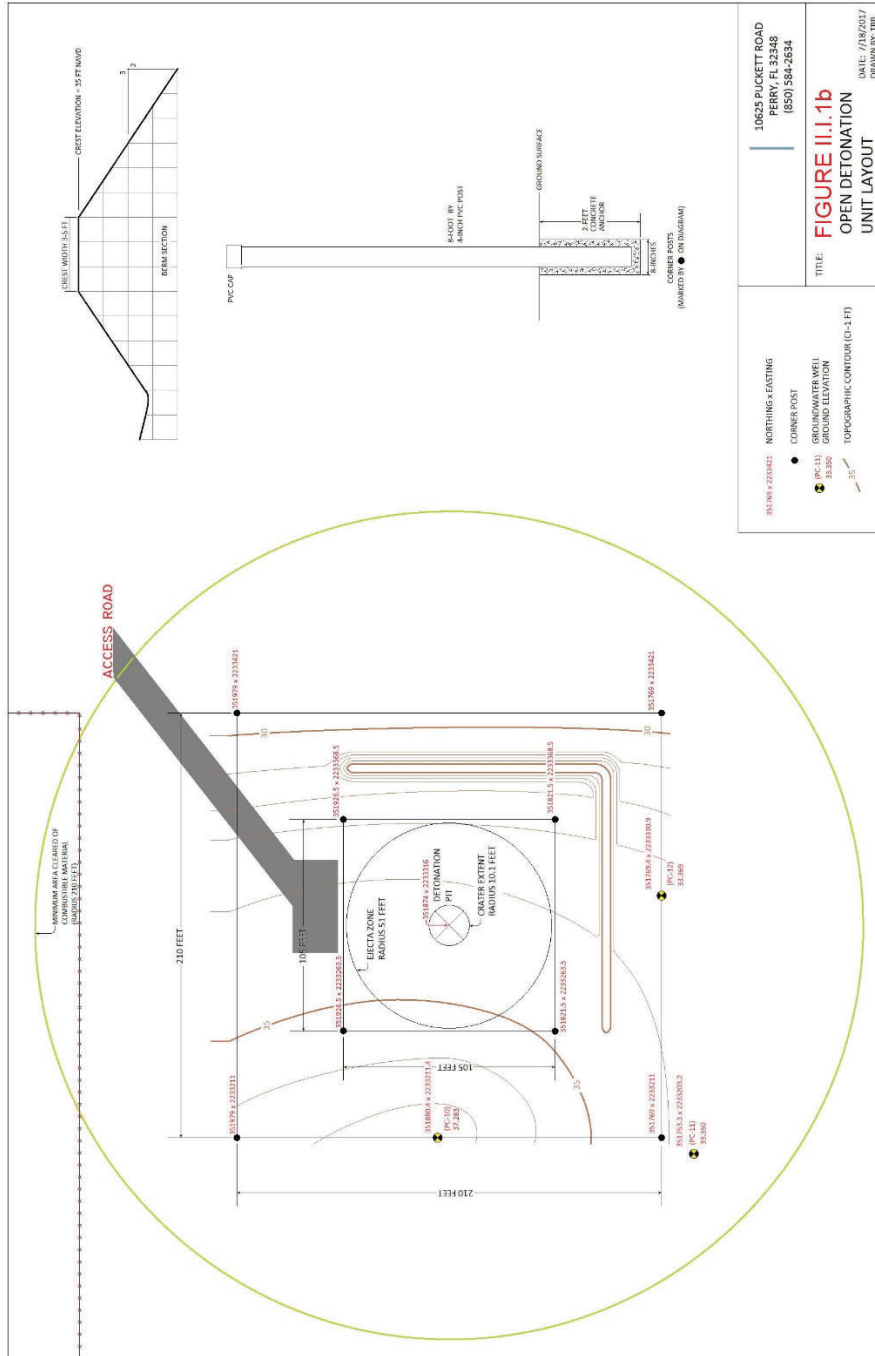


ATTACHMENT B – OPEN BURN AND OPEN DETONATION UNITS



ATTACHMENT C – OPEN BURN AND OPEN DETONATION UNIT DESIGN





ATTACHMENT D – ENVIRONMENTAL MONITORING PLAN – SOIL

OP 0016099-HO
EPA ID# FLD 047 966 593

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C: Soil Monitoring Plan

C-1: Soil Monitoring Introduction

Soils at the Open Burn Unit have been monitored since July 1996. Initially, this soil monitoring was based on traditional soil testing. In 2001, an alternative technique was proposed and approved using a combination of occasional soil sampling with routine Semiannual, particulate and rainwater testing. The particulate testing consisted of eight monitoring stations where clean stainless steel bowls are set with fabric wipes clamped over them. A measured portion of each wipe and the rainwater collected in the steel bowls are analyzed for specific constituents. The sum of these two analyses for each constituent is used to quantify particle deposition rates for the period that the fabric was exposed.

On November 9, 2016, Chemring proposed to revise the soil monitoring plan and in response, a meeting was held on December 9, 2016 with FDEP. The outcome of that meeting is documented in a summary letter from the FDEP dated December 16, 2016. At that meeting, changes to the soil sampling plan for the OBU were approved effective immediately to allow for total-metals analysis at 4 specified locations within the OB Waste Management Area plus 2 background locations.

As part of the modification to include OD as a treatment method, FDEP has indicated a preference for an incremental sampling methodology (ISM). This proposal uses the US Army Corps of Engineers ERDC/CRREL TR-11-15 "Guidance for Soil Sampling of Energetics and Metals" as reference. This sampling method was designed primarily with the objective of site closeout, not routine monitoring of an active facility; *"The TPP process was developed to provide comprehensive planning guidance to ensure effective and efficient progress to site closeout within all project constraints."* The major problem with ISM is the lack of discerning spatial patterning of contaminants and the reporting of the mean concentration only. ISM does not answer the question of whether small areas of high concentrations exist. Therefore, ISM appears to be a valid method only if our data quality objective is to determine whether the site, as a whole, will leach above an average contaminant concentration. If the data quality objective is for exposure safety (residential or industrial), ISM does not fit our objective.

