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DEPARTMENT OF THE NAVY
NAVAL WEAPONS SUPPORT CENTER
CRANE, INDIANA 47522

IN REPLY REFER TO:

11346
0924

13 JUN 1985

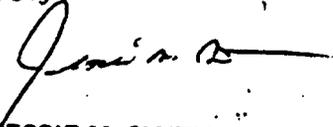
Mr. Martin Hamper
Environmental Protection Agency
Region 5
230 South Dearborn St.
Chicago, IL 60604

Dear Mr. Hamper:

In response to your correspondence of May 3, 1985, on solid waste management units and corrective action requirements, we are submitting a Solid Waste Management Unit Assessment Study for the Naval Weapons Support Center, Crane, Indiana. It consists of three volumes of documents including your certification form and information and reports on our current solid waste management operations and past disposal practices. To facilitate review, an executive summary is included in the front of Volume I summarizing the contents and purpose of the assessment.

NAWPNSUPPCEN Crane point of contact is Mrs. Cathy Andrews, Code 0924, telephone 812-854-3114.

Sincerely,


JESSIE M. SMITH
Commander, USN
Executive Officer
By direction of the
Commanding Officer

Encl:
(1) Solid Waste Management Assessment
Study (Volumes I-III)

Copy to:
Indiana State Board of Health (Guinn Doyle)
Northern Division, Naval Facilities
Engineering Command (Code 114, G. Wiese)
Navy Energy and Environmental Support Activity
Naval Sea Systems Command (SEA-6411E)

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SECTION I
 C. CLASSIFICATION REGARDING POTENTIAL LEAKS FROM
 SOLID WASTE MANAGEMENT UNITS

FACILITY NAME: Naval Weapons Support Center
 EPA I.D. NUMBER: IN5170023498
 LOCATION CITY: Crane
 STATE: IN 47522

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTES UNITS CURRENTLY SHOWN IN YOUR PART B APPLICATION

| | YES | NO |
|-----------------------------------|-------|-------|
| • Landfill | X | _____ |
| • Surface Impoundment | _____ | _____ |
| • Land Farm | X | _____ |
| • Waste Pile | _____ | _____ |
| • Incinerator | X | _____ |
| • Storage Tank (Above Ground) | X | _____ |
| • Storage Tank (Underground) | X | _____ |
| • Container Storage Area | _____ | _____ |
| • Injection Wells | _____ | X |
| • Wastewater Treatment Units | X | _____ |
| • Transfer Stations | _____ | X |
| • Waste Recycling Operations | _____ | _____ |
| • Waste Treatment, Detoxification | X | _____ |
| • Other _____ | _____ | _____ |

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed on and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, provide a site plan if available.

See Section II, Table I - For information regarding current Solid Waste Management Units Operations.

See Section III, Appendices A-G for data on past disposal practices and solid waste management units.

NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

- 3. For the units noted in Number 1 above and also those hazardous waste units in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or still be occurring.

Please provide the following information

- a. Date of release
- b. Type of waste released
- c. Quantity or volume of waste released
- d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

See Section II, Table 2 - For information regarding release from current Solid Waste Mgt. Units Operations.

See Section III for information on releases from past disposal operations/practices and solid waste management units.

- 4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

See Section III, Appendix E

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))

 Typed Name and Title

 Signature

 Date

SECTION II
 1.0 EXISTING SOLID WASTE MANAGEMENT UNITS
 AT
 NAVAL WEAPONS SUPPORT CENTER CRANE

| SOLID WASTE MGT. UNITS (1) | DESCRIPTION OF WASTE TREATED - STORED - DISPOSED | HAZARDOUS WASTE | HAZARDOUS CONSTITUENTS | CAPACITY | DIMENSIONS | VOLUME OF WASTE DISPOSED OF | COMMENTS |
|--|---|--------------------|---------------------------|---|------------|---|---|
| Sanitary Landfill (Operating Permit 151-2) | Trash demolition - construction debris asbestos | No | No | 4.2 million yd ³ | 65 Acres | 1000 yd ³ /day | Started operation in 1972 1976 - Bldg. 225 Fire debris sent to landfill. See Sec. III, Appendix A |
| Solidfill Sites -3 | Demolition/construction debris | No | No | 10,400 yd ³ | 4 Acres | 10 yd ³ /day | |
| Classified Material Incinerator | Classified papers and documents | No | No | 975 lbs./hr. | - | Average 80-100 ton/yr. | Built in 1962. Registered with Indiana as an air source. |
| Land Farm | Land application of sludge from tertiary sewage treatment plant (aerobic digester) | No | No | Applied along approximately 18 miles of roadside | - | 40,000 gallons/ month | Start land application of liquid sludge from tertiary plant in 1980. |
| Storage Tank (above ground) Bldg. 2801 | Waste Oil | No | No | 5,000 gallons | - | Estimate 4,000-6,000 gallons/year | Waste oil is either sold or used for boiler fuel. |
| Storage Tank (underground) Bldg. 1818 | Waste Oil | No | No | (2) 500 gallon | - | | Used for temporary storage of waste oil prior to moving it to underground tank at Bldg. 2801 or to boilers for use as fuel. |

