

**PRE-UNIT MANAGER MEETING
SNP, DOE & USACE**

1:00, June 24, 1992
SNP Facility

From/Approval: Robert K. Stewart Date: 7/2/92
 Robert K. Stewart, 1100-EM-1 Operable Unit Manager (DOE-RL)

Approval: Wendell Maxwell for John Stewart Date: 2 July 92
 John T. Stewart, 1100-EM-1 Operable Unit Proj. Mgr. (USACE)

Approval: would not sign July 2 92 wlf Date: _____
 Loren Maas, 1100-EM-1 Operable Unit Proj. Mgr. (SNP)

ATTENDEES:

See Attachment 1.

DISCUSSION AND AGREEMENTS:

The U.S. Department of Energy field Office, Richland (DOE), the U.S. Army Corps of Engineers, Walla Walla District (USACE), and Siemens Nuclear Power Corporation (SNP) met to discuss the status of the Remedial Investigation/Feasibility Study (RI/FS) activities on the 1100-EM-1 Operable Unit and adjoining SNP property. The agenda is shown on Attachment 2.

(1) SNP response to USDOE/USACE comments on Phase II Groundwater Study and Soils Work Plan:

Susan Keith of Geraghty and Miller (G&M), Inc. provided verbal dispositions of the comments made by DOE on the SNP work plan. The comments provided to SNP are shown on Attachment 3 and the corresponding dispositions follow:

1. AREAS NOT TARGETED FOR EVALUATION, BONEYARD BENEATH EAST END OF THE MACHINE SHOP: Sampling of this location was not performed because of the difficulty of obtaining samples from beneath the building floor slab. An evaluation of the contamination at this location will be made based upon a nearby, downgradient monitoring well.
2. AREAS NOT TARGETED FOR EVALUATION, LAGOONS 2 TO 5B AND SAND TRENCH: Sampling of these areas was not performed because these lagoons are in service at this time. Performing horizontal or angled drilling from the outer edge of the lagoons to obtain samples from beneath the lagoons may compromise the integrity of the lagoons. SNP believed that the potential risk of damage to the lagoon liner and associated piping outweighs the value of the information. In SNP's judgment, the samples obtained from beneath lagoon #1 should represent the worst case for contamination because that lagoon is the oldest and had documented leaks through the original single petromat liner.



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(7) EM-24 Group Update:

A brief summary of the EM-24 meeting on June 10, 1992 was given by John Stewart. The decision tree developed by PHB was reviewed by USACE and suggested revisions have been forwarded to EM-24. This information will be provided to SNP upon EM-24's incorporation of the revisions.

(8) Other:

DOE will send a letter to EPA in the near future stating that a residential risk assessment will be provided to them, as per their request, but that this will not be used in the final RI/FS report. Also, the letter will state that the remedial alternatives will be based upon the industrial land use.

(9) Next Meeting:

The next meeting is scheduled for 1:00 pm, July 28, 1992 at SNP.

ACTION ITEMS:

The action items closed out at this meeting, continuing from previous meetings and new actions for this meeting are shown below:

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Actions Items Status List
 Pre-Unit Manager Meeting
 SNP, DOE & USACE
 June 24, 1992

Item No.	Action/Source of Action	Status
PU0392001	Clarify the MCl action levels for gross Beta and Tc-99. Action: W. Greenwald (03/24/92).	Closed. Copies of proposed standard provide 03/25/92.
PU0392002	Review DOE beta analysis data, and evaluate the need for additional radio-isotope analysis on the new SNP groundwater wells. Action: S. Keith (03/24/92).	Open.
PU0392003	Provide well logs and coordinates of 300-FF-5-7A and -8A groundwater monitoring wells to SNP. Action: W. Greenwald (03/24/92).	Closed. See Attachment 6 for data provided to SNP.
PU0392004	Provide well pump test data from 300 Area to SNP. Action: W. Greenwald (03/24/92).	Open.
PU0392005	Evaluate the appropriateness of SNP involvement with the DOE-HQ, EM-24 group. Action: B. Stewart (03/24/92).	Closed.

