February 3, 2000

Steve W. Shaffer
Health Physicist
Decommissioning and Laboratory Branch
United States Nuclear Regulatory Commission
Region I, Mail Control No. 124941
475 Allendale Road
King of Prussia, PA 19406

RE: Additional Information in Support of Prometcor Report: *"Summary of Final Release Survey Data for the Concrete Slabs for Buildings 1-5".*

Dear Mr. Shaffer:

On behalf of Prometcor Inc., and in response to your comments regarding the survey of the concrete slabs, McLaren/Hart, Inc. provides this letter to you for the purpose of describing the procedures used for scanning the underside of the concrete slabs and to summarize the survey results for the small concrete slab area located beneath the sea container that was initially stored within the Building 5 area.

Gamma Measurements of Underside of Concrete Slabs

Gamma measurements were performed on the underside of the concrete slabs as the concrete slabs were removed form the Buildings 1-5 area. Pneumatic hammers were used to break the concrete surface at intervals of 5 to 10 meters in a grid-like pattern. The concrete was removed using the front bucket of the excavator. The bucket of the excavator was equipped with metal teeth that were able to penetrate the cracks and lift one corner of the concrete exposing the underside. Due to the significant number of cracks that existed prior to concrete removal, some of the larger sections of slab fractured into smaller pieces.

Once the underside of the concrete slab was exposed, direct exposure readings were taken at contact. As the underside of the concrete had no flat smooth surfaces, scanning with a alpha/beta gas proportional detector for surface contamination was not possible. Gamma measurements were performed with hand-held microR exposure meters including a Ludlum model L-19 and Ludlum model L-3, each interfaced with a collimated NaI scintillation probe. Two health physics technicians were used to complete the surveys.

Areas on the concrete slabs that exceeded two times background were identified with bright orange paint (background exposure rates ranged between 4 and 6 μR/hr). Concrete slabs that exhibited exposure readings greater than twice background were placed on a liner to limit the

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spread of loose contamination. No contaminated slabs were placed on the clean concrete areas. In most cases, contamination on the underside of the slab was limited to soil that was adhered to the concrete. All contamination was successfully removed using brooms, spades, and/or various types of brushes. Less than 10% of the total volume of concrete removed from the site required any decontamination on the underneath sides. If the exposure readings remained above twice background, the concrete was segregated and decontamination was achieved at a later time using a chipping hammer. The chipping hammer removed half to one inch layers of concrete which were collected onto a liner. The chipped concrete was collected and placed into 55 gallon drums that are currently stored in a locked sea-container on-site. Verification scans (gamma measurements) were performed on each of the decontaminated concrete pieces prior to their release. All readings of the concrete released from the site were below twice background.

Gamma measurements were performed on each bucket of concrete debris that was loaded onto the roll-offs being sent to the concrete recycler. Scans were also performed on the truck prior to filling and prior to the truck leaving the Prometcor site. Using the procedures described above, the concrete that was released from the Prometcor site to the concrete recycler was scanned three times thus ensuring that all surface contamination was identified and removed.

Survey of Alpha Contamination Under Sea Container

The sea-container that was located on Building 5 prior to the slab removal was moved to allow access to the underlying concrete. No material from the container was released during this exercise. Prior to the removal of the slab, surface activity measurements were made at the grid locations that were not accessible during the initial Final Status Survey of the concrete slabs (Grids A13-A18, B13-B18 and C13-C18). This data was collected on 8/19/99 and was inadvertently omitted from the Final Status Survey Report. The reported measurements and the direct survey results are presented in the attached Survey Record.

If you have any questions or concerns, please do not hesitate to contact me at (440) 684-8300.

Jack Buddenbaum, CHP
Supervising Health Scientist

Enclosures

cc: Daryl Holcomb
Dr. Edward David
Jeff Walder

FINAL STATUS SURVEY RECORD

FACILITY PROMETCOR

LOCATION BUILDING 5 AREAS UNDER SEA-CONTAINER

SURVEY FINAL RELEASE SURVEY

SURVEY DATE 8/19/99 SURVEY TIME 1200

DIRECT SURVEY INSTRUMENTS

	α	βγ	μR/hr
Instrument	L-2241	L-2221	L-19
Serial No.	150717	97830	91563
Cal Due	10/28/99	3/18/00	5/6/00
Background	5	277	6
Efficiency	0.19	0.18	N/A
Probe Size (cm^2)	100	100	N/A
BG Count Time	1	1	N/A
Source Count Time	1	1	N/A
MDA ($dpm/100cm^2$)	69	445	N/A
MDCR (cpm)	18	357	N/A

SMEARABLE CONTAMINATION

	α	βγ
Instrument	L-2929	L-2929
Serial No.	143870	143870
Cal Due	8/10/99	8/10/99
Background (CPM)	0.2	50
Efficiency	0.34	0.16
Probe Size (cm^2)	100	100
BG Count Time	30	30
Source Count Time	1	1
MDA ($dpm/100cm^2$)	12	165
MDCR (cpm)	4	76

REVIEW

	NAME	SIGNATURE	DATE
SURVEYORS	T. Ijaz		12/2/99
REVIEWER	J. Buddenbaum		12/3/99

SURVEY RECORD

FACILITY PROMETCOR

LOCATION BUILDING 5 AREAS UNDER SEA-CONTAINER

SURVEY FINAL RELEASE SURVEY

		Direct Survey Results				Exposure		Smearable Contamination			
GRID POINT	ITEM	α Gross cpm	α dpm/100cm2	βγ Gross cpm	βγ dpm/100cm2	μR/hr	Distance (m)	α Gross cpm	α dpm/100cm2	βγ Gross cpm	βγ dpm/100cm2
A13	FLOOR	62	300	301	<MDA	6	Contact	0	<MDA	48	<MDA
A14	FLOOR	112	563			7	Contact	0	<MDA	45	<MDA
A15	FLOOR	101	505			6	Contact	0	<MDA	52	<MDA
A16	FLOOR	98	489			6	Contact	0	<MDA	41	<MDA
A17	FLOOR	57	274			5	Contact	0	<MDA	43	<MDA
A18	FLOOR	77	379			6	Contact	1	<MDA	40	<MDA
B13	FLOOR	33	147			5	Contact	1	<MDA	51	<MDA
B14	FLOOR	62	300			4	Contact	0	<MDA	46	<MDA
B15	FLOOR	12	<MDA			5	Contact	0	<MDA	43	<MDA
B16	FLOOR	22	89	211	<MDA	5	Contact	0	<MDA	60	<MDA
B17	FLOOR	18	<MDA			5	Contact	0	<MDA	54	<MDA
B18	FLOOR	9	<MDA			5	Contact	0	<MDA	43	<MDA
C13	FLOOR	24	100			4	Contact	0	<MDA	55	<MDA
C14	FLOOR	12	<MDA			4	Contact	1	<MDA	44	<MDA
C15	FLOOR	18	<MDA			5	Contact	0	<MDA	57	<MDA
C16	FLOOR	22	89	328	<MDA	5	Contact	0	<MDA	60	<MDA
C17	FLOOR	31	137			5	Contact	1	<MDA	67	<MDA
C18	FLOOR	20	79			5	Contact	0	<MDA	48	<MDA