C-2: Soil Monitoring Plan

Sampling and Analysis Methods: Soil collection procedures will follow Florida's Standard Operating Procedure FS 3000 and analyses will follow USEPA's SW-846 methods to obtain total analyte concentrations within the soil sample for the previously approved analytes. Two samples will be taken from each location (one will be taken from 0- 6 inches and the other from 18-24 inches) of undisturbed soils nearest to the predetermined sampling location. Roots and rocks will be removed from the sample before collection as described in SOP FS 3000.

Monitoring Parameters: The monitoring parameters are selected to detect potential impacts of the OB/ODU operations on the surrounding soil. Semiannual Detection analyses will be performed on a list of indicator compounds used to determine whether additional assessment is necessary. Detection parameters and associated analytical methods are listed in Table II.M.5-1:

- The Detection List (Table II.M.5.1) is based on the decomposition products of historically treated materials as listed in the 2015 permit renewal application. Based on burn records, from 2015 through 2017, oxides of Barium, Chromium, Lead, Magnesium, Zirconium, and Potassium salts make up the bulk of potential fine residues—and metal components of the treated products such as Zinc, Iron, and Copper which are likely to remain as solids and collected as residue. Most of the fine residues will also be collected as residue, but they have the most potential to be incorporated in suspended ash and fallout within the WMU and will make up the Detection List along with the energetics RDX, HMX, and Perchlorate and, for groundwater samples, the indicator ions Calcium, Chloride, and Nitrate-Nitrogen.
- The Assessment List (Table II.M.5.2) will be used in addition to the routine Detection List in case of statistical or GCTL-exceedances and an expanded list of parameters potentially associated with OB/ODU operations.

Sample Locations: A total of ten locations will be sampled at each semiannual sampling event: 4 OBU Waste Management Area (OB-WMA) locations, 4 ODU Waste Management Area (OD-WMA) locations, and 2 background locations. Two samples will be taken from each location, one from 0-6 inches and the other from 18-24 inches.

