

R2-B16

Note To: Ed Reitler Ed Keelen
 Wilbur Goodwin Glenn Lowder
 Don Goldbach Dave Batson

4/10/92

Subject: NRC Meeting At Westinghouse 4/8/92
 Review Progress On Solvent Extraction
 Contamination Problem

On April 8, 1992, Tom Decker, U. S. Nuclear Regulatory Commission, visited the site to review the Westinghouse facility with respect to the problems noted in the solvent extraction area soil contamination incident and the response.

Our meeting reviewed the background and the current status of the project. The confirmatory action plan proposed at the NRC headquarters meeting on 1/23/92 was reviewed. All action items in the plan had been completed with the exception of the final evaluation of results which is due by 4/30/92. Results of both the liquid and soil samples had been received prior to the meeting from CEP. A review of the liquid "hydrocone" results indicated that the radiological Gross Alpha parameter ranged from 0.005 - 0.021 E-06 uCi/ml. Nitrates on the liquid samples ranged from 2.7 - 41.2 mg/l which is slightly elevated but within the isoplethic ranges of nitrate contamination noted in previous studies.

Soil sample Gross Alpha radioactivity results ranged from 4.2 to 44.3 pCi/g with only two samples exceeding 30 pCi/g, a limit which is proposed as a de minimus level of radioactivity. The maximum nitrate was 4.3 mg/KG,

A preliminary review of the results indicates that there is minimum soil and groundwater contamination outside the facility emanating from the solvent extraction area. A brief discussion was initiated with Dave Sanders, our consultant hydrogeologist, and he confirmed our opinion.

During the meeting the following items were noted by the inspector:

1. Evaluate the depth of the footers
2. Evaluate migration down the footers
3. Indicate site characterization numbers if any in report
4. Leak control procedure formalization

The meeting concluded with a tour through the Solvent Extraction area and a review of the "Hydrocone" and new well site locations. Mr. Decker indicated that he had no major concerns after being apprised of the data. He indicated that they will contact us regarding which soil samples they want to perform split analyses. The preliminary data is attached and was submitted to the NRC inspector.

Roger E. Fischer
Regulatory Engineering

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"HYDROPHONE" AND AUGER SOIL SAMPLING LOCATIONS

RADIOACTIVITY RESULTS

<u>SAMPLE</u>	<u>DEPTH</u>	<u>RESULTS, pCi/G</u> <u>GROSS ALPHA</u>
HC-1	1.5-3'	5.4
	4.5-6'	4.6
	7.5-9'	4.4
HC-2	1.5-3'	5.1
	4.5-6'	4.1
	7.5-9'	5.1
HC-3	1.5-3'	5.2
	4.5-6'	5.0
	7.5-9'	4.9
HC-4	1.5-3'	5.7
	4.5-6'	7.8
	7.5-9'	5.7
HC-5	1.5-3'	18.5
	4.5-6'	8.1
	7.5-9'	9.0
HC-6	1.5-3'	12.8
	4.5-6'	6.8
	7.5-9'	9.0
HC-7	1.5-3'	9.5
	4.5-6'	7.3
	7.5-9'	30.5
HC-8	1.5-3'	8.8
	4.5-6'	9.3
	7.5-9'	14.0
HC-9	1.5-3'	11.3
	4.5-6'	22.5
	7.5-9'	12.3
HA-14	2-3'	18.3
	5-6'	44.3
	8-9'	4.2
HA-15	2-3'	21.3
	5-6'	28.8
	8-9'	18.4
HA-16	2-3'	9.3
	5-6'	6.0