3.0 RELEASES FROM CURRENT SOLID WASTE MANAGEMENT UNITS OPERATIONS

| SOLID WASTE MANAGEMENT UNIT | DATE OF RELEASE | TYPE OF WASTE RELEASED | QUANTITY/VOLUME OF WASTE RELEASED | DESCRIBE NATURE OF RELEASE | COMMENTS |
|--|-------------------|---|-----------------------------------|--|--|
| Wastewater Treatment Units Bldg. 3044 | July 14, 1982 | Pink Water K047 TNT Concentration 40-50 PPM | 2600-3000 gallons gallons | Outside holding sump for treatment unit overflowed. | Approximately 2600 gallons of the spill was contained & collected, remainder went into Sulphur Creek (diluted to 1 PPM). |
| Wastewater Treatment Units Bldg. 3044 | May 31, 1983 | Pink Water -K047 TNT Concentration 40-50 PPM | 5500 gallons | Outside holding sump for treatment unit overflowed. | Contained/collected 500 gallons. Lost into Sulphur Creek 5000 gallons - results showed significantly diluted by time it reached creek. |
| Wastewater Treatment Units Bldg. 3044 | July 6, 1983 | Pink Water -K047 TNT Concentration 40-50 PPM | 4000-5000 gallons | Outside holding sump for treatment unit overflowed. | To reduce effects of spill diluted with 120,000 gallons of water. Designing spill containment structure for area. |
| Wastewater Treatment Units Bldg. 3044 | December 19, 1984 | Pink Water -K047 TNT Concentration 40-50 PPM | 100-200 gallons | Smaller holding sump for production building overflowed. | Entire amount was contained, appeared no surface waters were affected. |
| Waste Pile Ammunition Burning Grounds (1) | Continuous | Heavy metal contaminated ash from open burning. | Unknown | Pile was not covered ash was carried off by wind dispersion & surface water runoff. | |
| Waste Treatment Unit Open Burning Ammunition Burning Ground (1) | Continuous | Heavy metal contaminated ash from open burning. | Unknown | Ash removed each day - safety requires that ash must cool before being removed from pads. Wind dispersion & surface water runoff can carry it off. | Have requested funding to recontour burning pads to control surface water runoff & runoff. |

| SOLID WASTE MGT. UNITS *(1) | DESCRIPTION OF WASTE TREATED - | HAZARDOUS WASTE | HAZARDOUS CONSTITUENTS | CAPACITY | DIMENSIONS | VOLUME OF WASTE DISPOSED OF | COMMENTS |
|--|---|--------------------|---------------------------|-----------------------|------------|---|---|
| Storage Tank (underground) Bldg. 1820 | Waste Oil | No | No | 500 gallons | - | | Used for temporary storage of waste oil prior to moving it to underground tank or Bldg. 2801 or to boilers for use as fuel. |
| Storage Tank (underground) Ammunition Burning Grounds | Collection tank for pink water from sur- face impoundments used to dewater explosive sludges. | Yes K047 | No | 25,000 gallons | - | Estimated 5.8 million gallons/yr. | Started using 12/83 - Water stored less than 90 days. |
| Wastewater Treatment Unit Bldg. 160 *(2) | Treatment of pink water with activated carbon | K047 Yes | No | 14,400 gallons/day | - | Have treated 30,000-40,000 gallons of water in past 4 years | Plant constructed in 1980. |
| Wastewater Treat- ment Unit Bldg. 3044 *(2) | Treatment of pink water using activated carbon. | K047 Yes | No | 57,000 gallons/day | - | 1981-1.3 M gal. 1982-2.2 M gal. 1983-11.7 M gal. 1984-6.8 M gal. | Plant started operations in 1978. |
| Wastewater Treat- ment Unit Bldg. 136 *(2) | Treatment of wastewater cont. with lead based initiating compounds. | K046 | Yes | 6,700 gallons/day | - | Unit has been used very little since built. | Plant constructed in 1980. |
| Wastewater Treat- ment Unit Bldg. 3064 *(2) | Pretreatment facility for plating shop. | Yes | Yes | 17,000 gallons/day | - | - | Been in operation since 1979. |
| Wastewater Treat- ment Unit Bldg. 3049 *(2) | Sewage Treatment Plant - tertiary treatment provided by rotating biological contractors. | No | No | 1.2 M gal./day | - | Average .03 M gal/day | Plant built in 1978. |