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The OB/OD-WMA samples will be taken at one location in each quadrant of each of the WMA. Figure II-M-1 shows the gridded Waste Management Areas along with color-coded sampling quadrants. All sampling locations will be determined by assigning a number to each of the grid locations and using an on-line random number generator to choose one location in each quadrant. That location will be presented to the FDEP in the previous sampling report; i.e. the 2020 First Semiannual Sampling Report includes the locations for the 2020 Second Semiannual Sampling Report.

The two background sample locations for each sampling event will also be proposed one sampling report in advance. The background sampling locations will be chosen from throughout the facility and surrounding properties and under the following constrictions:

- Soil types will be similar to those at the OD/OBU (NRCS designations Ridgewood Fine Sand and Ortega Fine Sand exclusively).
- Known previous product testing locations and SWMUs will be avoided.
- Areas affected by runoff from a roadway or parking area will be avoided.
- Moderately and heavily travelled areas will be avoided.
- Fill areas and low areas where water or allochthonic materials collect will be avoided.
- The only anthropogenic modification of the background locations allowed are the same normal modifications that have been done at the WMA including minimal lawn seeding, sod-enhancements, and tillage.

Cleanup Target Levels: The current land use of the NPI facility is considered industrial. This land use is not expected to change over the course of the permit period and will remain in effect until the time of closure. Residential (unrestricted) land use soil cleanup target levels (SCTL) will be used during the closure plan and will be used as part of the detection monitoring of the OBU. Industrial SCTLs may be considered if risk assessments under Rule 62-680 FAC are required during the active lifetime of the facility. Action Levels during the active lifetime of the facility will be set at the residential SCTL as listed in Rule 62-777, FAC, Table II.

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Sample Frequency: Semi-annual sampling is proposed over the duration of the permit period.

A soil quality monitoring schedule is provided in Table II.M.5-4. Soil sampling events are conducted in January and July of each year. Reporting will be submitted before the end of March and September of each year. The initial sampling at the ODU will be performed before any detonations occur.

Sample Collection:

A stainless-steel spoon will be used at each location—push-probe soil corers are impractical for this purpose because a portion of the OBU WMA decision unit includes limerock fragments.

All sampling equipment (i.e. bowls, spoons, etc) will be cleaned and decontaminated onsite per DEP SOP- 001/01, FC 1131. Soil collection procedures will follow FDEP SOP FS 3000. Sample chain of custody, packaging, shipping, and laboratory analysis shall be performed in accordance with procedures in the FDEP SOPs for field activities.

NPI will provide the FDEP with opportunities to observe soil sampling and split samples by providing notification (either over the telephone or through e-mail) at least seven (7) calendar days prior to each sampling event).

Data Evaluation Methods: If the analyte concentration exceeds the action levels (80% of the Industrial SCTL or the Residential SCTL, whichever is lowest), NPI will:

- Notify the FDEP of the exceedances within seven (7) calendar days.
- If the exceedance is related to an individual soil sampling point, then within fourteen (14) calendar days, NPI will collect soil samples from the same location(s) and analyze it/them for the subject analyte(s). NPI will provide the FDEP with analytical data within forty-five (45) calendar days of sampling.
- If soil sampling confirms that the concentration of any analyte is above the action level, then within thirty (30) calendar days of submitting the soil data from the resampling event NPI will submit a plan to the FDEP for assessment and remediation, as appropriate.

Table II.M.5-1	
Detection Monitoring List	
Soil Quality Monitoring	
OB/ODU, Nammo Perry Inc.	
Parameter	U.S. EPA Method Number
Aluminum	6010B
Barium	6010B
Total Chromium	6010B
Lead	7421/6010B
Magnesium	6010B
Nickel	6010B
Zirconium	6010B
Potassium	6010B
RDX	SW 8330B
HMX	SW 8330B
Percent Moisture	ASTM D2216-80
Phosphorous*	365.1

* Phosphorus monitoring will begin during the sampling event prior to notification to the FDEP of NPI's intent to initiate the Red Phosphorus program.

ASTM = American Society for Testing and Materials.

U.S. EPA = United States Environmental Protection Agency.

HMX = homocyclonite octogen cyclotetremethylene tetranitramine.

RDX = cyclo-1,3,5-trimethylene-2,4,6-trinitramine.

