(130)

October 1, 1997

MEMORANDUM TO: Claudia A. Seelig, Chief
Program Analysis Branch
Program Management, Policy Development
and Analysis Staff, NMSS

FROM: John W. N. Hickey, Chief [ORIGINAL SIGNED BY:]
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management, NMSS

SUBJECT: DATA FOR FUTURE BUDGETS

In a memorandum from Carl Paperiello, dated June 5, 1997, the Division of Waste Management (DWM) was requested to provide information on the costs and Full Time Equivalents (FTEs) spent on the close out of each Site Decommissioning Management Plan (SDMP) site and the two reactors that were decommissioned by DWM. The attached table summarizes the SDMP sites that have been closed out since 1992 and the 2 reactors mentioned in Dr. Paperiello's memorandum. We are requesting your assistance in obtaining the information requested by Dr. Paperiello. Please provide the RITS data which shows the total hours and FTE expended for each of these facilities, broken out by NRC Headquarters and Regional employees, for 1990 through 1997. Please include overtime and compensatory time. In addition, please provide the hours and FTE expended for PA Numbers 232BA, 232BAA, 232BAB, 232BAC, which are not already included in the data for the facilities on the attached list. In order to meet our Division deadline, I am requesting that you provide this information by October 17, 1997.

Attachment: As stated

Contact: Dominick Orlando, DWM/NMSS
301-415-6749

TICKET: N9700239 (Do not close)
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B/113

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 1, 1997

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Program Management, Policy Development
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Contact: Dominick Orlando, DWM/NMSS
301-415-6749

Facility Name	License Docket Number
Allied Signal Corp	STB-424 040-00772
ALCOA	NA 040-00501
AMAX	SNM-1418 040-08820
Anne Arundel County/Curtis Bay Depot	STC-133 040-00341
Army - Aberdeen Proving Ground	SMB-141 040-06354
Babcock and Wilcox - Apollo	SNM-145 070-00135
Budd Company	37-05680-04 030-19963
Engelhard Corp.	NA 070-00139
Fromme Investment Corp.	NA 040-0235
Magnesium Electron	NA 040-008964
Nuclear Metals, Inc.	SUB-179, SUB-1452 040-00672, 040-08866
Old Vic, Inc	31-26394-01 030-19594
Pawling (Chevron)	SNM-871 070-00903
RTI, Inc.	20-13613-12 030-07022
Texas Instruments	SNM-23 070-00033
United Nuclear Recovery Systems	SNM-777 070-00820
United Technologies/ Pratt & Whitney	06-00550-03 unknown
Westlake Landfill	NA 040-08035, 040-08801
Wyman-Gordon Company	STB-840 040-01650
Ft. St. Vrain Nuclear Generating Station - Unit 1	DPR-34 50-267
Shoreham Nuclear Power Plant - Unit 1	DPF-82 50-322

Attachment

(13)

DOCKET NO. 40-5007

July 25, 1960

TO: Dr. D. R. Spink
Carborundum Metals Co.
Akron, New York

FROM: R. J. Augustine, D. E. Barber and G. Hoyt Whipple
University of Michigan

SUBJECT: Report of the Radiological Surveys of Operations at the Parkersburg Plant, May 10 - July 22, 1960, and a Recommended Routine Radiological Program.

This report is divided into the following sections:

1. Introduction
2. Air Samples
3. Water Samples
4. Urinalysis
5. Gamma Measurements
6. Revised Counting Procedure
7. Conclusions and Recommendations
   - A. Carbiding
   - B. Chlorination
   - C. Separations
   - D. Maintenance
   - E. General
   - F. Routine Radiological Program

d1

1. Introduction

The data contained in this report were obtained during less than 100% plant production. Concentrations of radioactivity in air and water may be expected to increase when full production utilizing Nigerian ore is achieved.

Separations data were taken when the feed to that system was only 50% Nigerian tetrachloride.

No data has been obtained during the operation of more than one chlorinator.

2. Air Samples

Table 1 is a summary of air sample data obtained following the installation of additional ventilation equipment in the carbide building. All average values are less than MPC except for the drumming operation, the routine for which has not yet been definitely established. The use of the MSA respirator will effectively reduce the exposure during this operation to less than MPC.

A comparison of the data of Table 1 with those of Table 3 of our memo dated March 10, 1960, shows that the ventilating equipment and the more careful handling of the carbide and old mix has resulted in a reduction of average concentrations of radioactive material in the air.

Off site samples from the continuous air samplers located at the nearest neighbors of the plant indicate air concentrations of radioactive materials well below the MPC.