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Actions Items Status List
 Pre-Unit Manager Meeting
 SNP, DOE, USACE

Item No.	Action/Source of Action	Status
PU039006	SNP risk assessors will compare and evaluate the <u>Hanford Site Baseline Risk Assessment Methodology</u> , EPA Region X risk assessment guidance, EPA response to USACE risk assessment questions, and the EPA residential risk assessment for the 1100-EM-1 Operable Unit, and provide their results to DOE-RL. Action: S. Keith (03/24/92).	Open.
PU0392007	Provide 300 Area groundwater elevations to SNP. Action: W. Greenwald (03/24/92).	Closed. See Attachment 6 for data provided to SNP.
PU0392008	USACE will investigate (and, if possible, provide) why November 1991 groundwater levels are not listed for MW-19, MW-20, MW-21 and MW-22. Action: W. Greenwald (03/24/92).	Closed. Data is not available.
PU0392009	SNP will provide DOE-RL/USACE the single page Lagoon History Report.	Closed. Provided to Greenwald on 3/25/92.
PU0392010	SNP will review data requests from DOE-RL/USACE, and provide available data that may be released. Action: S. Keith (03/24/92).	Closed.
PU0492001	USACE will develop a list of source information which will be requested of SNP. Action J. Stewart (04/21/92).	Open.

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Actions Items Status List
Pre-Unit Manager Meeting
SNP, DOE, USACE

Item No.	Action/Source of Action	Status
PU0492002	USACE will provide SNP with water quality data, if available, for the area between George Washington Way and the Columbia River. Action W. Greenwald (04/21/92).	Closed.
PU0492003	USACE will provide SNP with current maps of 1100-EM-1 monitoring wells. Action: J. Anderson (04/21/92).	Closed.
PU0492004	USACE will mail a detailed copy of the PNL results to Jay Bower. Action: W. Greenwald (04/21/92).	Closed. Provided June 29, 1992.
PU0592001	USACE will modify their analytical lab. contract to add Total Devolved Solids to the list of analytes for the August sampling round. Action: A. Foote (05/26/92).	Open.
PU0592002	USACE will provide SNP with pump test data from the 300 area. Action: J. Anderson (05/26/92).	Open.
PU0592003	SNP will provide DOE with pump test data from their well by June 10, 1992 if possible. Action: J. Bower (05/26/92).	Closed. Provided 12 June, 1992.
PU0692001	USACE will add temporary well names to the summary table of the analytical results of the March groundwater sampling. Action: W. Greenwald (06/24/92).	Closed. Provided June 29, 1992.

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Pre-Unit
6/25/92

Name	organization	tel.
Wendell Greenwald	USACE	376-1252
Doris Minor	for SNP	(206) 781-7882
Susan Keith	for SNP	206 869-6321
Bob Stewart	DOE-RL/ERD	509-376-6197
MIKE KIRKMAN	SNP	509-375-8158
C.W. (Chuck) Molodt	for SNP	509-375-8537
LOREN MAAS	SNP	509-375-8537
LISA CHETNIK TREICHEL	DOE-HQ/EM-442	301-903-8177
John Stewart	USACE	509-376-9101
Steve Clarke	WTC	

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AGENDA

Pre-Unit Managers Meeting
Siemens Nuclear Power Corporation (SNP)/
U.S. Department of Energy (USDOE)/U.S. Army Corps of Engineers (USACE)

June 24, 1992, 1:00 p.m. to 2:30 p.m.
SNP Facility, Conference Room 8U

1. SNP response to USDOE/USACE comments on Phase II Ground-Water Study and Soils Work Plan
2. First Quarter 1992 Ground-Water Quality Report
3. Modelling efforts (SNP and USDOE)
4. Status of risk assessment activities
 - SNP comments on USEPA Ground-Water Risk Assessment
 - USDOE Risk Assessment
5. Update on SNP Soils Study
6. Remedial Investigation/Feasibility Study (RI/FS) update
 - SNP activities
 - USDOE activities
7. EM-24 Group update
8. Other
 - Upcoming activities
 - Next meeting



DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON 99362-9265

June 4, 1992

REPLY TO
ATTENTION OF

Hanford Program Office

Serial Letter 92PM063

Subject: Task Order DE-AT06-90RL12103 Under Master Interagency Agreement No. DE-AI06-90RL12074; 1100-EM-1 Operable Unit Remedial Investigation/Feasibility Study; Comments on the Work Plan, Hazardous Substance Source Evaluation, Siemens Nuclear Power Corporation

Mr. R. D. Freeberg, Acting Director
Environmental Restoration Division
U.S. Department of Energy Field Office, Richland
P.O. Box 550, MSIN A5-19
Richland, WA 99352

Dear Mr. Freeberg:

USACE has the following comments on the Siemens Nuclear Power Corporation Hazardous Substance Source Evaluation Work Plan prepared by Geraghty & Miller, Incorporated.