Table II.M.5-2 Assessment Monitoring List Soil Quality Monitoring OB/ODU, Nammo Perry Inc.	
Parameter	U.S. EPA Method Number
Arsenic	7060A/6010B
Antimony	6010B
Barium	6010B
Boron	6010B
Cadmium	6010B
Total Chromium	6010B
Copper	6010B
Lead	7421/6010B
Magnesium	6010B
Nickel	6010B
Titanium	6010B
Tungsten	6010B/Standard Methods 3111B
Zirconium	6010B
Acetone	SW 8260A
Isopropanol	SW 8260A
Hydrocarbons (as diesel fuel)	FL Pro
Tetrazine ^a	SW 8331
Nitrocellulose	USATHAMA LF03
Nitroglycerine	USATHAMA
1-methyl aminoanthraquinone	SW 8270B
PETN	USATHAMA
RDX	SW 8330B
HMX	SW 8330B
Styrene	SW 8260A
Nitrobenzene	SW 8330
2,4-Dinitrotoluene	SW 8330
Diphenylamine	SW 8270
Percent Moisture	ASTM D2216-80
Perchlorate	SW 6850

^a Tetrazine will be analyzed if a certified laboratory is found to perform the analysis.

ASTM = American Society for Testing and Materials.

U.S. EPA = United States Environmental Protection Agency.

HMX = homocyclonite octogen cyclotetramethylene tetranitramine.

PETN = Pentaerythritol tetranitrate (explosive, vasodilator).

RDX = cyclo-1,3,5-trimethylene-2,4,6-trinitramine.

USATHAMA= United States Army Toxic and Hazardous Materials Agency.

PERMITTEE: Nammo Perry Inc.
I.D. NUMBER: FLD 047 966 593

PERMIT NUMBER: 0016099-14-HO
EXPIRATION DATE: March 12, 2026

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Table II.M.5-4
Soil Quality Monitoring Schedule
OB/ODU, Nammo Perry Inc.

Date	Sample Method
January 2021	Random Sample Stations
July 2021	Random Sample Stations
January 2022	Random Sample Stations
July 2022	Random Sample Stations
January 2023	Random Sample Stations
July 2023	Random Sample Stations
January 2024	Random Sample Stations
July 2024	Random Sample Stations
January 2025	Random Sample Stations
July 2025	Random Sample Stations

ATTACHMENT E – ENVIRONMENTAL MONITORING PLAN – GROUNDWATER

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EPA ID# FLD 047 966 593

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Environmental Monitoring Plan

D: Groundwater Monitoring Plan

D-1: Groundwater Monitoring Introduction

Groundwater at the OBU has been monitored since May 1992 using the three downgradient shallow monitoring wells (PC-1, PC-2, and PC-3), the two downgradient deep monitoring wells (PC-5 and PC-6), and the one background well (PC-4). All of the wells were installed as flush-mounted wells, with the downgradient wells placed as close to the unit as possible in accordance with the 1986 RCRA Technical Enforcement Guidance Document (TEGD) to establish the POC.

In 1996, the old OBU limerock pads were demolished and replaced with a 75 x 105-foot monolithic concrete containment pad with a moveable aluminum canopy system to enclose the unit when not in use, minimizing stormwater contact with the four interior burn pads and providing secondary containment for any materials and residues inside. This project included extensive soil stabilization around the unit that extended the WMA to include an area about 100-feet from the containment pad in all directions. The point-of-compliance was thereby extended, but the groundwater monitoring wells were retained inside the WMA. Therefore, results of the groundwater monitoring within the POC should be considered to be an 'early warning' system that serves to trigger actions to prevent violations of constituent concentration criteria outside the POC before they occur.