"HYDROCONE" AND AUGER SOIL SAMPLING LOCATIONS

NITRATE RESULTS

<u>SAMPLE</u>	<u>DEPTH</u>	<u>RESULTS. mg/liter</u> <u>NITRATE</u>
HC-1	1.5-3'	0.9
	4.5-6'	0.4
	7.5-9'	0.3
HC-2	1.5-3'	0.9
	4.5-6'	4.3
	7.5-9'	2.2
HC-3	1.5-3'	2.0
	4.5-6'	1.4
	7.5-9'	1.1
HC-4	1.5-3'	0.9
	4.5-6'	1.2
	7.5-9'	1.7
HC-5	1.5-3'	2.0
	4.5-6'	4.0
	7.5-9'	2.4
HC-6	1.5-3'	0.5
	4.5-6'	1.0
	7.5-9'	2.0
HC-7	1.5-3'	0.9
	4.5-6'	0.7
	7.5-9'	0.5
HC-8	1.5-3'	0.5
	4.5-6'	0.6
	7.5-9'	1.2
HC-9	1.5-3'	0.1
	4.5-6'	0.2
	7.5-9'	0.5
HA-14	2-3'	1.5
	5-6'	0.9
	8-9'	1.0
HA-15	2-3'	0.9
	5-6'	0.5
	8-9'	0.6
HA-16	2-3'	1.8
	5-6'	1.8

"HYDROCONE" AND LIQUID WELL SAMPLES

RADIOACTIVITY RESULTS

<u>SAMPLE</u>	<u>DEPTH</u>	<u>RESULTS</u> $\mu\text{Ci/ml} \times 10^{-4}$	
		<u>GROSS ALPHA</u>	<u>GROSS BETA</u>
HC-1	(15)	0.005	0.012
	(24)	0.005	0.012
HC-2	(11)	0.005	0.012
	(18)	0.006	0.012
HC-3	(11)	0.006	0.012
	(18)	0.005	0.012
HC-4	(11)	0.006	0.011
	(18)	0.005	0.011
HC-5	(11)	0.019	0.012
	(18)	0.005	0.012
HC-6	(11)	0.021	0.019
	(18)	0.000	0.012
HC-7	(11)	0.008	0.013
	(18)	0.005	0.166
HC-8	(11)	0.008	0.014
	(18)	0.000	0.012
HC-9	(11)	0.006	0.012
	(18)	0.006	0.011
W37	(20.5')	0.004	0.012
W35 (OIL HOUSE)		0.004	0.012

... "HYDROCONE" AND LIQUID WELL SAMPLES

CHEMICAL RESULTS

<u>SAMPLE</u>	<u>DEPTH</u>	<u>RESULT</u> <u>NITRATE. mg/l</u>
HC-1	(15)	3.3
	(24)	5.1
HC-2	(11)	6.9
	(18)	7.7
HC-3	(11)	7.8
	(18)	6.0
HC-4	(11)	29.0
	(18)	10.6
HC-5	(11)	11.7
	(18)	10.0
HC-6	(11)	8.6
	(18)	9.9
HC-7	(11)	2.7
	(18)	41.2
HC-8	(11)	11.2
	(18)	10.3
HC-9	(11)	9.5
	(18)	16.6
W37	(20.5')	5.8
W35 (OIL HOUSE)		6.0

PRELIMINARY DATA ON "HYDROPHONE" AND WELL SAMPLES

<u>SAMPLE</u>	<u>DEPTH</u>	<u>CONDUCTIVITY</u>	<u>pH</u>	<u>NH₃</u>	<u>F</u>	<u>FILTERED SAMPLE U ppm</u>
HC-1	(15)	140	7.0	<0.1		<0.05
	(24)	120	6.8			<0.05
HC-2	(11)	130	7.1			<0.08
	(18)	180	6.7			<0.05
HC-3	(11)	190	6.7	<0.1		<0.05
	(18)	90	6.1			<0.05
HC-4	(11)	370	6.4	0.3		<0.05
	(18)	170	5.8			<0.05
HC-5	(11)	270	4.6			<0.05
	(18)	155	7.1			<0.05
HC-6	(11)	130	5.3			<0.05
	(18)	125	5.2			<0.05
HC-7	(11)	320	5.9		69.4	<0.05
	(18)	400	7.6			<0.05
HC-8	(11)	235	6.9			<0.05
	(18)	140	5.6			<0.05
HC-9	(11)	310	6.2			<0.05
	(18)	295	6.8			<0.05
W37	(20.5')	165	6.0	<1	<0.1	<0.05

