NAS Jacksonville Administrative Record
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DEPARTMENT OF THE NAV
NAVAL AIR STATION
JACKSONVILLE, FLORIDA 32212

IN REPLY REFER TO
Code 184/WR
6280

NOV 21 1983

Mr. Ernest Frey
Department of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

RECEIVED
NOV 29 1983

Dear Mr. Frey:

On November 4, 1983, personnel from the Department of the Navy and from Geraghty & Miller, Inc., met with FDER (Florida Department of Environmental Regulation) representatives to discuss activities at the NAS (Naval Air Station-Jacksonville) including: (1) the NACIP verification study presently being performed, (2) closure and post-closure plans for the Glass Bead Disposal Area, (3) RCRA compliance at the industrial wastewater treatment plant; and (4) compliance with Chapters 17-3 and 17-4 of the Florida Administrative Code at NAS.

During this meeting, existing data along with data collected during the field program (verification study) of the NACIP investigation were verbally presented for many of the sites identified in the IAS (Initial Assessment Study). These data, which were not available for review by the FDER prior to the meeting, clarified some of the items presented in the FDER's letter to the Navy dated October 7, 1983. At this time we would like to address the contents of that letter on a site-by-site basis. Subsequently, we will prepare an updated Plan-of-Action incorporating the contents of this letter, which, with your concurrence, will be implemented in the very near future. Presented herein is a discussion of the individual sites following a format consistent with the FDER's letter to the Navy dated October 7, 1983 and our meeting on November 4, 1983.

RCRA Compliance - Industrial Wastewater Treatment Plant.

The two proposed monitor wells at the sludge drying beds along with a background monitor well located nearby will form the monitor-well network which is believed to be sufficient to monitor possible contamination from the sludge-drying beds. The wells, discussed in the Ground-Water Monitoring Plan for RCRA compliance previously submitted to the FDER, will be constructed in the uppermost saturated zone as near to the beds as possible. Based on topography at the site, the general shallow ground-water flow direction is toward the St. John's River. The constituents identified in the RCRA monitor plan will be analyzed at the frequencies identified. In addition, phenols will be added to the parameter list for quarterly sampling and a pesticide and herbicide scan will be performed during the first round of sampling, and if undetected, no additional analyses will be performed.

Glass Bead Disposal Area, Site No. 17. Sediment samples collected from the glass bead area in Mulberry Cove were analyzed for EP toxicity for arsenic, barium, chromium, cadmium, lead, mercury, selenium, silver, and nickel. As a result of all the samples passing the test, the glass beads in this area are not considered to be a hazardous waste; nevertheless, a closure and post-closure plan will be submitted and implemented with the concurrence of the FDER. The closure plan will better define the vertical and lateral extent of the Glass Bead Disposal Area and possible periodic water-quality testing of the surface water in the area. The closure plans will be submitted as a separate document for FDER's approval.

Present Fire Fighting Training Area, Site No. 2. A water-quality sample will be collected from a temporary well and analyzed for VOC's (volatile organic compounds) and PCBs (polychlorinated biphenyls) along with a field determination of pH, temperature and specific conductance. A follow-up Plan-of-Action to be submitted to FDER will show the proposed locations and sampling procedures.

Sludge Disposal Area/Sewage Treatment Plant Area, Site No. 3. The FDER's intent was to determine whether or not the sludges disposed of in this area were hazardous based on EP Toxicity tests for metals. EP Toxicity tests results have been performed previously on the sludge prior to their disposal in this area and copies of the results are presented in Attachment A. Both of the samples analyzed passed the EP Toxicity test and are not considered to be a hazardous waste. Therefore, the Navy recommends no additional studies be performed at this site.

Pine Tree Planting Area, Site No. 4. Three sediment samples were collected from the Pine Tree Planting Area and analyzed for EP Toxicity for arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and nickel. All samples passed the EP Toxicity tests for these metals. In addition, water samples collected from three monitor wells installed at this site meet FDER's drinking-water standards for the metals analyzed which included chromium, cadmium, lead, cyanide, and nickel. The Navy therefore requests that no additional verification work be performed at this time other than the collection of soil samples for asbestos analysis. The data collected during verification study at this site will be presented to the FDER at the conclusion of the expanded verification study.