Concentrations of radioactive material in the air of the separations building are all below the occupational MPC for thorium. A single sample was taken at each location given in Table 1a except for the $ZrSO_4$ filter and tetrachloride feed locations. The values given for these latter two locations are maximums of two and three samples respectively. All reported values are also based on first counts of the sample; consequently, all are high estimates.

Table 1

SUMMARY OF AIR AND WATER SAMPLE DATA COVERING THE PERIOD

MAY 10 - JULY 22, 1960

Location and Operation	Average μc/ml	Highest μc/ml	Lowest μc/ml	No. of Samples	Average/MPC
Carbide Building, Coke Hole	2.7×10^{-11}	7.3×10^{-11}	2.1×10^{-13}	3	.54
Carbide Building, Locker Room	$<5.5 \times 10^{-12}$	4.9×10^{-11}	$<2.4 \times 10^{-13}$	10	<.11
Carbide Building, Control Room	$<1.0 \times 10^{-12}$	1.3×10^{-11}	$<2.1 \times 10^{-13}$	10	<.02
Carbide Building, Catwalk	5.9×10^{-12}	1.7×10^{-11}	1.1×10^{-12}	9	.12
Carbide Building, Picking Belt	2.7×10^{-11}	4.9×10^{-11}	1.0×10^{-11}	3	.54
Carbide Bldg., Drumming Carbide	2.4×10^{-10}	6.4×10^{-10}	8.5×10^{-12}	5	4.8
Carbide Bldg., Car Pull - General	3.6×10^{-11}	1.3×10^{-10}	1.1×10^{-12}	6	.72
Marbon Roof, Off Site	$<3.4 \times 10^{-14}$	9.9×10^{-14}	$<2.6 \times 10^{-14}$	17	<.02
Moellendick Farm, Off Site	$<3.6 \times 10^{-14}$	$<1.2 \times 10^{-13}$	$<2.6 \times 10^{-14}$	12	<.02
Stevens Farm, Off Site	$<3.0 \times 10^{-14}$	1.3×10^{-13}	$<2.1 \times 10^{-14}$	27	<.02

Table 1a

AIR SAMPLE DATA FROM SAMPLES TAKEN IN SEPARATIONS ON 20-21 JULY 1960

Location	μc/ml
Catwalk - $ZrSO_4$ Filter	2.7×10^{-12}
$ZrSO_4$ Filter	1.5×10^{-12}
Feed Filter	9.5×10^{-13}
Tower, 1st Floor	7.5×10^{-13}
" 2nd "	8.2×10^{-13}
" 3rd "	1.1×10^{-12}
" 4th "	1.4×10^{-12}
" 5th "	1.5×10^{-12}
Tet Feed	8.3×10^{-12}
ZrO Drum Change	1.8×10^{-12}
ZrOH Filter	4.0×10^{-12}
HfOH Filter	1.1×10^{-12}
ZrOH Filter	3.3×10^{-12}
Hf Tray Dump	1.1×10^{-11}

drum pulling
feeding cartridge
pulling last residue
} over MPC

3. Water Samples

There appear to be three components of the liquid effluent to the Ohio River.

These are:

a. Surface drainage, which includes coolant water from the carbide furnace and floor washings, as well as roof drainage from the several buildings.

b. Process sewer drainage.

c. Sanitary drainage through a septic tank.

All three of these components combine on plant property to form the single line which empties into the river. Total effluent flow rate is estimated by Mr. Tuttle to be from 450 to 900 gallons per minute.

Samples taken from the effluent contain a large amount of solids. From inspection of samples thus far counted our experience forces us to apply a self-absorption correction factor of 10 to the water sample counting data. This correction factor applied to two samples taken during chlorination operations only and to two samples taken during both separations and chlorination operations provides an estimate of liquid effluent concentration at the river of 4.9×10^{-7} μc/ml which is approximately ten times the MPC for natural thorium in water. MPC 10

An intensive sewer effluent and river radiological survey is recommended when the plant achieves full production on 100% Nigerian ore. The results of this survey will help to determine the magnitude of the effluent problem.

4. Urinalysis

All reported alpha activity concentrations in urine are well below the Maximum Permissible Urinary Excretion Rate (MPUER) of 1.5×10^{-2} dpm/ml which we had recommended in a previous report.

No definite pattern can be recognized from the compilation of data in Table 2 either by work location or with respect to time. Consequently, it is recommended that urinalyses not be performed at frequent intervals but be used as a check to demonstrate the absence of entry of radioactivity into the body.

It is suggested that urinalyses be performed following six months of operation. A review of the data will then enable determination of an appropriate interval at which these analyses should be performed. Specimens from one or two office workers may serve as controls for these analyses.

It is considered advisable to include radioactive urinalyses as a part of pre-employemnt and terminal physical examinations.

