

Permit Modification #4 is issued under the provisions of Chapter 403-722, Florida Statutes, and Florida Administrative Code Rule(s) 62-4, 62-530, 62-550 and 62-730. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To operate a hazardous waste miscellaneous unit on Ranges #52 North and #62. The operation will consist of open burning and open detonation of waste explosives on Range 62 and open detonation of waste explosives on Range 52 North.

The open burn unit consists of two steel burn kettles 20 feet long, 8 feet wide and 8 feet high. Sides and bottom are constructed of 1/2 inch steel plate continuously welded on the interior with a reinforced 4 inch by 3 inch by 1/4 inch rectangular tubing top rail. Side walls and bottom are reinforced with 4 inch by 5.4 pounds per foot structural channel on 30 inch centers. One end of each burn kettle has doors that are 1/2 inch plate with a 4 inch by 5.4 pounds per foot structural channel reinforcement. A 6 inch steel dam is welded at the door opening to the burn kettle where wastes are placed to provide additional containment of virgin fuel used to initiate burning. Each burn kettle is underlain with 2 feet of compacted soil and a 6 millimeter Kevlar reinforced polyethylene liner.

Open Detonation (OD) operations occur at locations on Range 52 North and Range 62 directly on the ground surface. Craters formed by previous OD operations are used for OD events. Soon after the OD unit can be safely approached following completion of a detonation (generally within one hour of the detonation), the OD unit is inspected for any items which remain after detonation. Negligible quantities of ash are generated from the OD operations. Items still containing energetic material are detonated immediately. Large metallic items not containing energetic materials are transported to the Defense Reutilization and Marketing Office for recycle/resale.

Operation of the facility will be in accordance with the revised Permit Application dated May 10, 1995, the information discussed on August 30, 1995 (minutes dated September 11), the information received on November 2, 1995 and the Quality Assurance/Project Assurance Plan received on May 3, 1996.

GENERAL CONDITIONS: No change from existing permit.

SPECIFIC CONDITIONS: FOR MISCELLANEOUS UNIT:

PART I - General Operating Requirements

1. The permittee shall maintain 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, in accordance with 40 CFR 264.31 and 40 CFR 264.601.

2. The permittee shall follow the procedures described in the waste analysis plan, Section II.B.2 of the Permit Application (40 CFR 264.13(b)).

3. The permittee shall comply with the following conditions concerning preparedness and prevention:

a. At a minimum, the permittee shall equip the facility with the equipment described in the contingency plan, Section II.C, Tables II.6 through II-8 of the Permit Application, as required by 40 CFR 264.32.

b. The permittee shall test and maintain the equipment specified in Specific Condition 4(a), of this part, as necessary to assure its proper operation in time of emergency, as required by 40 CFR 264.33.

4. The permittee shall comply with the following conditions concerning the contingency plan:

a. The permittee shall immediately carry out the provisions of the contingency plan, Section II.D of the Permit Application.

b. The Department of Environmental Protection's 24 hour emergency telephone number is (904) 413-9911. During normal business hours, the Department's Northwest District Office may be contacted at (904) 444-8360.

PART II - Waste Minimization

1. In the event that the permittee treats, stores, or disposes of hazardous wastes on-site where such wastes were generated, then the permittee must comply with 40 CFR part 264.73(b)(9), and the permittee must certify, no less often than annually, that:

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; and,

c. The permittee shall maintain copies of certification in the facility operating record as required by 40 CFR 264.73(b)(9).

2. If the waste minimization program, as detailed in Specific Conditions 12a. and 12b. of this part, is applicable, then the permittee shall, at a minimum, address the following elements:

a. Top management support

1. A dated and signed policy describing management support for waste minimization and for implementation of a waste minimization plan,

2. A description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to maximize the extent feasible, and

3. A description of how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to produce design, capital planning, production operations, and maintenance;

b. Characterization of waste generation

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

c. Periodic waste minimization assessments

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

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

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

4. Specific performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the generator.

d. Cost allocation system

1. Identification of waste management costs for each waste, factoring in liability, transportation, recordkeeping, personnel, pollution control, treatment, disposal, compliance, and oversight costs to the extent feasible,

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

3. Comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste;

e. Technology transfer

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

f. Program evaluation

1. Description of types and amounts of hazardous waste reduced or recycled,

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

3. Amendments to waste minimization plan and explanation,

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

5. Explanation and documentation regarding impediments to hazardous waste reduction specific to the individual facility.

Part III - Land Disposal

1. 40 CFR Part 268 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances in 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. If 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 once the effective date for the waste has been reached pending final approval of such application.