JP-4 Explosion and Roof Collapse, Fuel Farm Area, Underground Tanks, Site No. 7. Lightning caused an explosion and fire which destroyed the underground tank No. 159-I on June 24, 1980. At the time, there was 24,107 gallons of JP-4 in the tank. The tank had a capacity of 100,000 gallons. The tank fire was extinguished with 76 gallons of light water and 230 pounds of PKP fire agent. Adjacent grass fires were extinguished with hydrant water using 1200 feet of 2 ½" hose. Residual fuel at bottom of the tank was floated with 1000 gallons of water pumped into the tank

by the fire department on July 10, 1980. Of the 2,000 gallons of fuel/water mix which were pumped out, it is estimated that 1000 gallons of fuel were extracted as waste oil. On three additional occasions (July 14, 18, and 21, 1980), 2300, 200, and 355 gallons of fuel/water mix was extracted each containing 1200, 100, and 15 gallons of fuel, respectively, which was also disposed of as waste oil. The total fuel estimated to be 2,315 gallons was sent to waste oil storage tank where it was blended with various waste oils. The DPDO waste oil contractor at the time was International Petroleum, Hallendale, Florida who collected waste oil for re-refinement and re-sale.

Old Disposal Area (East of Fuel Farm), Site No. 9. Three sediment samples were collected from the Old Disposal Area and analyzed by EP Toxicity tests for arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and nickel. All three samples passed the test. In addition, a water sample was collected from a monitor well installed at the site and analyzed for chromium, cadmium, lead, cyanide, and nickel, and each was below FDER's drinking water standards. The Navy therefore recommends no additional verification studies be performed at this location. The results of the study at this site will be presented in the expanded verification report and will be submitted to the FDER.

Building 119 (A-T), Site No. 10. Tank 119K is a 27,000-gallon buried tank used for storage of paint wastes consisting of a blend of cold carbon remover, vapor degreasing solvents, and paint residues. The blend is classified as a hazardous waste being both flammable and toxic and is disposed of by contract. A hydrostatic test would be performed by an independent contractor to determine the integrity of the tank.

Hanger Building, Old Test Cell Building, Battery Shop, Solvent and Paint Sludge Disposal Area, and Storm Sewer Discharge, Sites No. 11, 12, 14, 15, 16. Three sediment samples were collected and analyzed for EP Toxicity for arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and nickel. All three samples passed the test. In addition, water samples were collected from seven monitor wells installed during the investigation. These water samples were analyzed for chromium, cadmium, nickel. lead, and cyanide, and each were below FDER's drinking water standards. The Navy therefore recommends no additional verification work be performed at this site. The results of the study at these sites will be presented in the expanded verification report and will be submitted to the FDER.

Radium Paint Waste Disposal Pit, Site No. 13. Location of the former 40' x 50' pit has been determined to be beneath what was the Helo rotor blade test and balance stand. A shallow temporary monitor well will be installed to collect a water sample which will be analyzed for radionuclides identified in FDER's drinking-water standards, along with a field determination of pH, temperature, and specific conductance. A Plan-of-Action will be submitted for the FDER's approval of the sample site location and sampling procedures prior to performing this work.

Radioactive Waste Fill Area, Site No. 18. A shallow temporary monitor well will be installed and a water sample collected for analysis for radionuclides identified in FDER's drinking-water standards, along with a field determination of pH, temperature, and specific conductance. A Plan-of-Action will be submitted for FDER's approval of the sample site location and sampling procedures prior to performing this work.

Old Gas Station, Site No. 19. Presently, the old tanks underlie a building housing a plant nursery making access difficult. The tanks were abandoned in January 1980 by over-filling them with water to ensure complete removal of the fuel. All fuel lines, cross-connections, and venting systems were disconnected and capped. The Navy therefore recommends no additional work be performed at this site.

"Fort Dix," Old Skeet Range, Sites No. 22, 23. Two responsible agencies, the Weapons Department and Personnel Services both agreed that target and skeet range ammunition was discharged at the site; however, none was buried.