In contaminant detections at PC-2 and PC-1 required the installation of 2 assessment wells (AW-1 and AW-2) downgradient of the subject wells, but still within the WMA and deeper wells (PC-5 and PC-6) were installed to determine vertical extent. Groundwater contamination has not been found to migrate to the POC. Some of the contamination detected in PC-1 and PC-2R has been demonstrated to be caused by degradation of the monitoring well's annular seal that resulted in the subsequent infiltration of surface water that facilitate grout contamination of the sand pack from the Portland cement used to seal the well. The grout contamination resulted in elevated pH of the ground water samples. (See the routine groundwater reports from the Second 2015 semiannual sampling event through the Second 2016 semiannual sampling event for more detail.) Inspection of the flush-mount monitoring wells indicates that fines from the surrounding soil regularly wash into the annulus surrounding the riser. These fines originate from the compacted limerock and stabilized soils and

are allowed to stand, usually saturated, on the well pad and in the manhole. This construction calls into question the representativeness of any samples collected from these wells.

On February 1, 2017, Operating Permit # 16099-HO-011 was issued and a condition of the permit required the installation of new wells at the POC and the abandonment of the older flush mount monitoring wells that failed. The riser of PC-4 was extended approximately 2-feet above land surface. This work was initiated on February 21, 2017, completed on March 17, 2017, and documented in a report to the FDEP dated April 24, 2017.

D-2: Description of the Groundwater Monitoring System

The new compliance wells (PC-7, PC-8, and PC-9) were installed at a point as close as possible to the outer edge of the WMA as required in 40 CFR 264. Compliance wells for the ODU (PC-10, PC-11, and PC-12) were installed at the same time. The screens for these wells were placed from about -2 to 8 feet NGVD. The new wells were installed with stick-ups and locking protective casings. Bollards have been installed to protect them from damage. Deeper wells (AW-3, AW-4, and AW-5) were installed as assessment wells and to monitor vertical hydraulic gradients at the OBU. AW-6 was installed in July 2018 near PC-11 at a depth about 15-feet deeper than PC-11 to monitor vertical hydraulic gradients at the ODU. An additional well, PZ-1, was installed between PC-1 and PC-2R to determine whether the contaminants detected in those wells persist. Figure II-B-1a shows the location of the new wells in relation to the OB/ODU WMAs. Figure II-B-1b shows the entire facility including the OB/ODU background well and on-site wells that are associated with other operations of the facility. Tables II.M.3-2a and b summarize the well construction.

Background well PC-4 was replaced with PC-4R in July 2018 at an elevation consistent with the PC-series wells at the OB/ODU. In addition, MWB-1, an older background well used to monitor background conditions for the wastewater treatment plant, was added as a supplementary background well. While MWB-1 has a longer screen than is usually accepted at RCRA sites, sampling will use a low-flow technique with the pump intake set at a specific elevation in the screen to ensure samples are taken from the discrete interval similar to those monitored at the OB/ODU site.

Any new wells will be constructed in compliance with the FDEP's 2008 Monitoring Well Design and Construction Guidance Manual.

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Table II.M.3-2a Nammo Perry Groundwater Monitoring Well Construction Information Summary								
Well ID	Date Installed	Well Designation	Casing Information			Screen Information		
			Solid Length (ft bls)	ToC Elevation (ft NAVD)	Stick-up (ft)	Length (ft)	Top of Screen (ft NAVD)	Base of Screen (ft NAVD)
PC-4	5/14/1992	Background	10	27.986	3.07	10	17.87	7.87
PC-4R	7/24/2018	Background	20	28.278	3.38	10	8.87	-1.13
MWB-1	2/9/1984	Background	5	30.992	3.43	20	22.07	2.07
PC-7	3/17/2017	Compliance	20	28.992	2.21	10	8.99	-1.01
PC-8	3/17/2017	Compliance	20	28.984	1.85	10	8.98	-1.02
PC-9	3/17/2017	Compliance	20	29.408	1.70	10	9.41	-0.59
PC-10	3/31/2017	Compliance	25	39.407	2.12	10	14.41	4.41
PC-11	3/31/2017	Compliance	25	35.695	2.35	10	10.70	0.70
PC-12	3/31/2017	Compliance	25	35.075	1.71	10	10.08	0.08
AW-1	6/8/1998	Assessment	10	29.395	1.75	10	19.05	9.05
AW-2	6/16/1998	Assessment	10	29.571	2.24	10	19.69	9.69
AW-3	3/17/2017	Assessment	40	28.855	2.12	5	-11.15	-16.15
AW-4	3/17/2017	Assessment	40	28.759	1.74	5	-11.24	-16.24
AW-5	3/17/2017	Assessment	40	30.001	2.44	5	-10.00	-15.00
AW-6	7/23/2018	Assessment	45	35	2.5	5	-10	-15
PZ-1	3/17/2017	Piezometer	20	29.142	1.94	10	9.14	-0.86

All wells are 2" PVC with 0.010" slot-sized screens.

