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NAS PENSACOLA
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SEPTEMBER 1996 MONTHLY OPERATION AND MAINTENANCE REPORT ON THE
DOMESTIC WASTEWATER TREATMENT PLANT GROUNDWATER REMEDIATION
PROJECT FOR NAS PENSACOLA FL
10/1/1996
HRP SPECTRUM INC

HRP/Spectrum

October 1, 1996

Commanding Officer
Naval Public Works Center, Code 911.3
310 John Tower Road, Building 3819
Naval Air Station
Pensacola, FL 32508-6500
Attention: Mr. Tom Kelley

RE: SEPTEMBER 1996 MONTHLY OPERATION AND MAINTENANCE REPORT ON THE DOMESTIC WASTEWATER TREATMENT PLANT (DWTP) GROUNDWATER REMEDIATION SYSTEM; NAVAL AIR STATION (NAS), PENSACOLA, FLORIDA; (JOB # NAV0227.FE)

Dear Sir:

HRP/Spectrum is pleased to submit the September 1996 monthly report for the operation and maintenance activities conducted on the DWTP Ground Water Treatment System for the above referenced project. The attached Table 1 contains a summary of the recovery well pumping data for the month of September 1996 and Attachment "A" contains a time series graph of the calculated bi-weekly pump flow rates to facilitate evaluation of the performance and maintenance requirements of the recovery wells and pumps. In addition, two (2) copies of the report have been sent to Mr. Maxie Keisler with Southern Division, Naval Facilities Engineering Command and two (2) copies to Commander, Naval Air Station, Environmental Division, Attention: Mr. Bill Taylor. *HRP/Spectrum* has the following comments for the month of September, 1996:

RECOVERY WELL SYSTEM OPERATION STATUS

RW 1, 2 & 3

- On September 5, 1996, Pump A for RW 1, 2 & 3 was turned on after a two week shut down. This shut down was performed to allow the RW 5 pump station to operate sufficiently with no influencing back pressure. The intake valve for RW 3 was fully opened while the intake valve for RW 2 was partially opened. The pump quickly gained pressure and was operating with sufficient flow upon departure from the site.
- On September 23, 1996, the pump station for RW 1, 2 & 3 was shut down due to a poor flow rate. Upon inspection of the flow meter by *HRP/Spectrum* personnel, it was observed that the flow meter had worn down and was not operating properly. The pump station was valved off and remained off-line upon departure from the site.

Mr. Tom Kelley
Commanding Officer
October 1, 1996
Page 2 of 3

RW 4 & 6

- On September 4, 1996, RW 4 & 6 pumping station was working properly and produced sufficient pressure and flow. Pressures and flows are recorded on Table 1 of this document.
- On September 5, 1996, Pump A which was out for service was reinstalled and checked. The pump produced sufficient pressure and flow. RW 4 & 6 were then shut off and valved out in accordance with the current practice of rotating pumps on and off every two weeks.
- On September 23, 1996, RW 4 & 6 were placed on-line and were operating sufficiently upon departure from the site.

RW 5

- On September 4, 1996, RW 5 was producing sufficient pressure and flow. The pump was working properly upon departure from the site.
- On September 23, 1996, RW 5 was operating properly and producing sufficient flow and pressure. The pump was on-line upon departure from the site.

RW 7

- On September 4, 1996, RW 7 appeared to have a decreased flow rate. After cleaning the flow meter filter of debris, the flow meter reading increased to a sufficient level.
- On September 23, 1996, RW 7 was operating sufficiently. The flow meter filter was removed and cleaned. RW 7 was operating with proper pressure and flow upon departure from the site.

PRE-TREATMENT AIR STRIPPER

- On September 4, 1996, the Pre-Treatment Air Stripper operated properly. The Air Stripper was checked and the flow meter filter cleaned. Inlet and outlet samples were collected from the Air Stripper and submitted for laboratory analysis. The Pre-Treatment Air Stripper was operating properly upon departure from the site. Flow meter reading are included in Figure 1 of this document.
- On September 23, 1996, the Pre-Treatment Air Stripper was operating properly. The automatic shut off components were working sufficiently. The system was operating properly upon departure from the site.

Mr. Tom Kelley
Commanding Officer
October 1, 1996
Page 3 of 3

If you have any questions regarding this report or other matters pertaining to this project please contact Tad Goetcheus or myself at (864) 298-0231.

Sincerely,

HRP/Spectrum



Brian W. Hill
Project Engineer

BWH/crw
Enclosure

cc: Maxie Keisler - NAVFALENGCOM - Code 18213 (2 copies)
Bill Taylor - NAS Pensacola - Code 00500 (2 copies)

(1001-NAV.0227)

Cleaning Procedures for the Air Stripper Unit, Naval Air Station, Groundwater Pretreatment System, Pensacola, Florida.

1. Switch all pumps to the Off position
2. Turn all influent valves to the Closed position
3. Turn Off blower
4. Take Off top of unit
5. Using Wet/Dry vacuum, remove all water from Top shelf. All water and debris removed from Air Stripper should be drummed.
6. Drain and remove the 3" influent pipe.
7. Remove Top level and place in the sun to dry.
8. Vacuum water from next the level, remove and place in the sun to dry.
9. Repeat step #8 for all levels
10. Once all the levels are dry, brush the trays to loosen remaining debris and vacuum again.
11. Replace levels in the order they came Off.
12. Replace influent pipe.
13. Replace top.
14. Turn on blower.
15. Open influent valves and turn On pumps.
16. Check unit for leaks and proper operation.