2. A restricted waste identified in 40 CFR Part 268, Subpart C may not be placed in a land disposal unit without further treatment unless the requirements of 40 CFR Part 268, Subparts C and/or D are met.

3. The storage of hazardous wastes restricted from land disposal under 40 CFR Part 268 is prohibited unless the requirements of 40 CFR Part 268, Subpart E are met.

PART IV - Thermal Treatment Unit

1. The permittee is allowed to thermally treat military munitions and explosives contaminated items by Open Burn (OB) on Range 62 in the units numbered 8763 and 8764. The hazardous waste can be generated from sources outlined in Section II.B2.6 of the Permit Application. In the event that items meeting Department of Defense (DOD) criteria are composed of explosive items not listed in Tables I and II in Section II.B of the Permit Application, Department approval must be obtained to perform Open Burning. Additional requirements follow:

a. The Open Burn activities may only be accomplished by Explosive Ordnance Detachment (EOD) Personnel and under the following conditions:

- (1) Daylight hours;
- (2) Wind speeds greater than 3 mph and less than or equal to 15 mph;
- (3) No electrical storms within 3 miles of the OB Unit;
- (4) No forecast of a major storm; and
- (5) No inversion forecast.

b. The integrity of the OB Units must be evaluated each year and a report submitted and signed by a Professional Engineer.

c. The OB operation may be initiated by placing dunnage (wood and fiber board) in the OB Unit and igniting it along with the explosives with 50-100 gallons of virgin diesel fuel. The fuel should be minimized to that absolutely necessary to accomplish the OB mission.

d. The combination of explosives and dunnage in the OB containers shall allow for a free-board height of at least 2 feet in order that ejected particles are minimized during the operation.

e. Upon completion of the burn (at least 12 hours and not longer than 24 hours) EOD personnel shall inspect the area for ejected particles and dispose of them properly.

f. The OB units shall be decontaminated by cleaning and washing down after each burn event. The residue shall be collected and tested to determine if the waste is a characteristic hazardous waste. The wash down water may remain in the OB unit until the test is completed on the residue

(1) If the residue is shown to be a characteristic waste, the water shall be disposed of as a hazardous waste.

(2) If the residue is not a hazardous waste, the water may remain in the OB unit to evaporate.

g. After the OB event is concluded and the unit is decontaminated, a precipitation cover shall be placed over the OB unit.

2. The Permittee is allowed to thermally treat by Open Detonation (OD) military munitions at a designated location on Ranges 52 North and 62 as described in the Permit Application in Sections II-A and III-A. The hazardous waste can be generated from sources outlined in Section II.B.2.6 of the Permit Application.

a. The OD operations shall only be performed by EOD personnel in accordance with standard Explosive Disposal Ordnance Procedures and under the conditions listed above in Paragraph 1a (1) to 1a (5).

b. The Net Explosive Weight (NEW) treated by OD operation shall not exceed that outlined in Section III.C6a of the Permit Application.

c. At the conclusion of the operation the EOD personnel shall visually inspect fragments to determine if energetic residue remains. Those fragments containing residue will be detonated in place.

d. All non-explosive scrap metal produced during the OD operation shall be collected and disposed of at the Eglin Defense Reutilization and Marketing Office for recycling.

3. The permittee shall comply with waste compatibility requirements of 40 CFR 264.17(b).

4. The permittee shall provide adequate fire protection to assure confinement and control of any fire resulting from the operation, as specified in Section II.D1.4 of the Permit Application.