Building No. 2038, Site No. 25. Three hundred drums of low-level radioactive waste from the Naval Hospital were disposed of in June 1982 by the South West Nuclear Corporation located at 906 Montgomery St., Laurel, Maryland. The Radiological Affairs Support Office directed the removal of the drums to a disposal site in Richland, Washington. A copy of the manifests are available for inspection at NAS.

Old Main Registered Disposal Area, Site No. 26. A letter from Roland E. Byrd, retired head of Industrial Hygiene at the Naval Regional Medical Center, was submitted on April 19, 1979 to Peter L. Palmer of Geraghty & Miller, Inc., detailing the removal of the radioactive wastes. A copy of the letter is contained in Attachment B.

Organic Disposal Area, Site No. 29. A water-quality sample will be collected from a temporary monitor well and analyzed for VOCs, TOC (total organic carbon), cyanide, and primary drinking-water metals along with a field determination of pH, temperature, and specific conductance. A Plan-of-Action will be submitted for FDER's approval of the sample site location and sampling procedures prior to performing this work. The locations and laboratory EP Toxicity results of the sediment samples will be provided in the expanded verification report and will be submitted to FDER.

Old Drum Lot, Site No. 30. The expanded verification report will show the location of the monitor wells, sediment sampling sites, and the sampling procedures. This report will be submitted to the FDER.

Base Landfill, Site No. 32. A water-quality sample will be collected from a temporary monitor well installed downgradient of the landfill, and analyzed for VOC and TOC along with a field determination of pH, temperature, and specific conductance. A Plan-of-Action will be submitted for FDER's approval of the sample site location and sampling procedures prior to performing this work.

Base Service Station, Site No. 33. The source of the problem at the base service station was loose pipe fittings on the gasoline delivery pipes to the service station island. The fittings leaked gasoline to the ground beneath the island when the pipe was under pressure. Gasoline in the ground found its way to a sanitary manhole near the island via an abandoned broken tile pipe. The gasoline/sewage mix in the manhole was sent to a lift station and then to the Sewage Treatment Plant leaving gasoline vapors at the lift station and several buildings along the route. A recovery well consisting of a large perforated corrigated pipe wrapped in a fabric filter was set in an excavation made between the island and the gasoline storage tank. A gasoline scavenger and a ground-water depression pump were then installed in this recovery well. The depression pump lowered the ground-water level in the well and the gasoline scavenger pump retrieved gasoline from the depressed water-table surface and pumped it to a separate container. The underground gasoline storage tanks, pipes, and fittings were thoroughly checked, fittings were tightened and the entire system pressure checked by Law Engineering. The gasoline scavenger recovered a small amount of gasoline before the flow of gasoline to the recovery well ceased. The scavenger pump, depression pump and controls were removed and shipped to California for use at other Navy facilities. The recovery well is fitted with a manhole cover and both this and the sanitary manhole are checked periodically for gasoline. No gasoline has been found at either location after the removal of the scavenger system.

Torpedo Rework Facility, Site No. 38. Typical otto fuel manifests are contained in Attachment C. Additional manifests are available for inspection at the NAS.

Sludge Weathering Area and Slurry Pit; Slurry Pit/Sludge Trench, Tank No. 21; Slurry Pit, Tank No. 20; Slurry and Burn Pit, Sites No. 1, 2, 3, 4. As discussed in the IAS, it is felt that a further verification study is not needed for sites No. 1, 2, and 3 due to the low volume of bottom-sludge slurry disposed of in the pits, along with the fact that it occurred awhile ago. Site No. 4 had on separate occasions received: (1) approximately 8,000 barrels of Navy special fuel contaminated with water, (2) 200 barrels of Tetraethyl lead contaminated sludge and rust from tank cleaning, and (3) an unknown quantity of trash from the NFD (Naval Fuel Depot). A water sample collected from a monitor well installed hydraulically downgradient from site No. 4 showed essentially no contamination of the shallow ground water in this area. The results of the study conducted at this site will be provided in the expanded verification report and will be submitted to FDER.

Gas Hill. The location of the installed monitor wells and soil borings and the results of the study at Gas Hill will be provided in a final report which will be submitted to the FDER.