(1001-NAV.0227)

**TABLE 1
NAS PENSACOLA
RECOVERY WELL PUMPING DATA**

PUMP STATION	DATE INSPECTED	TIME (MILITARY)	FLOW METER READING (GALLONS)	DISCHARGE PRESSURE (psig)	SUCTION VACUUM ("Hg)	INSTANTANEOUS PUMPING FLOW RATE (GPM)	CALCULATED BI-WEEKLY FLOW RATE (GPM)	PUMP IN USE (A or B)	ELAPSED TIME (HOURS)	TOTAL BI-WEEKLY FLOW (GALLONS)	WATER LEVEL BELOW TOP OF CASING (FT) (RESPECTIVELY)
RW 1,2 & 3	8/8/96	11:00	9,998,610	39	15	6.7	3.96	B	336	80,000	4.01, 9.83, 8.55
RW 4&6	8/8/96	11:20	650,000	40	10.5	6.85	5.95	B	336	120,000	5.09, 6.34
RW 5A	8/8/96	11:30	4,500,500	0	0	0	0	N/A	336	0	4.55
RW 7	8/8/96	11:45	5,182,780	40	26.5	3.55	2.97	B	336	60,000	20.88
RW 1,2 & 3	8/21/96	14:20	10,151,900	43	15	6.5	7.54	B	339	153,290	4.53, 8.43, 8.27
RW 4&6	8/21/96	14:40	740,540	41	9	5.5	4.45	B	339	90,540	5.51, 6.09
RW 5A	8/21/96	14:55	4,500,500	0	0	0	0	N/A	339	0	4.62
RW 7	8/21/96	15:05	5,238,450	38	26	4.25	2.74	B	339	55,670	19.39
RW 1,2 & 3	9/4/96	14:25	10,151,900	0	0	0	0	N/A	331	0	N/A
RW 4&6	9/4/96	13:45	895,010	10	13	8	7.78	B	331	154,470	4.58, 5.02
RW 5A	9/4/96	13:50	4,549,684	21	8	3.2	2.47	B	331	49,184	3.05
RW 7	9/4/96	13:30	5,299,430	10	27	3.2	3.07	B	331	60,980	22.36
RW 1,2 & 3	9/23/96	13:15	10,344,230	30	15	7.5	7.42	A	432	192,330	3.18
RW 4&6	9/23/96	13:20	895,010	0	0	0	0	N/A	432	0	N/A
RW 5A	9/23/96	13:30	4,770,020	22	10	7.3	8.5	B	432	220,336	3.2
RW 7	9/23/96	13:20	5,381,430	12	27	3.5	3.16	B	432	82,000	13

NOTES:

RW 1,2,3 - Recovery station for recovery wells RW 1, RW 2, and RW 3.

RW 4,6 - Recovery well for wells RW 4 and RW 6.

INSPECTOR'S NAME	BRIAN HILL		
DATE	9/4/96		
AMBIENT TEMPERATURE	85		
WEATHER CONDITIONS	CLEAR		
ITEM	INSPECTION CHECK	INSPECTION FREQUENCY	DATA/ COMMENTS
INFLUENT PIPING	OPERATION OF BALL CHECK VALVE	MONTHLY	OK
	SAMPLE PORT OPERATION	MONTHLY	OK
	FLOW METER READING	BI-WEEKLY	2,642,710
	SAMPLE COLLECTION	MONTHLY	YES
AIR STRIPPER	PRESSURE GAUGE READING	BI-WEEKLY	16" WATER
	CLEAN / CHECK TRAYS	BI-WEEKLY	CHECKED
BLOWER	PIPING CONNECTIONS	MONTHLY	OK
EFFLUENT PIPING	OPERATION OF BALL CHECK VALVE	MONTHLY	OK
	SAMPLE PORT OPERATION	MONTHLY	OK
	FLOW METER READING	BI-WEEKLY	N/A
	SAMPLE COLLECTION	MONTHLY	YES
SYSTEM COMPONENTS	EXPOSED PIPING CONNECTIONS	MONTHLY	OK
SYSTEM DESCRIPTION:			
ACTIVITIES PERFORMED:			

INSPECTOR'S NAME	BRIAN HILL		
DATE	9/23/96		
AMBIENT TEMPERATURE	85		
WEATHER CONDITIONS	CLEAR		
ITEM	INSPECTION CHECK	INSPECTION FREQUENCY	DATA/ COMMENTS
INFLUENT PIPING	OPERATION OF BALL CHECK VALVE	MONTHLY	OK
	SAMPLE PORT OPERATION	MONTHLY	OK
	FLOW METER READING	BI-WEEKLY	3,200,210
	SAMPLE COLLECTION	MONTHLY	N/A
AIR STRIPPER	PRESSURE GAUGE READING	BI-WEEKLY	17" WATER
	CLEAN / CHECK TRAYS	BI-WEEKLY	CHECKED
BLOWER	PIPING CONNECTIONS	MONTHLY	OK
EFFLUENT PIPING	OPERATION OF BALL CHECK VALVE	MONTHLY	OK
	SAMPLE PORT OPERATION	MONTHLY	OK
	FLOW METER READING	BI-WEEKLY	N/A
	SAMPLE COLLECTION	MONTHLY	N/A
SYSTEM COMPONENTS	EXPOSED PIPING CONNECTIONS	MONTHLY	OK
SYSTEM DESCRIPTION:			
ACTIVITIES PREFORMED:			

NAS PENSACOLA
GROUNDWATER RECOVERY WELL FLOW RATES