5. The permittee shall maintain an operating record describing the OB/OD activities. The report shall include the following information:

a. Description and quantity of each hazardous waste received and treated at the unit.

b. Dates 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 burn residues and/or the quantity of burn residues on site at the end of the reporting period.

f. Air monitoring data collected pursuant to Part VI of this permit.

g. Details of any problems discovered during inspections conducted and details of remedial actions taken.

6. The permittee shall maintain compliance with the environmental performance standards listed in 40 CFR 264.601 at all times.

PART V - Groundwater Monitoring

1. Upon Permit issuance, the facility shall be in Detection Monitoring in accordance with 40 CFR 264.98.

2. The Waste Management Areas (40 CFR 264.95 (b)) shall be designated by imaginary lines circumscribing the OD unit of Range C-52 and OB/OD unit of Range C-62 as indicated in Attachment 1 of this permit.

3. The Point of Compliance (POC) (40 CFR 264.95 (a)) for Waste Management Area C-62 shall be the west and southwest boundaries of Range C-62, and the POC for Waste Management Area C-52 shall be the southwest, south and southeast boundaries of Range C-52, as shown on the Attachment 2 of this permit.

4. The POC wells and the background wells shall be as follows:

a. MW-94-62-02, MW-94-62-03, MW-92-62-04,
MW-92-62-05 for Range C-62.

b. MW-94-52-02, MW-94-52-03 for Range C-52.

The background wells are MW-94-62-01 for Range C-62 and MW-94-52-01 for Range C-52. If future groundwater elevation monitoring indicates a change in groundwater flow direction, this Permit may be modified to require the installation of additional monitoring wells and to make other necessary revisions to the groundwater monitoring plan.

5. Upon permit issuance and pursuant to 40 CFR 264.98(d), the permittee shall perform replicate sampling for all constituents listed in Specific Condition 11 of this Part on monitor wells MW-94-62-01, MW-94-62-02, MW-94-62-03, MW-92-62-04, MW-92-62-05, MW-94-52-01, MW-94-52-02 and MW-94-52-03 in February, May, August, and November for the first year, pursuant to 40 CFR 264.98(d). Upon completion of the 12 month ground water monitoring, a review of the monitoring data shall be conducted and this permit modified to incorporate any changes deemed necessary to the monitoring program. A sequence of at least four discrete samples, per well, per sampling event, shall be taken at intervals that assure, to the greatest extent technically feasible, that each sample taken is an independent sample. Upon completion of four quarter groundwater monitoring, a review of the monitoring data shall be conducted and this permit modified to incorporate any changes deemed necessary to the monitoring program.

6. The permittee shall submit to the Department groundwater monitoring reports that include information required pursuant to Specific Conditions 6, 8, 9, 13 and 16 of this Part. The groundwater monitoring data from the February sampling event shall be submitted no later than the last day of April; the data from the May sampling event shall be submitted no later than the last day of July; the data from the August sampling event shall be submitted no later than the last day of October; the data from the November sampling event shall be submitted no later than the last day of next January. If, for any reason, the permittee is unable to submit these reports within the specified time, the permittee must comply with General Condition 8.

7. All analyses shall be performed on unfiltered groundwater samples. Analyses on filtered samples may be performed for the facility's own use [Rule 62-730.220(5)(h)(2)].

8. The permittee shall measure groundwater elevations every time any well is sampled prior to each sampling event (40 CFR 264.97(f)). All groundwater elevations must be measured within the same eight hour period. These data shall be used to determine the quarterly groundwater flow directions and flow rates.

9. Total depth of all wells must be determined by physical measurement in August of every year to determine if siltation of any well has occurred. The discovery and repair shall be reported to the Department within 15 calendar days of such event.

10. All groundwater sampling and analysis shall be conducted in accordance with the Quality Assurance Project Plan (QAPP). The permittee shall revise the QAPP whenever there is a change in sampling and/or analytical procedures, including field organization or laboratory. The revised plan or revisions must be submitted to the Department for approval of such changes prior to the sampling event under the revised QAPP.