Table II.M.3-2b Nammo Perry Groundwater Monitoring Well Location Information Summary								
Well ID	Aquifer Zone	Sampling Frequency	Survey Information: Ft, NAVD88/State Plane CS					
			Surveyor	Date Surveyed	Top of Casing Elevation	Ground Surface Elevation	Northing	Easting
PC-4	Shallow	Semiannual	SE	4/12/2017	27.986	25	353407.005	2234193.489
PC-4R	Shallow	Semiannual	NPI*	7/25/2018	28.278	25	353407.005	2234193.489
MWB-1	Shallow	Semiannual	SE	4/12/2017	30.992	28	355554.242	2236170.630
PC-7	Shallow	Semiannual	SE	4/12/2017	28.992	26	352329.752	2233581.893
PC-8	Shallow	Semiannual	SE	4/12/2017	28.984	26	352227.244	2233577.069
PC-9	Shallow	Semiannual	SE	4/12/2017	29.408	26	352215.704	2233673.745
PC-10	Shallow	Semiannual	SE	4/12/2017	39.407	32	351880.378	2233211.423
PC-11	Shallow	Semiannual	SE	4/12/2017	35.695	32	351753.322	2233203.161
PC-12	Shallow	Semiannual	SE	4/12/2017	35.075	32	351769.078	2233330.880
AW-1	V. Shallow	Water Level	SE	4/12/2017	29.395	26	352289.660	2233641.152
AW-2	V. Shallow	Water Level	SE	4/12/2017	29.571	26	352289.281	2233611.110
AW-3	Deeper	Water Level	SE	4/12/2017	28.855	26	352329.730	2233573.053
AW-4	Deeper	Water Level	SE	4/12/2017	28.759	26	352227.614	2233569.735
AW-5	Deeper	Water Level	SE	4/12/2017	30.001	26	352214.796	2233681.798
AW-6	Deeper	Water Level	NPI*	7/25/2018	37.545	33	351750	2233200
PZ-1	Shallow	Water Level	SE	4/12/2017	29.142	26	352354.114	2233671.329

SE = Southeastern Surveying and Mapping, Inc.

* These wells were surveyed using a laser level from the nearby survey points on PC-4 and PC-11.

D-3: Sampling and Analysis Plan

All field sampling activities will follow the applicable collection and quality control protocols and requirements described in Florida Department of Environmental Protection Standard Operating Procedure (DEP-SOP) FA 1000, *Regulatory Scope and Administrative Procedures For Use Of DEP SOPs*, which is incorporated by reference in Rule 62-160, Florida Administrative Code (FAC).

Sampling and analyses will be modified to comply with revisions of FDEP published SOPs.

D-4: Flow Directions and Groundwater Velocity

Water levels will be collected from each well at each sampling event. A unique groundwater contour map will be produced, and groundwater velocities will be calculated using the water level data collected at each sampling event. Historic ground water contour maps indicate that ground water consistently flows toward the south-southwest. Groundwater velocities are dependent on the variables gradient, hydraulic conductivity, and effective porosity.

Hydraulic gradients are based on the difference in ground water elevations between two monitoring wells divided by the distance between the two monitoring wells.

Hydraulic conductivities are estimated from slug tests conducted in February 2007 (17.64 ft/day in PC-2R) and in May 1992 (3.76 ft/day in PC-1, 14.25 ft/day in PC-3, and 9.06 ft/day in PC-4). These data result in an average hydraulic conductivity of 11.12 ft/day for the surficial aquifer at the site.