5. Gamma Measurements

Gamma radiation measurements tabulated in Table 3 show that a conclusion of a previous report continues to hold true and film badges as a routine monitoring tool are unnecessary anywhere in the plant. It is considered advisable to begin a gamma radiation log book wherein measurements can be permanently recorded.

A gamma measurement on the $ZrCl_4$ feed tanks indicated nearly background radiation or a net of .01 mr/hr. It is not expected that other vessels will give much if any greater readings than this, but measurements should be made and recorded if film badges are not to be used.

As a matter of legal record it would be advisable to monitor with film badges those individuals most exposed, at six month intervals.

6. Revised Counting Procedure

Count the standard source at least once each day and record the result in the log book! Any major deviation from the expected standard count indicates

Table 2

SUMMARY OF URINALYSIS DATA

(MPUER = 1.5×10^{-2} dpm/ml)

Name	Report Date / Position or Location	Feb. 15 After Carbiding	March 17 Before Chlorination	June 14 After Chlorination and Before Carbiding	June 27 After Carbiding	
[redacted]	[redacted]		0			
[redacted]	[redacted]		21 ± 23	0		
[redacted]	[redacted]		3 ± 13	13 ± 27		
[redacted]	[redacted]		0	0		
[redacted]	[redacted]		43 ± 26	54 ± 60		
[redacted]	[redacted]		3 ± 13	13 ± 23		
[redacted]	[redacted]		0	6 ± 13		
[redacted]	[redacted]		4 ± 16	27 ± 30		
[redacted]	[redacted]		38 ± 29	0		*
[redacted]	[redacted]		17 ± 19	0		
[redacted]	[redacted]		3 ± 13	59 ± 30		*
[redacted]	[redacted]		23 ± 23	0		
[redacted]	[redacted]		30 ± 23	0		*
[redacted]	[redacted]		0	13 ± 27		
[redacted]	[redacted]		0	46 ± 27		*
[redacted]	[redacted]		4 ± 16	33 ± 34		
[redacted]	[redacted]		3 ± 13	8 ± 13		
[redacted]	[redacted]		4 ± 16	74 ± 38		*
[redacted]	[redacted]		3 ± 13	27 ± 30		
[redacted]	[redacted]		43 ± 26	44 ± 45		
[redacted]	[redacted]		105 ± 44	13 ± 23		*

Table 2 (Continued)

Name	Report Date / Position or Location	Feb. 15 After Carbiding	March 17 Before Chlorination	June 14 After Chlorination and Before Carbiding	June 27 After Carbiding	
[redacted]			95 ± 50	26 ± 27		
[redacted]			0	40 ± 30		*
[redacted]			4 ± 16	0		
[redacted]			17 ± 18	0		
[redacted]			4 ± 16	66 ± 35		*
[redacted]			21 ± 23	398 ± 99		*
[redacted]				13 ± 23		
[redacted]			21 ± 23	0		
[redacted]			38 ± 29	83 ± 42		
[redacted]			17 ± 18	9 ± 20		
[redacted]		124 ± 42	0	0		*
[redacted]		15 ± 19	57 ± 30			
[redacted]		82 ± 35	17 ± 18			*
[redacted]			3 ± 13			
[redacted]			4 ± 16			
[redacted]			43 ± 26			
[redacted]		82 ± 35		13 ± 23	6 ± 23	*
[redacted]		42 ± 27		80 ± 38	0	*
[redacted]		28 ± 23		0	49 ± 33	*
[redacted]		15 ± 19		26 ± 27	6 ± 23	
[redacted]		57 ± 30		40 ± 30	0	*
[redacted]		15 ± 19		19 ± 19	22 ± 27	
[redacted]		149 ± 46				
[redacted]		109 ± 40		46 ± 27	6 ± 23	*
[redacted]		2 ± 13		6 ± 13	0	

Table 2 (Continued)

Report Date		Feb. 15	March 17	June 14	June 27	
Name	Position or Location	After Carbiding	Before Chlorination	After Chlorination and Before Carbiding	After Carbiding	
[redacted]	[redacted]	95 ± 38				
[redacted]	[redacted]	55 ± 30		66 ± 35	0	*
[redacted]	[redacted]	57 ± 30		21 ± 27	9 ± 39	
[redacted]	[redacted]	15 ± 19		26 ± 27	46 ± 33	
[redacted]	[redacted]	28 ± 23		53 ± 35		
[redacted]	[redacted]	42 ± 27		99 ± 50	17 ± 23	*
[redacted]	[redacted]	83 ± 35		13 ± 23	9 ± 39	*
[redacted]	[redacted]	2 ± 13		0	31 ± 38	
[redacted]	[redacted]	69 ± 33		39 ± 40	22 ± 27	
[redacted]	[redacted]	97 ± 38				
[redacted]	[redacted]			46 ± 27	35 ± 30	
[redacted]	[redacted]			40 ± 30		

NOTES:

1. *Changes outside limits of error.
2. All figures x 10^{-5} dpm/ml.