11. The permittee shall sample all wells, specified in Specific Condition 5 of this Part, for the following parameters:

- 1,3-dinitrobenzene (1,3-DNB)
- 2,4-dinitrotoluene (2,4-DNT)
- 2,6-dinitrotoluene (2,6-DNT)
- 4-amino-2,6-dinitrotoluene (4-Am-DNT)
- 2-amino-4,6-dinitrotoluene (2-Am-DNT)
- HMX (Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine)
- dibutylphthalate
- nitrate
- nitrite
- 2-nitrotoluene (2-NT)
- 3-nitrotoluene (3-NT) 4-nitrotoluene (4-NT)
- nitroglycerine nitroguanidine

PETN (pentareythrithol tetranitrate)
 RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)
 1,3,5-trinitrobenzene (1,3,5-TNB)
 2,4,6-trinitrotoluene (2,4,6-TNT)
 tetryl (methyl-2,4,6-trubuttriogebtkbutranube)

The permittee shall also sample all wells at Range C-62 for the following additional parameters:

benzene ethylbenzene
 toluene xylene

12. The Maximum Contaminant Level (MCL) (40 CFR 264.94 and 1994 Florida Ground Water Concentration Guidelines) for the constituents in Specific Condition 12 of this Part are as follows:

PARAMETERS	UNIT	CONCENTRATION
benzene	µg/l	1
1,3-dinitrobenzene	µg/l	50
2,4-dinitrotoluene	µg/l	0.2
2,6-dinitrotoluene	µg/l	0.2
4-amino-2,6-dinitrotoluene	µg/l	PQL
2-amino-4,6-dinitrotoluene	µg/l	PQL
ethylbenzene	µg/l	30
HMX		µg/l
1800		
nitrate	µg/l	10,000
nitrite	µg/l	1000
nitrogen, ammonia	µg/l	PQL
nitrogen, total	µg/l	PQL
nitroglycerine	µg/l	PQL
nitroguanidine	µg/l	700
2-nitrotoluene	µg/l	61
3-nitrotoluene	µg/l	61
4-nitrotoluene	µg/l	61
PETN		µg/l
PQL		
RDX	µg/l	10
sulfate	µg/l	250,000
sulfide		PQL
1,3,5-trinitrobenzene	µg/l	60
2,4,6-TNT		µg/l
10		
tetryl	µg/l	370
toluene	µg/l	40
xylene	µg/l	20

µg/l = microgram per liter

PQL = practical quantitation limit, which is the minimum concentration of a chemical that can be measured and reported in accordance with the Quality Assurance Project Plan.

If, during any sampling event, for any constituent, the background value is higher than the PQL or MCL as stated here, the background value will be used as the MCL rather than the PQL for that sampling event.

13. The permittee shall use the appropriate statistical procedure(s) included in the EPA guidance document "Statistical Analysis of Ground-water Monitoring Data at RCRA Facilities, dated April, 1989" to determine the statistical

significance of evidence of contamination for any constituents listed in Specific Condition 11 of this part in accordance with 40 CFR Part 264.98. The facility may propose an alternate statistical test, subject to Department approval.

14. The permittee shall, at a minimum, inspect the integrity of groundwater monitoring wells during each groundwater monitoring event and notify the Department in writing of any damage requiring repair (not maintenance) to the groundwater monitoring wells and provide a schedule for repair within seven calendar days. A description of repairs shall be provided within seven calendar days after the damage has been corrected.

15. Abandonment of monitoring wells shall be performed in accordance with Rule 62-532.500 (4), F.A.C.

16. If the permittee determines that there is a statistically significant exceedence of MCLs or background concentrations for any hazardous constituent(s), unless it can be demonstrated that these exceedences are caused by another source or are artifacts of sampling or are the result of errors in analysis or statistical evaluation or are due to natural variations in the groundwater, the permittee shall:

a. Notify the Department within seven calendar days of the results of statistical tests confirming contamination.

b. Sample the groundwater at the well most representative of the groundwater quality at the associated Waste Management Area and determine whether constituents listed in 40 CFR Part 264 Appendix IX are present, and if so, in what concentration.