Code 184/WR
6280

Domestic Wastewater Treatment Plant. Monitor wells will also be installed around the polishing pond associated with the domestic wastewater treatment plant in accordance with Chapter 17-4.245(6)(g)1 of the Florida Administrative Code. It is anticipated that these wells will be installed during the same period as the wells to be drilled during the expanded verification study. The well locations and sampling procedures will be presented in a Plan-of-Action prior to performing this work.

In closing, I would like to extend my appreciation to the FDER for their cooperation with the Navy in the NACIP study being performed at the NAS-Jacksonville. We feel that the phased approach utilized by the Navy in performing these NACIP investigations is a thorough, cost-effective technique to delineate which sites actually need long-term monitoring (for which a ground-water monitoring plan will be prepared) or remedial actions.

If you have any questions concerning the information contained herein, please give me a call.

Sincerely,

T. J. [illegible]
CAPTAIN, CEC, USN
[illegible] OFFICER
BY DIRECTION OF THE
COMMANDING OFFICER

Copy to:
SOUTHNAVFACENGCOM
(Code 1142-T)

Peter Palmer, P.E.
Geraghty & Miller, Inc.

ATTACHMENT A

TECHNICAL SERVICES, INC.

ENVIRONMENTAL CONSULTANTS — INDUSTRIAL CHEMISTS
105 STOCKTON STREET — P.O. BOX 52229
JACKSONVILLE, FLORIDA 32201
(904) 353-5761

Laboratory No. 37662

November 17, 1980

Sample of Sludge

Date Received October 8, 1980

For Commanding Officer, Southern Division, Naval Facilities Engineering Command, P.O. Box 10068, Charleston, South Carolina 29411

Marks:

Contract #N62467-80-C-0464

CERTIFICATE OF ANALYSIS OR TESTS

Dry sludge, Naval Air Station
Jacksonville, Florida

	EPA Extraction Procedure Toxicity Tests
Endrin, µg/l	<1
Lindane, µg/l	<1
Methoxychlor, µg/l	<5
Toxaphene, µg/l	<3
2,4-D, µg/l	<1
2.4-5-TP Silvex, µg/l	<0.5
Arsenic, mg/l	0.018
Barium, mg/l	0.24
Cadmium, mg/l	0.078
Chromium, mg/l	0.51
Lead, mg/l	0.051
Mercury, mg/l	<.0002
Selenium, mg/l	<0.01
Silver, mg/l	0.022

Respectfully submitted,

TECHNICAL SERVICES, INC.

BY [illegible]

TECHNICAL SERVICES, INC.

ENVIRONMENTAL CONSULTANTS — INDUSTRIAL CHEMISTS
OFFICE 2471 SWAN ST. — P.O. BOX 52329
LABORATORIES 103-107 STOCKTON STREET
JACKSONVILLE, FLORIDA 32201
(904) 353-5761

Laboratory No. 52986

July 18, 19

Sample of Dried Domestic Sludge

Date Received June 3, 1983

For Director of Environmental Division, Public Works Department, Code 10E, Box 5, Jacksonville, Florida 32212, Attn: Mr. Bill Roche

Marks: Dried Domestic Sludge #837, Call No. 2A30

CERTIFICATE OF ANALYSIS OR TESTS

Arsenic, mg/l	0.009
Barium, mg/l	1.59
Cadmium, mg/l	<0.003
Chromium, mg/l	0.117
Lead, mg/l	<0.02
Mercury, mg/l	<0.0002
Selenium, mg/l	0.0068
Silver, mg/l	<0.005

Factor		As Received	Dried @ 100°C
Water		66.64%	---
pH		7.3	---
Nitrogen		2.21% N	6.62%
Cadmium, ppm		115	345
Chromium, ppm		7333	21,931
Copper, ppm		232	695
Barium, ppm		120	360
Mercury, ppm		0.341	1.022
Manganese		615	1844
Nickel, ppm		142	426
Lead, ppm		559	1676
Potassium, ppm		595	1784
Selenium, ppm		0.269	0.306
Silver, ppm		43.6	130.7
Sodium, ppm		263	788
Zinc, ppm		268	803
Arsenic, ppm		1.776	5.324
Ignition Loss:	100 - 600°C	24.43%	
	600 - 800°C	0.33%	

Respectfully submitted,

TECHNICAL SERVICES, INC.

