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DEPARTMENT OF THE NAVY
NAW PUBLIC WORKS CENTER
NAVAL AIR STATION
PENSACOLA, FLORIDA 32508-6500

IN REPLY REFER TO:
5090
Code 481
October 25, 1990

N00204.AR.000169
NAS PENSACOLA
5090.3a

Mr. William E. Kellenberger, P.E.
Hazardous Waste Engineer, NW District
Florida Department of Environmental Regulations
160 Governmental Center
Pensacola, FL 32501-5794

Re: Closure Permit HF-178989, Closure Surface Impoundment

Dear Mr. Kellenberger:

Enclosed are the Quarterly Reports for June - August 1990 of the Groundwater Quality Monitoring as required by the above referenced permit, Specific Condition 25. The report lists the wells that were sampled on August 7, 8, and 15, 1990 and the analysts that were performed for the Corrective Action (CA) and Point of Compliance (POC) monitoring requirements. All analyses were performed using EPA approved methodologies by Ecology and Environment, Inc. Analytical Services Center, Buffalo, New York.

CA monitoring wells GM-71, GM-72, Gil-76, GM-77, GM-78, GM-79, GM-83, and GM-84, and POC monitoring wells GM-11, GM-12R, GM-13, and GM-14 were not sampled during this quarter. The proposed Waste Management Area for the post-closure permit application submitted August 8, 1990 recommended discontinuing sampling these monitoring wells. Our Southern Division Office, which administers the Ecology and Environment Inc. contract for the Quarterly Report on Groundwater Monitoring of the Wastewater Treatment Facility, inadvertently assumed that the post-closure permit would be issued by the third quarter thus approving discontinuation of sampling these wells. Consequently, they modified Ecology and Environment's scope of work to discontinue sampling these monitoring wells. Southern Division hac, added these monitoring wells to Ecology and Environment's scope of work for the fourth quarter Groundwater Quality Monitoring report for calendar year 1990. Sampling of these monitoring wells is scheduled for the first week of November.

The results of analyses for CA monitoring wells GM-62 through GM-69; and POC monitoring wells UG-1, GM-8, GM-9, PCS-1, PCI-1, and PCD-1 are reported on DER Form 17-1.216(2). No significant changes or trends from previous report were noted. A brief summary follows:

- Specific Conductance:

  6 shallow wells tested 640 umhos/cm or less:
  1 well tested 1,200 umhos/cm.

  1 intermediate well tested 600 umhos/cm;
  3 tested at 2,200, 2,406, and 3,000 umhos/cm.

  4 deep wells tested at 250, 540, 1,000, and 3,200 umhos/cm.

- pH: Ranged from 3.6 in GM-66 to 7.4 in PCS-1 with 6 of 16 monitoring well measurements within the secondary drinking water limits of 6.5-8.5.

- Cadmium: Intermediate well GM-66 tested 31 ppb which exceeds primary drinking water standards of 10 ppb for cadmium.

- Chromium: Intermediate well GM-66 tested 240 ppb which exceeds the primary drinking water standard of 50 ppb for chromium.

- Chlorides: 3 deep wells (GM-63, GM-65, PCD-1) and 4 intermediate wells (GM-64, GM-66, GM-69, PCI-1) exceeded the secondary drinking water standards of 250 ppm fur chloride. No shallow wells exceeded this standard.

- Sulfates: Deep well GM-66 was the only well exceeding the secondary drinking water standard of 250 ppm for sulfates.

- Iron: Each well with the exception of GM-64 and PCI-1 exceeded the secondary drinking water standard of 300 ppb for iron.

- Manganese: Each well with the exception of shallow wells GM-67, UG-1, and GM-9 exceeded the secondary drinking water standard of 50 ppb for manganese.

- Zinc: 7 out of 16 wells tested above the detectable limit of: 4 ppb. No levels of zinc, which ranged between 8.4 ppb (PCS-1) to 350 ppb (GM-66), exceeded the secondary dt-inking water standard of 5,000 ppb.

- Organics: 16 wells were tested for organics. 5 wells are considered to have measurable levels of organic contaminants; Whenever a test resulted in a reading for both samole and blank, these readings are suspect and not included. A summary of the wells considered contaminated are 1isted below in Table 1.

able 1 - Summary of Organic Contaminants Detected in Monitoring Wells

Chemical Constituents (Results in ppb)	Shallow		Intermediate		
	GM-8	GM-67	GM-66	GM-69	PCI-1
Vinyl Chloride	74[a]		180[a]		
Chloroethane				20	
1,1-Dichloroethene	45		260	98	
Total-1,2-Dichloroethene	130		1400		
Acetone		120			
Chlorobenzene	790		150		
1,3-Dichlorobenzene	640				
1,2-Dichlorobenzene	770				17
1,4-Dichlorobenzene	860[a]		11	330[b]	
Napthalene			29		
2,4-Dimethylphenol			44		
Trichloroethene			7300[b]		

a - Exceeds primary drinking water standard
b - Exceeds calibration limit

Only Pump B at recovery well RW7 was operative during the months of June and July. Recovery wells RW5 and RW7 were the only recovery wells operable for the month of August. During the period of this report, corrective action recovered and treated 512,600 gallons of groundwater.

Sincerely,

T. W. BONE
Captain, CEC, USN
Commanding Officer

Enclosure:
(1) Quarterly Monitoring Report ,

copy to:
COSOUTHNAVFACENGCOM (11526) w/o encl.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING :
2600 BLAIR STONE ROAD
TALLAHASSEE. FLORIDA 32301-8241

BOB GRAHAM
GOVERNCR

VICTORIA J. TSCHINKEL
SECRETARY

QUARTERLY REPORT ON GROUND WATER HONITORING
Rule 17-4.245(6)(k)2.

GMS # 1017F00625 DATE

DER PERMIT # HF17-148989

U.S. Navy Public Works - Storage Surface Impoundment Closure
Installation Name

NAS Pensacola' Pensacola Florida Escambia
Address city State Zip County

T. W. BONE, Captain, CEC, USN Commanding Officer
Owner or Authorized Representative's Name Title

Method of Discharge N/A

Type of Industry Military

Report for Period 06-01-90 to 08-31-90
date date

ttach monitoring data as approved in monitoring plan using parameter monitoring report orms. When applicable, attach additional sheets describing any changes in the background water quality and the diecharge plume since the lost reported description. Include any changes in size, .direction of movement, rate of movement, and concentration changes of plums constituents in violation of the applicable standards.

NOTE: Pursuant to Rule 17-4.245(6)(k)3., at any time there is a change in the permitted volume, location or chemical, physical or microbiological composition of the discharge plume, the permittee shall notify the department and, if required by the department, submit a new report stating the volume and chemical, physical and microbiological compositions of the discharge at the point of release or contact with the ground water at the site boundary.

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and ell attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the informetion is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, Including the possibility of fine and imprisonment.

TWBone 10/29/90
Owner or Authorized Representative's Signature Date