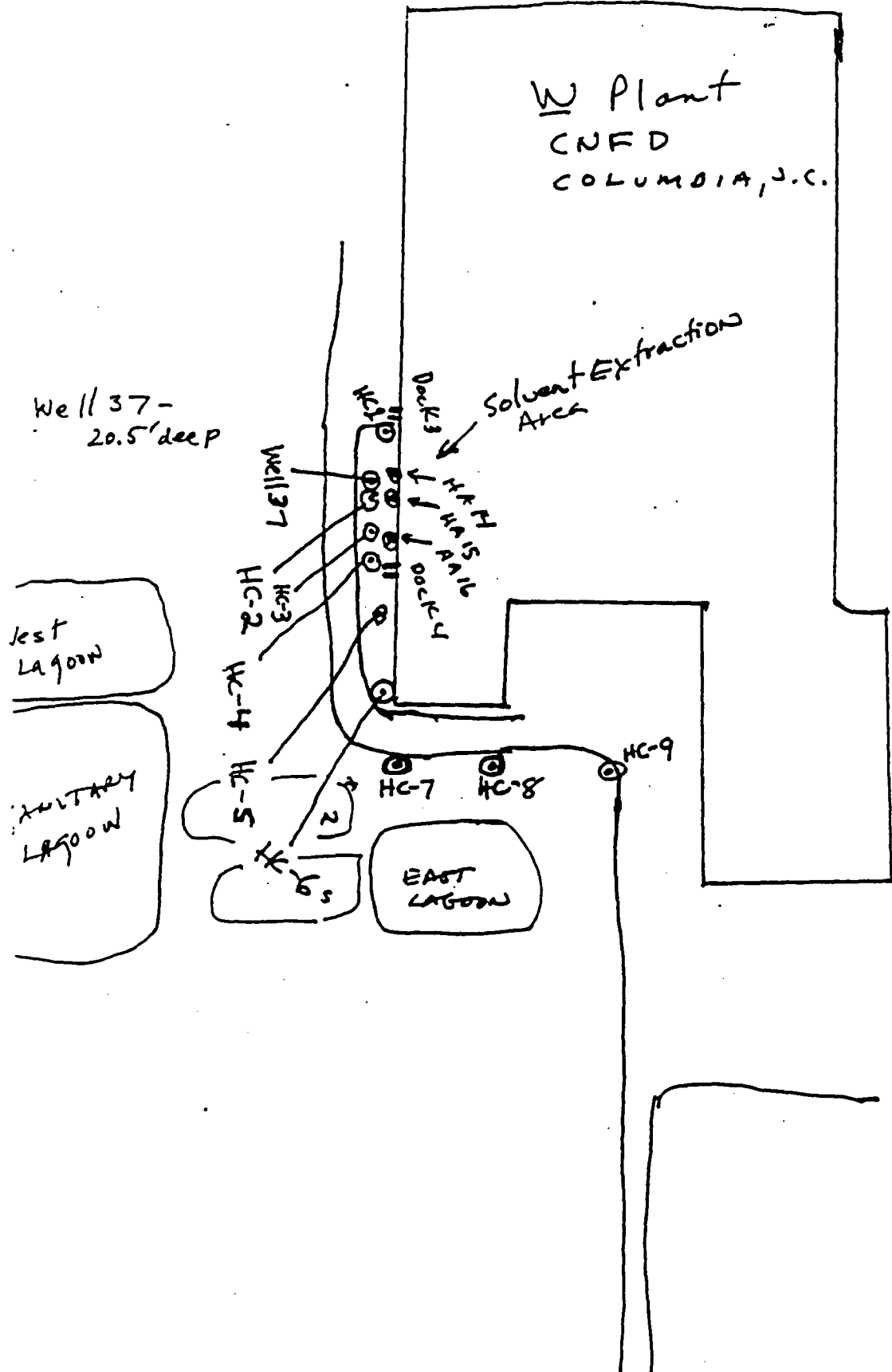
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HA-14 (Hand Auger Soil Samples)
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Attn: DAN JONES
 US-NRC
 Region II
 Atlanta, Ga.

Well 37 - Groundwater Well

HC-1-9 - "Hydro cone" samples (3 soils per location
 2 water samples per location)



	Distances From Bldg
HC-1	- 6'
- 2	- 24
- 3	- 33
- 4	- 11
- 5	- 14
- 6	- 14
- 7	- 28
- 8	- 35
- 9	- 40
HA-14-16	
HA-14	- 3.5
15	- 2.0
16	- 3.5