BY Harvey C. Gray, Jr.

DOMESTIC STP
DRIED SLUDGE

ATTACHMENT B

NAVAL REGIONAL MEDICAL CENTER
JACKSONVILLE, FLORIDA 32214

RECD APR 23 1979

IN REPLY REFER TO:

NRMCJAX-40:dd
6260
19 April 1979

Mr. Peter P. Palmer, P. E.
Senior Hydrologist
Geraghty & Miller, Inc.
P. O. Box 271173
Tampa, Florida 33688

Dear Mr. Palmer:

In answer to your letter of April 10, 1979, the following information is provided relative to the radium paint disposal area of the Naval Air Station, Jacksonville. A plot of ground in the old land burial area of the Naval Air Station had been used as a radium paint waste ground burial site for a period of approximately 10 or 12 years prior to about 1955, when its usage was stopped. In 1973, the ground to a depth of about 4½ feet was completely excavated and disposed of as radioactive waste, to remove this contamination from the vicinity of a proposed new housing area.

This abstract following gives a summary of the procedures used and the results as reported. During a Radiological Affairs Support Office technical assistance visit to the Naval Air Station, Jacksonville, on 8 and 9 January 1973, RASO was informed of the existence of a no longer used radioactive radium waste burial site and was informally requested to evaluate the burial site for possible radiological hazards.

During the period 20 to 22 January 1973, RASO obtained and evaluated several soil and water samples from the burial site. As a result, RASO recommended that all radium waste material and contaminated soil be removed and disposed of at an Atomic Energy Commission licensed burial site and that the land be returned to a condition acceptable for general use.

During the period 5 to 29 November 1973, RASO provided technical assistance during the radium waste removal effort and performed a final evaluation of the burial site. Based upon the results of the final surveys, a radiological hazard no longer exists and the area is acceptable for general use.

As of 29 November 1973, this area is considered to be free of radioactive contamination. A copy of the RASO report is available for review in the Industrial Hygiene office of the Naval Regional Medical Center should it be desired.

Sincerely,

Roland E. Byrd

ROLAND E. BYRD
Industrial Hygienist
Occupational Environmental
Health Service

State of California—Health and Welfare Agency

Department of Health

HAZARDOUS MATERIALS MANAGEMENT SECTION
744 P Street
Sacramento, CA 95814

UNIFORM HAZARDOUS WASTE MANIFEST

104.8

Please print or type with ELITE type (12 characters per inch).

STATE ID NUMBER 82624

FILLED IN BY THE GENERATOR

GENERATOR NAME AND MAILING ADDRESS
NAVAL AIR STATION JAX FL. CODE 18E
32212
AREA CODE/PHONE NUMBER 904-772-2114

MANIFEST DOCUMENT NUMBER
EPA ID NUMBER FLG170244112

TRANSPORTER NO. 1
VTS TRUCKING P.O. BOX 7978
BAKERSFIELD CA 93307

VEH./CONTAINER NO. 155 FLAT BED

EPA ID NUMBER CAD006649

TRANSPORTER NO. 2/ALTERNATE TSD FACILITY

EPA ID NUMBER

TREATMENT, STORAGE, OR DISPOSAL (TSD) FACILITY
CHEMICAL WASTE MANAGEMENT
CA, KETTLEMAN HILLS
AREA CODE/PHONE NUMBER

EPA ID NUMBER CAT000646117

PROPER U.S. D.O.T. SHIPPING NAME AND HAZARD CLASS	UN/NA NUMBER	TOTAL QUANTITY	UNIT	CONTAINER NO.	TYPE	WA CAT
HW N.O.S. ORME	9189	5945	LBS	109	DM	110

COMPONENTS	CONC. UPPER %	RANGE LOWER %	UNI
MISC PAPER & PLASTIC	95	95	
OTTO FUEL CONTAMINATES	05	05	

Hazardous Materials Management Section
MAR 09 1983
California Department of Health Services
SACRAMENTO

