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NAS CECIL FIELD, FL
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PERMIT 13526-HE-007 FOR DETONATION OF MUNITIONS AND EXPLOSIVES OF CONCERN FOUND DURING PHASE 3 MUNITIONS AND EXPLOSIVES OF CONCERN INVESTIGATION CONDUCTED 15 TO 18 MAY 2006 NAS CECIL FIELD FL
6/27/2006
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Department of
Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

BEFORE THE STATE OF
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re:
Request for an Emergency Permit by
U. S. Naval Facilities Engineering Command
Engineering Field Division South
P.O. Box 190010
2155 Eagle Drive
North Charleston, S.C. 29419-9010

Date: June 27, 2006

Permit Number: 13526-HE-007

FINAL ORDER

BY THE DEPARTMENT:

On June 23, 2006 the Department received a request from James R. Ferro of the U. S. Naval Base Realignment and Closure Program Management Office Southeast (BRAC PMO SE) Command for an emergency permit to allow the thermal treatment and disposal of waste. An Emergency permit was issued on February 14, 2005 and has been carried out by the Naval Ordnance Safety and Security Activity (NOSSA), Naval Facilities Engineering Command Southeast (NAVFAC SE), and the NAVFAC SE Munitions Response/Explosive Ordnance Disposal (EOD) and Contractors CH2M HILL Constructors, Inc. (CH2M HILL) and USA Environmental, Inc. (USA) at the munitions response site located at the intersection of Loop Road and Skymaster Drive, former Naval Air Station Cecil Field, Jacksonville, Florida. The treatment involves deactivation or destruction of reactive waste, (i.e., recovered munitions and explosives of concern (MEC)) that present a shock-sensitive characteristic, which could create an imminent danger to persons handling the waste and to the general public. This permit is for the detonation of MEC found during Phase III MEC investigation conducted from May 15 to 18, 2006.

FINDINGS OF FACT

1. The specific waste to be thermally treated/destroyed by detonation is the following:

- Approximately (10) each 20-mm high explosive projectiles (combination of unfired/fuzed with cartridge intact and projectile only) consisting of a primer which initiates the smokeless powder (approx. 0.07 lbs.) contained in a steel or brass cartridge case, which in turn propels a projectile constructed of steel; copper in the rotating band and an aluminum ogive.

- Approximately (35) each Cartridge Actuated Devices (CADs) consisting of a primer which initiates a nitro cellulose (black powder) (0.0021 - 0.01014 lbs.) charge that is contained in an aluminum cartridge.

- Approximately (450) each JAU-22/B Initiators consisting of a 0.001180 lb. ignition element and 4.5 grams of propellant. These are electrically fired and used to deploy sonobouys. Housing components are aluminum, anodized aluminum, and epoxy sealed.

- Approximately (8) each Spotting Charges consisting of a primer which initiates smokeless powder charge (10 gauge shotgun) that in turns expels a smoke mixture, all of which is contained in a cardboard or aluminum case.

CH2M HILL and USA have determined the above waste to be unsafe to transport for disposal. Because of the flammable, shock-sensitive, reactive, and explosive nature of this hazardous waste, there is a potential danger to the health and welfare of those persons coming in contact with this waste if the waste is not handled in the proper manner. Based on the above, the hazardous waste presents an imminent hazard to persons and property in its proximity.

2. NOSSA, PMO SE, NAVFAC SE, CH2M HILL, and USA will abate the imminent hazard identified in Findings of Fact #1 by thermal destruction of the unstable, flammable, shock-sensitive, and potentially explosive hazardous waste.

3. The waste specified in Findings of Fact #1 will be thermally treated to deactivate or destroy the hazardous nature of the waste and any waste that is found by permit expiration date. The treatment operation will be accomplished in accordance with this request; "Work Plan Addendum No. 23 Munitions Response for Discarded Military Munitions at Hangar 860," dated April 2006; and the project Explosives Safety Submission and Explosives Sitting Plan, dated February 2006.

4. Thermal treatment/destruction will be accomplished according to the procedures specified in this request; "Work Plan Addendum No. 23 Munitions Response for Discarded Military Munitions at Hangar 860," dated April 2006; and the project Explosives Safety Submission and Explosives Sitting Plan, dated February 2006. The following general procedures will be used to thermally treat and destroy the items listed in Findings of Fact #1:

   For JAU-22/B Initiators, the general procedure will be to use 600 or 900 Grain Flex Linear Shape Charge to thermally treat and destroy the items. The JAU-22/B Initiators will be placed side-by-side lengthwise in the bottom of a trench approximately 20 feet in length, 3 feet wide, and 3 feet deep. The Flex Linear Shape Charge will be placed over the Initiator Cap and Ignition Assembly. Treatment/detonation events will be segregated to not exceed 6 lbs.