c. For any 40 CFR Part 264, Appendix IX compounds detected in the analysis pursuant to Specific Condition 16.b of this Part, the permittee may resample within one month to repeat the analysis for those newly detected constituents unless it can be demonstrated the occurrence of these constituents is due to other source or error. If the results of the second analysis confirm the initial results, then these newly detected constituents will be included in the compliance monitoring list provided in Specific Condition 6 this part. If the permittee chooses not to resample for the newly detected compounds, then they will form the basis along with the parameters already sampled for compliance monitoring.

d. Within 90 calendar days, the permittee must submit an application for a permit modification, with appropriate fees, to establish a compliance monitoring program that meets the requirements of 40 CFR 264.99 and Rules 62-4.050, and 62-730.900(2) Part II.M.8, F.A.C.

17. The permittee shall provide opportunities for site inspections and sample splits with the Department by informing the Department at least three working days in advance of all monitoring well sampling.

PART VI - Air Monitoring Requirements

1. The permittee shall perform ambient air monitoring for the first 12 months at locations both upwind and downwind of Ranges C-52 and C-62 (locations are outlined in the Permit Application, Appendix O, figures 2-2 and 2-3) to determine the ambient impacts of OB/OD operations.

a. The monitoring equipment shall collect 24 hour Total Suspended Particulate (TSP) samples during each OB/OD event. The equipment should be made operational to allow for air sampling for approximately 12 hours prior to the event and 12 hours after the event.

b. The monitoring equipment shall be analyzed for TSP, Barium, Lead, and Magnesium.

c. Upon completion of the 12 month ambient air monitoring, a review of the monitoring data shall be conducted and this permit modified to incorporate any changes deemed necessary to the monitoring program.

PART VII - Closure

1. The permittee shall close the OB/OD Units on Ranges C-52 North and C-62 in accordance with the provisions outlined in Section II.F of the permit application. The units shall be closed by:

a. Metallic materials shall be collected and segregated to insure that any unexploded ordnance is properly treated before the metals are transported to the Defense Reutilization and Marketing Office at Eglin for recycling.

b. The burn kettles shall be decontaminated by washing and steam cleaning. Following decontamination, the burn kettles shall be sampled with surface wipe testing and analyzed for the following parameters: reactivity, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, 2,4 DNT and explosives. When decontamination is considered complete, the burn kettles may be removed from the range for recycling.

c. Soil sampling in the vicinity of the burn kettles shall be conducted before decontamination, after decontamination, and after the burn kettles are removed. A minimum of four samples from each burn kettle location shall be taken and analyzed for the Appendix VIII constituents.

d. Groundwater sampling shall be conducted in accordance with Part V of this permit.

e. This permit shall be modified to include post closure activities if clean closure cannot be achieved.

PART VIII - General

1. Four copies of submittals in response to the Permit, except submittals required by Specific condition 2 of this Part, shall be submitted as follows: (This condition supersedes Specific Condition 34 in the Operation Permit)

a. One copy shall be sent to:

Hazardous Waste Section Supervisor
Department of Environmental Protection
160 Governmental Center
Pensacola, Florida 32501

b. Two copies shall be sent to:

Administrator
Hazardous Waste Regulation Section
Bureau of Solid and Hazardous Waste
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

- c. One copy shall be sent to:
Chief, Waste Management Division
US EPA - Region IV
100 Alabama Street, S.W.
Atlanta, Georgia 30303-3104

2. All submittals modifying major engineering features of the hazardous waste storage areas shall be worded, signed, and certified by a qualified Professional Engineer registered in the State of Florida in accordance with Rule 62-730.220(7), F.A.C. All submittals incorporating interpretations of geological data shall be signed and sealed by a Professional Geologist registered in the State of Florida in accordance with Section 492, F.S., and Rule 62-730.220(8), F.A.C.

Expiration date: Issued this _____ day of _____
, 1996.

September 1, 1996

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Bobby A. Cooley
Director of District Management

FILING and ACKNOWLEDGMENT FILED, on this date,
pursuant to Section 120.52, Florida Statutes, with the
designated Clerk, receipt of which is acknowledged.

Clerk

Date

This is to certify that this Notice
of Permit was mailed before the close of business on _____
_____.