SPECIAL HANDLING INSTRUCTIONS

CLOSED

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

WILLIAM P. ROCHE — PRINTED OR TYPED FULL NAME AND SIGNATURE — MO. 01 DAY 17

☐ CHECK IF CONTINUATION SHEET IS USED. NUMBER OF CONTINUATION SHEETS _____

TO BE FILLED IN BY TRANSPORTER

TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE MATERIALS — DATE REC'D & ACC
ROBIN LEE DEJONGH — PRINTED OR TYPED FULL NAME AND SIGNATURE — MO. 01 DAY 17

TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE MATERIALS — DATE REC'D & ACC
Terry D. Hampton — PRINTED OR TYPED FULL NAME AND SIGNATURE — MO. DAY

TO BE FILLED IN BY TSD FACILITY IF

DISCREPANCY INDICATION SPACE

110 DRUMS INSTEAD OF 109
1 LEAKY DRUM TRANSFERED IN DEMING N.M.

Facility owner or operator: Certification of receipt of hazardous material covered by this manifest except as noted in the discrepancy indication space above. Note: TSDF must complete waste number. See instructions. — DATE REC'D & ACCE

PRINTED OR TYPED FULL NAME AND SIGNATURE — EPA ID NUMBER CAT000646117 — MO. DAY 26

Original—White—Disposer send to DHS; Green—Hauler; Yellow—Disposer; Pink—Generator

DHS 8022 (7/82)

LIQUID BURNABLE MATERIAL
MANIFEST

NO. 02260

SECTION A:

I.D. CODES State / Federal	NAME	ADDRESS CITY, STATE, ZIP	CONTAC TELEPHON
generator S	NAVAL AIR STATION	P.O. Box 5 - Code PE	MR. ROCHE
FL617002441 F	PUBLIC WORKS	JACKSONVILLE FL 32212	904-772-21
transporter S	OLDOVER CORP	P.O. Box 297	J. KULK
VAD040159436 F		GREEN COVE SPRINGS FL 32043	904/269-6
facility S	OLDOVER CORP	SAME	
FLD000737312 F			

SECTION B:

MATERIAL DESCRIPTION	%	CLASSIFICATION DOT	EPA	STATE	PHYSICAL STATE	ESTIMAT GALLON
X OTTO FUEL WASTE			D003		LIQ	650
NOS ORME #9189						

SECTION C: EMERGENCY INFORMATION

IMMEDIATE RESPONSE:

SPECIAL HANDLING INFORMATION:

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, US COAST GUARD, 800-424-8802 FOR EMERGENCY ASSISTA

SECTION D: CERTIFICATIONS

Generator: This is to certify that the above-named materials are properly classified, described, packaged, marke and labeled, and are in proper condition for transportation according to the applicable regulations of the Department o Transportation, the U. S. Environmental Protection Agency, and the applicable state agencies of hazardous material an waste management.

TERMS & CONDITIONS: If, after FACILITY analyzes said waste material and FACILTIY determines that the informatio supplied above is not accurate with respect to the information requested, FACILITY has the option to either return the materic to the generator, at generator expense or if possible, blend this material, as to bring the waste stream into compliance fo proper disposal at the generator expenses. In any case the FACILITY shall have the option to return any waste materials th are found to be a different composition than stated above. Actual gallons to be determined by FACILITY through lab tests c specific gravity and scale weights.

TRAILER I.C NUMBER | X William P. Roche PE | GENERATOR REPRESENTATIVE'S SIGNATURE | 10/3/8 DATE

Transporter: This is to certify acceptance of the shipment described above

TRAILER I.C NUMBER | X Bruce Tabor | TRANSPORTER REPRESENTATIVE'S SIGNATURE | 10/3/8 DATE

Facility: This is to certify acceptance of the shipment described above for ☐ Treatment ☐ Storage or ☒ Disposal

TRAILER I.C NUMBER | 650 ACTUAL GALLONS | Marlene F Reed | FACILITY REPRESENTATIVE'S SIGNATURE | 10-3-8 DATE

FORM 3092

GENERATOR COPY

ATTACHMENT C