Net Explosives Weight. A line of sandbags will be placed over the charge to ensure continuity and provide protective works/engineering controls.

For all other items listed in Findings of Fact #1, the general procedure will be to use 0.75-lb PETN boosters to thermally treat and destroy the items. Multiple items will be secured around the boosters. The boosters will then be segregated into treatment/detonation events not to exceed 6 lbs. Net Explosives Weight. The boosters will be initiated with a detonation cord and/or blasting caps depending on the composition of the treatment/detonation event. All treatment/detonation events will be done with protective works/engineering controls by surrounding with an enclosure which has 24 inches of sand bags on the roof and walls.

5. The hazardous waste will be thermally treated under the supervision and control of NOSSA, PMO SE, NAVFAC SE, CH2M HILL, and USA. These officials are experienced in the handling and disposal of explosives.
6. Thermal treatment of the waste as specified above in Findings of Fact #1 will occur in an open field as described in Findings of Fact #5 within the next 120 days.

CONCLUSION

NOSSA, PMO SE, NAVFAC SE, CH2M HILL, and USA will conduct this thermal treatment operation in an environmentally sound and a Department-approved manner. Therefore, pursuant to Sections 403.726(5) and 120.59(3), Florida Statutes, it is

ORDERED

1. This Permit authorizes thermal treatment of the waste as specified above in Findings of Fact #1, in accordance with the Work Plan Addendum No. 23.

2. The hazardous waste will be treated/destroyed via detonation in a field (latitude: 30° 13'11''North; longitude: 81°53'42'' West) within the Hangar 860 Munitions Response Site located at the intersection of New World Avenue and Aerospace Way, former Naval Air Station Cecil Field, Jacksonville, Florida. The treatment site is owned by:

   Jacksonville Airport Authority – Cecil Field
   ATTN: Russel Chandler
   13365 Aeronautical Circle
   Jacksonville, Florida 32221

   Written permission to use the treatment site has been received from the Jacksonville Airport Authority prior to thermal treatment/destruction.

The closest permanent residences are the Cecil Pines senior housing complex that is located approximately 4,650 feet from the treatment site.

3. Any visible residue or debris resulting from the treatment process will be removed and properly disposed of offsite by approved methods. Post-treatment soil sampling will be completed to ensure no contamination remains following residue/debris removal. Collection and laboratory analysis of five soil samples (four grab/one composite) from the treatment site for metals and nitro aromatics (explosives) is planned.

4. Adequate fire and personal protection to assure confinement and control of any fire resulting from the operation, and to prevent injuries of personnel present, will be provided.

5. Prior to the thermal treatment, the treatment site in #2 of this section will be secured and access restricted except to authorized personnel. Additionally, prior to the treatment operation, a visual inspection will be performed within a minimum 200-foot radius of the treatment site described in #2 of this section to assure that no unauthorized personnel are on site. Based on the engineering controls calculations provided in the project Explosives Safety Submission and Explosives Sitting Plan, dated February 2006, an enclosure which has 24 inches of sand bags on the roof and walls would have a maximum sandbag throw of 135 feet and would require a safety arc of 200 feet. The project Explosives Safety Submission and Explosives Sitting Plan, dated February 2006 provides the detailed engineering controls and calculations, risk assessment, and operational hazard analysis, as well as sand bag construction examples.

6. The Permittee will notify the local FDEP Northeast District representative or its designee to offer the option of being present to observe the thermal treatment operation.

7. The Permittee is required to obtain all other local, state and federal approvals and licenses required for conducting the activities in this permit.

8. Within 60 days of completion of the thermal treatment authorized by this permit, the Permittee shall submit a detailed written summary of the specific description of the actual procedures used for treatment, and the disposition of any residues from the treatment process, as well as any additional pertinent information shall be submitted to the Waste Program Administrator, Department of Environmental Protection, Northeast District Office, 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256; Environmental Administrator, Federal Facilities Group, Bureau of Waste Cleanup, M.S. 4535, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and to the Environmental Administrator, Hazardous Waste Regulation Section, M.S. 4560, Bureau of Solid and Hazardous Waste, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

The Permittee shall undertake whatever action necessary to comply with Rule 62-730.320, F.A.C.

Issued this 28 day of June

CHARLES F. GODDARD, CHIEF
SOLID AND HAZARDOUS WASTE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing FINAL ORDER has been furnished by U.S. Mail to:

1. Mark E. Davidson, NAVFAC EFD SOUTH
2. Ashwin Patel, DEP/Jacksonville
3. David Grabka, DEP/Federal Facilities
4. Don Webster, EPA/Atlanta

on this 28 day of June, 2006 in Tallahassee, Florida.

Filing and Acknowledgment
Filed on this date, pursuant to
Section 120.52, Florida Statutes,
with the designated Clerk, receipt
of which is acknowledged.

Kim Shurby
CLERK

6-28-06
DATE