1. AREAS NOT TARGETED FOR EVALUATION, Boneyard beneath East end of the Machine Shop: Assumptions for not sampling at this site seem to neglect the possibility for long term storage (very slow migration) of contaminants within the vadose zone. The fact that no contaminants are seen in wells monitoring the groundwater in the area does not preclude the possibility of contaminants. Only direct soil sampling and testing can provide direct negative results indicating the absence of contaminants. Using GM-14 as a down gradient well to check for contaminants from the boneyard area may or may not be a valid assumption. Sources located in the southeast quadrant of the area may not be detected. Local minor irregularities in the groundwater flow direction may allow a small, not very dispersed contaminant plume to bypass the well. I suspect that the well is too close to the suspected site, cannot be proven to be in a direct down gradient direction from the source, and that direct soil sampling using angled drilling techniques should be used to sample beneath the machine shop area to provide definite, concrete results.

2. AREAS NOT TARGETED FOR EVALUATION, Lagoons 2 to 5B and Sand Trench: How can lagoon 1 be considered representative of the other lagoons. This assumption cannot be substantiated. The fact that lagoons 4, 5A, and 5B are lined with a material different from lagoons 1, 2, and 3 should raise a red flag as to the validity of the aforementioned assumption. What "evidence" is there that the other lagoons have never leaked? Other suspected contaminant source sites were described as potential sites

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having no records of releases yet are being sampled. The same argument is used here for the opposite. The lagoons are major suspected sources of contamination and should be sampled as such regardless of the difficulties involved.

3. AREAS NOT TARGETED FOR EVALUATION, Uranium Dioxide Building: Placement of fill material "between footings" is not usually performed at optimum compaction unless it is overlain by a floating floor slab. A loose fill may encourage infiltration around the building perimeter because of a higher permeability than other materials in the area. Although some interior fill may be more or less isolated from the effects of infiltration (which is also a questionable assumption), perimeter fill may be a preferred infiltration pathway. Sampling of the fill should be undertaken regardless of the difficulties involved. The difficulties of sampling beneath a large building are not insurmountable.

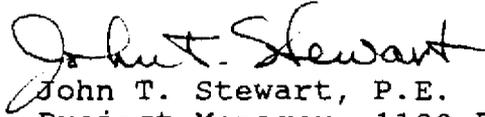
4. SOIL SAMPLING: Excavations should not be field adjusted. All locations are available for checking by equipment operators and field personnel at present. Piping locations/depths and structural details of adjacent buildings can be checked prior to the field work. Excavations performed by a backhoe of sufficient size should not meet any undue resistance from the local soil materials in either particle size or compaction considerations. Similarly, sample locations and frequency should be specified beforehand. All field adjustments to the pre-stated numbers should be fully justified, in writing, by the field personnel involved at the time the change(s) was made.

5. GENERAL: No mention is made of developing a geologic log of the excavations to supplement the chemical data being gathered. A geologic log should be developed for each excavation. Each log should contain information at least as detailed as that gathered during installation of the monitoring wells.

We received the work plan at the Pre-Unit Manager's Meeting (Pre-UMM) May 26, 1992. Sampling activities outlined in the document started June 1, 1992. The short time available (3 working days) precluded a standard review exercise. This was stated at the Pre-UMM. These comments are the result of a cursory review only.

If you have any questions, or need further information,
please contact me at 509-376-9101, or Jim McBane at 509-522-6833.