Effective porosity for wells installed in unconsolidated sediments will be determined based on the following. Fetter (2001) describes effective porosity as the porosity available for fluid flow. Fetter cites Peyton, et al, (1986) to conclude that, *"even in lacustrine clay, water molecules could pass through all the pore throats, so the effective porosity was the same as the porosity. This suggests that at least in sediments all the pores are connected and we need not be concerned with effective porosity with respect to flow of water."* The difference between total porosity and effective porosity only arises when the sediments become cemented and vugs or hydraulic dead-ends are produced. For unconsolidated sediments effective porosity is the total porosity. Soil porosity, for determining groundwater flow rate are based on the default soil, waste, and geosynthetic characteristics table in

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the HELP model users guide (Schroeder, 1994). Based on the subsurface lithology, the estimated porosity for the surficial aquifer at the site is 0.20 (20%).

D-5: Statistical Evaluation Plan

No changes are proposed in the routine statistical evaluation of groundwater data. The approved statistical analysis plan includes two tiers:

Tier I: Wilcoxon Rank-Sum test (WRS—also known as the Mann-Whitney U-test) is used on detected analytes to determine whether the background well data is of a different population than the data from each compliance well. The test results are reported as a confidence level that two data sets for a specific analyte were derived from different populations. In accordance with the permit, if the p-level result of the WRS is less than 0.01, then there is 99 percent confidence that the data from the background well and the compliance well are representative of two populations. In this case, the Tier II evaluation will be performed for that analyte at that well.

Tier II: Tier II is triggered for analytes determined by the WRS to be of different populations. Tier II is a correlation coefficient calculation between a chosen analyte that either exceeds the GCTL or has increasing concentration trends against the other WRS-selected analytes. If the correlation coefficients indicate a relationship between these constituents, this may be considered to be evidence that the site is influencing the concentrations of the constituent being tested. If not, this is evidence that the concentrations, while different from the background well, are not currently being influenced by the site.

WRS and Pearson's Correlation Coefficient statistics will be performed as described in EPA's Unified Guidance Document (EPA 530/R-09-007). Assessment will be triggered if an analyte fails the statistical test and is above the compliance limit.

After at least 8 samples have been analyzed for the routine constituents, NPI might assess the baseline data for initiating Shewhart-CUSUM Control Chart statistical method using an intra-well comparison for background.

D-6: Groundwater Monitoring Plan

Semiannual groundwater sampling is proposed over the duration of the permit period. NPI proposes to conduct routine semiannual sampling for the detection monitoring parameters listed in Table II.M.6-1. If any constituent analyzed is found to exceed background and its compliance limit as listed in Table II.M.6-3, NPI will notify the appropriate regulatory agency and resample within seven days of receipt of analytical results. If resampling confirms that the compliance limit is exceeded, NPI will recommend that semiannual sampling of the assessment monitoring parameters listed in Table II.M.6-2 be initiated.

Sampling will occur in April and October of each year as shown in the schedule in Table II.M.6-4. The April report will be submitted to the Department no later than 30 days after NPI's receipt of the data from the laboratory.

WELL	STATUS
PC-4R	Background
MWB-1	Background
PC-7	Point of Compliance (OBU)
PC-8	Point of Compliance (OBU)
PC-9	Point of Compliance (OBU)
PC-10	Point of Compliance (ODU)
PC-11	Point of Compliance (ODU)
PC-12	Point of Compliance (ODU)
PZ-1	Piezometer
AW-1	Piezometer
AW-2	Piezometer
AW-3	Piezometer
AW-4	Piezometer
AW-5	Piezometer
AW-6	Piezometer

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Table II.M.6-1	
Detection Monitoring List	
Groundwater Monitoring	
Nammo Perry Inc., Perry, Florida	
Parameter	U.S. EPA Method Number
Aluminum	6010B
Barium	6010B
Chromium	6010B
Copper	6010B
Iron	6010B
Lead	6010B
Magnesium	6010B
Nickel	6010B
Zinc	6010B
Zirconium	200.7
Calcium	6010B
Potassium	6010B
Chloride	9056A
Nitrate-Nitrogen	353.2
RDX	8330
HMX	8330
Perchlorate	314.0

Notes:

* No analytical method is currently available. This analyte will be monitored when an analytical method is available and accepted by FDEP.