| SOLID WASTE MGT. UNITS *(1) | DESCRIPTION OF WASTE - TREATED - STORED - DISPOSED | HAZARDOUS WASTE | HAZARDOUS CONSTITUENTS | CAPACITY | DIMENSIONS | VOLUMES OF WASTE DISPOSED OF | COMMENTS |
|---|--|-----------------|------------------------|-------------------------|-----------------------|---|--|
| Storage Tank (Underground) Ammunition Burning Grounds | Collection tank for red phosphorus contaminated water from surface impoundment used to dewater red phosphorus sludges. | No | No | 12,000 Gallons | - | Estimated 2.9 million gallons/year | Started using 12/83. Water stored less than 90 days. |
| Waste Treatment Unit *(2) Ammunition Burning Grounds | Thermal treatment of waste explosives, explosives cont. waste, waste pyrotechnics, pyrotechnics cont. waste & propellants. | D003 K045 | Yes | - | 40 Acres | 1981-2461 Tons 1982-2387 Tons 1983-3770 Tons 1984-1783 Tons | Started in 1940's. |
| Waste Treatment Unit *(2) Demolition Range | Open detonation of explosive, pyrotechnic loaded, unsafe & waste munitions. | D003 P009 | Yes | - | Estimated 40-50 Acres | 1981-3500 Tons 1982- 403 Tons 1983- 273 Tons 1984- 409 Tons | Started in 1940's. |
| Waste Treatment Unit *(2) Rifle Range *(3) | Thermal treatment of ammonium picrate, ammonium picrate loaded rounds & explosives cont. materials. | D003 P009 | Yes | - | 10 Acres | 1981- 240 Tons 1982- 7 Tons 1983- 20 Tons 1984- 23 Tons | |
| Sanitary Landfill Leachate Collection Ponds *(2) | Any leachate generated in landfill cells drain to these 2 collection ponds. | No | No | Estimate 30,000 gallons | 1/4 Acre | As leachate collects it is pumped from holding ponds into sanitary sewer for treatment at Sewage Treatment Plant. | |

NOTES: *(1) Past practices pertaining to these units are identified in Section III, Appendix I.
*(2) Discharge points associated with these solid waste management units are covered by NPDES Permit# IN0021539.
*(3) The Rifle Range is located within the boundaries of the Demolition Range.

The following location map shows location of each current Solid Waste Mgt. Unit.

| SOLID WASTE MANAGEMENT UNIT | DATE OF RELEASE | TYPE OF WASTE RELEASED | QUANTITY/VOLUME OF WASTE RELEASED | DESCRIBE NATURE OF RELEASE | COMMENTS |
|---|---------------------|---|-----------------------------------|---|----------|
| Waste Treatment Unit Demolition Range (2) | Continuous | Residue from detonation - heavy metal/ possible explosive | Unknown | No surface runoff/runoff controls - Any runoff could carry contamination. | |
| Land Farm | Each time it rains. | Sludge | Unknown | The aerobic digested sludge is applied along 18 miles of highways. If a hard rain occurs right after application some could be carried by surface water runoff. To date analysis has indicated it is non-hazardous. | |

* See Appendix A of Section 3 for past history and see Site 10 Groundwater Analyses in Appendix E

- NOTES: (1) An instream sampling point has been established downstream in Little Sulphur Creek from Ammunition Burning Grounds. This sampling point is covered by NPDES Permit# IN0021539.
- (2) Runoff from the Demolition Range is collected by 3 soil sedimentation ponds. The discharge points from these 3 ponds are covered by NPDES Permit# IN0021539.

ENCLOSURES

**Enclosure (1) - Solid Waste Management Unit Current
Operations and CERCLA Sites (3 volumes)
can be found under the date 06/01/85.**