Sincerely,



John T. Stewart, P.E.
Project Manager, 1100-EM-1 O.U.
Hanford Program Office

Copies Furnished:

- J. K. Erickson, DOE-RL
- R. D. Hudson, DOE-RL
- R. D. Larson, DOE-RL
- R. K. Stewart, DOE-RL
- W. L. Greenwald, USACE
- L. Maas, SNP

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Sample Results Summary 1100-EM-1 March 1992 Sample Results Summary

Sample Date	well ID & HEIS #	MultilIMS Lab #	VOA Neat (ug/L)	VOA dil (ug/L)	NO2-N mg/l	NO3-N mg/l	OPO4-P mg/l	F mg/L	Cl mg/L	SO4 mg/L	Alk mg/L	NH3 mg/L	Ba ug/L	Ca ug/L	Fe ug/L	Mg ug/L	Mn ug/L	K ug/L	Na ug/L	Temp Blank	
3/9/92	(B06208) S29-E11 (MW-20)	920310001	TCA (0.5), TCE(4)		ND	35	ND	0.3	14.5	90	162	ND	93	91000	172	18200	28	7700	30600	12 deg	
3/9/92	(B06244) S29-E11 TB	920310002	ND																		
3/9/92	(B06221) S29-E11 Field Blank	920310003	CHCl3 4 Xylenes (0.6) toluene (0.6)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/9/92	(B06209) S31-E11	920310004	ND		ND	4.2	ND	0.35	13.2	35	142	ND	43	44600	88B	9000	13B	5460	20300	11 deg	
3/9/92	(B06245) S31-E11 TB	920310005	ND																		
3/9/92	(B06222) S31-E11 Field Blank	920310006	CHCl3 (3) Xylenes (0.5)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/10/92	(B06198) S31-E10A (MW-12)	920311001	NA	TCE (58)	ND	52	ND	0.37	18	71	171	ND	103	102000	66B	20800	ND	7790	30900	3 deg	
3/10/92	(B06238) S31-E10A TB	920311002	ND																		
3/10/92	(B06199) S31-E10A DUP	920311003	TCA (1), PCE (0.5) *	TCE (72)	ND	51	ND	0.39	17	69	169	ND	106	103000	86B	21000	ND	7670	30600	4 deg	
3/10/92	(B06239) S31-E10A DUP TB	920311004	ND																		
3/10/92	(B06217) S31-E10A Field Blank	920311005	CHCl3 (3)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/10/92	(B06200) S31-E10A MS	920311006	Recovery ok		116%	100%	105%	107%	100%	91%	92%	82%	96%	98%	92%	106%	94%	96%	102%		
3/10/92	(B06201) S31-E10A MSD	920311007	Recovery ok		118%	87%	106%	109%	101%	91%	92%	82%	95%	98%	93%	104%	94%	95%	99%		
3/10/92	(B06202) S31-E10C (MW-14)	920311008	TCA (1), PCE (0.6) *	TCE (58)	ND	51	ND	0.43	17	70	172	ND	83	102000	ND	21200	ND	7820	30600	5 deg	
3/10/92	(B06240) S31-E10C TB	920311009	ND																		
3/10/92	(B06203) S31-E10C DUP	920311010	NA	TCE (72)	ND	51	ND	0.43	17	70											4 deg
3/10/92	(B06241) S31-E10C DUP TB	920311011	ND																		
3/10/92	(B06218) S31-E10C Field Blank	920311012	CHCl3 (3)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/10/92	(B06204) S31-E10C MS	920311013	Recovery ok		121%	90%	104%	108%	100%	94%											
3/10/92	(B06205) S31-E10C MSD	920311014	Recovery ok		121%	95%	105%	108%	98%	94%											
3/10/92	(B06206) S31-E10D (MW-15)	920311015	TCA (0.7) *	TCE (34)	ND	24	ND	0.62	14	46	159	ND	65	70300	ND	14600	ND	6190	25400	5 deg	
3/10/92	(B06242) S31-E10D TB	920311016	ND																		
3/10/92	(B06219) S31-E10D Field Blank	920311017	CHCl3 (4)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		

Samples with U qualifiers are not shown.