** No laboratory currently available to perform this analysis. This analyte will be monitored when a lab is approved by FDEP to perform this analysis.

Key:

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

U.S. EPA = United States Environmental Protection Agency

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Table II.M.6-2 Assessment Monitoring List Groundwater Monitoring Nammo Perry Inc., Perry, Florida	
Parameter	U.S. EPA Method Number
Antimony	6010B
Arsenic	6010B
Barium	6010B
Boron	6010B
Cadmium	6010B
Total Chromium	6010B
Copper	6010B
Lead	6010B
Magnesium	6010B
Nickel	6010B
Strontium	6010B
Titanium	6010B
Tungsten	6010B
Zinc	6010B
Zirconium	6010B
Hydrocarbons (as diesel)	FL-PRO
Fluoride	9056
pH	150.1
Specific Conductance	120.1
Turbidity	180.1
Tetrafluoroethene*	Currently not available
Tetrazine**	8331
Isopropanol	8260A
Acetone	8260A
2,4-dinitrotoluene	8330
Nitrobenzene	8330
1-methylaminoanthraquinone	8270
PETN	8330
Diphenylamine	8330
HMX	8330
RDX	8330
Styrene	8260A
Nitrocellulose	USATHAMA LF03
Nitroglycerin	8330
Perchlorate	314.0

Notes:

* No analytical method is currently available. This analyte will be monitored when an analytical method is available and accepted by FDEP.

** No laboratory currently available to perform this analysis. This analyte will be monitored when a lab is approved by FDEP to perform this analysis.

Key:

PETN = Pentaerythritoltetranitrate.

Table II.M.6-4 Groundwater Quality Monitoring Schedule Open Burn Unit, Nammo Perry Inc.				
Year	Event #	Date	Sample Locations	Analytical List
1	1 (21S1)	April 2021	PC-4R,7,8,9,10,11,12	Detection
	2 (21S2)	October 2021	PC-4R,7,8,9,10,11,12	Detection
2	1 (22S1)	April 2022	PC-4R,7,8,9,10,11,12	Detection
	2 (22S2)	October 2022	PC-4R,7,8,9,10,11,12	Detection
3	1 (23S1)	April 2023	PC-4R,7,8,9,10,11,12	Detection
	2 (23S2)	October 2023	PC-4R,7,8,9,10,11,12	Detection
4	1 (24S1)	April 2024	PC-4R,7,8,9,10,11,12	Detection
	2 (24S2)	October 2024	PC-4R,7,8,9,10,11,12	Detection
5	1 (25S1)	April 2025	PC-4R,7,8,9,10,11,12	Detection
	2 (25S2)	October 2025	PC-4R,7,8,9,10,11,12	Detection

A Note about the GCTL for Magnesium.

Previous GCTLs for Magnesium at this site had been set at the PQL. HOWEVER, Mg^{2+} is a major cation in natural groundwater, particularly in a weathered dolostone lithology in unfiltered samples. All samples will include a significant amount of natural magnesium making the PQL an impractical GCTL.

According to the Food and Nutrition Board of the National Institute of Medicine (NIM), Magnesium deficiency is significantly more detrimental to health than excessive Magnesium from ingestion. *“No functional criteria of magnesium status have been demonstrated that reflect response to dietary intake in infants. Thus, recommended intakes of magnesium are based on an Adequate Intake (AI) that reflects the observed mean intake of infants fed principally with human milk.”* Human milk has an average Magnesium concentration of 34 mg/L, infant formula generally has 40-50 mg/L Magnesium.

Regarding the Tolerable Upper Intake Levels for magnesium, NIM states, *“Magnesium, when ingested as a naturally occurring substance in foods, has not been demonstrated to exert any adverse effects. However, adverse effects of excess magnesium intake have been observed with intakes from nonfood sources such as various magnesium salts used for pharmacologic purposes. Thus, a Tolerable Upper Intake Level (UL) cannot be based on magnesium obtained from foods.”*

Citation NIM:
DRI: Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride
Standing Committee on the Scientific Evaluation of Dietary Reference Intakes
Food and Nutrition Board
Institute of Medicine
NATIONAL ACADEMY PRESS
Washington, D.C. 1997