* = TCE overrange (quantitated in dilution); NA = Not Analyzed; ND = Not Detected; B = Below CRDL but above HDL; TCA = 1,1,1-TCA, CHCl3 = Chloroform
Field Blanks are shown as Collection Blanks in the Supplemental Work Plan (latest changes)

Sample Results Summary 1100-EM-1 March 1992 Sample Results Summary

Sample Date	well ID & HEIS #	MWH/IMS Lab #	VOA Neat (ug/L)	VOA dil (ug/L)	NO2-N mg/l	NO3-N mg/l	OP04-P mg/l	F mg/L	Cl mg/L	SO4 mg/L	Alk mg/L	NH3 mg/L	Ba ug/L	Ca ug/L	Fe ug/L	Mg ug/L	Mn ug/L	K ug/L	Na ug/L	Temp Blank	
3/11/92	(B06196) S30-E10A (MW-10)	920312004	TCE (2), TCA (0.8)		ND	43	ND	0.31	26	69	159	ND	90	95800	68B	19800	ND	7530	30500	7 deg	
3/11/92	(B06236) S30-E10A TB	920312005	ND																		
3/11/92	(B06215) S30-E10A Field Blank	920312006	CHCl3 (3)		ND	ND	ND	ND					ND	2980B	ND	1080B	ND	ND	3670B		
3/11/92	(B06197) S30-E10B (MW-11)	920312007	TCE (6), TCA(1)		ND	49	ND	0.3	26	75	161	ND	84	105000	ND	22600	20	8330	35600	4 deg	
3/11/92	(B06237) S30-E10B TB	920312008	ND																		
3/11/92	(B06216) S30-E10B Field Blank	920312009	CHCl3 (2)		ND	ND	ND	ND					ND	ND	ND	ND	34	ND	ND		
3/11/92	(B06195) S31-E8 (MW-8)	920312010	TCA (2)		ND	6.5	ND	0.31	16	30	161	ND	50	54700	ND	13100	ND	5160	21700	3 deg	
3/11/92	(B06235) S31-E8 TB	920312011	ND																		
3/11/92	(B06214) S31-E8 Field Blank	920312012	CHCl3 (3)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/11/92	(B06211) SNP-SPL	920312013	* TCE (21)		ND	20	0.13	2.1	11	50	156	6.7	83	56700	62B	13500	ND	6670	22000	6 deg	
3/11/92	(B06224) SNP-SPL Field Blank	920312014	CHCl3 (3)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/11/92	(B06212) SNP-SPL DUP	920312015	NA TCE (18)		ND	20	0.13	2.1	11.5	50										5 deg	
3/11/92	(B06247) SNP-SPL TB	920312016	ND																		
3/11/92	(B06248) SNP-SPL DUP TB	920312017	ND																		
3/12/92	(B06194) S34-E10 (MW-2)	920313001	ND		ND	5	ND	0.33	14	43	154	ND	51	50800	120	10600	ND	5800	20600	7 deg	
3/12/92	(B06234) S34-E10 TB	920313002	ND																		
3/12/92	(B06213) S34-E10 Field Blank	920313003	CHCl3 (2) Toluene (0.7)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/12/92	(B06207) S32-E11 (MW-19)	920313004	ND		ND	3.6	ND	0.33	12	35	142	ND	40	44100	51B	8740	ND	5730	19800	9 deg	
3/12/92	(B06243) S32-E11 TB	920313005	ND																		
3/12/92	(B06220) S32-E11 Field Blank	920313006	CHCl3 (2) Toluene (0.7)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		
3/17/92	(B06210) S29-E12	920318001	ND		ND	6.3	ND	0.32	13	37	144	ND	45	47500	ND	9410	ND	5670	20900	3 deg	
3/17/92	(B06246) S29-E12 TB	920318002	ND																		
3/17/92	(B06223) S29-E12 Field Blank	920318003	CHCl3 (0.7) Toluene (0.6)		ND	ND	ND	ND					ND	ND	ND	ND	ND	ND	ND		

Note: VOA results shown as compound name followed by concentration in parentheses

Samples with U qualifiers are not shown.

* = TCE overrange (quantified in dilution); NA= Not Analyzed; ND= Not Detected; B=Below CRDL but above IDL; TCA= 1,1,1-TCA, CHCl3 = Chloroform
Field Blanks are shown as Collection Blanks in the Supplemental Work Plan (latest changes)