Table 3

GAMMA RADIATION MEASUREMENTS, JULY 22, 1960

(CHLORINATION BUILDING)

Location	Date $ZrCl_4$ Container Filled	Mrad/hr	Floor
$ZrCl_4$ Container, Top, Center	7-22-60	5.0	First
" Top, Side	"	2.0	"
" Bottom, Side	"	.76	"
" Top, Center	7-18-60	.36	"
" Top, Side	"	.41	"
" Bottom, Side	"	.41	"
" Top, Center	7-14-60	.21	"
" Top, Side	"	.14	"
" Bottom, Side	"	.21	"
A - Chlorinator	-	.56	First
"	-	Top .21 Bottom .56	Second
"	-	.06	Third
A - Condenser	-	.76	First
"	-	Top .36 Bottom .66	Second
"	-	.11	Third
$ZrCl_4$ Container, Top, Side	Being filled	.76	First
" Bottom, Side	"	2.5	"

some trouble with the counter, i.e., dirty chamber, dirty center wire electrode, change in high voltage setting, or malfunction of the electronics. The validity of the sample counts depends on this standard source check procedure!

Background should continue to be counted twice a day or after counting "sloppy" samples and recorded in the log book. The chamber should be cleaned to reduce background below 1 c.p.m. With background counts at or above 1 c.p.m. the background count should be subtracted from the sample count before recording the count in the log book.

Air samples need only to be counted at approximately 100 hours after collection (Δt = 90-110 hours.)

The formulae for calculating the air activity concentrations are as follows:

High Vol. Air Sampler:

$$\frac{\mu c}{ml_{(air)}} = 2.2 \times 10^{-10} \times \frac{\text{(net 100 hr. c.p.m.)}}{\text{(vol. in cu. ft.)}}$$

Continuous 24 hr. Samplers:

$$\frac{\mu c}{ml_{(air)}} = 2.75 \times 10^{-11} \times \frac{\text{(net 100 hr c.p.m.)}}{\text{(vol. in cu. ft.)}}$$

Air filter samples should be dry when counted. This may require heating them before counting!

Liquid samples should be prepared with care and placed in the planchets carefully to avoid getting sample material on the outside of the planchet. The final slurry in the planchet must be dried slowly to avoid bubbling, splattering, popping, frothing, etc. After drying, continue to heat the sample to drive off organic vapors, ammonia vapors, etc. Some samples may need to be stored in a dessicator until counted! Calculate the activity of liquid samples by using the following formula:

$$\frac{\mu c}{ml_{liquid}} = 4.5 \times 10^{-6} \times \frac{\text{(net 100 hr. c.p.m.)}}{\text{(vol. in ml.)}}$$

7. Conclusions and Recommendations

A. Carbiding: Continued care in handling ore, carbide, and old mix coupled with the use of the ventilating equipment will help to keep the air concentrations in the general carbiding area below the MPC. Prompt repair of furnace leaks is essential to maintain low air concentrations. Respirators should be worn for any dusty operation or when visible clouds of dust are being generated. Respirators are not required, however, merely to walk through the building, in the locker room, or in the control room, as long as one stays out of the dust cloud. Conscious effort to keep dust to a minimum is essential for this area!

Protective clothing, consisting of caps, gloves, and coveralls should be worn for all operations involving contact with radioactive material or very dusty conditions. Protective clothing is not necessary when merely walking through the building.

The following two types of signs should be posted at all entrances to the carbiding area:

(1) "Caution - Airborne Radioactivity Area"

(2) "Caution - Radioactive Materials"

In addition all containers, bins, hoppers, etc., containing radioactive ore, carbide, or old mix should be posted as follows:

"Caution - Radioactive Materials"

B. Chlorination: In this area the general air concentrations are below MPC, except for the dusty operations of drum pulling, feeding carbide, and pulling the bed residue. Respirators should be worn for these operations. Also, during bed residue pulls the air concentrations in the general chlorination area requires wearing of respirators. Continual care in the handling of dusty materials and use of the ventilation equipment is essential for the safe conduct of these operations.

Coveralls, caps, and gloves should be worn during feeding carbide, tet drum pulling, and bed residue pulls. Protective clothing is not required at other times.

The two types of signs are required here:

(1) "Caution - Airborne Radioactivity Area"

(2) "Caution - Radioactive Materials"

All drums, bins, and hoppers containing radioactive material should be posted with: "Caution - Radioactive Materials."

C. Separations Building: All air samples indicated no airborne hazard although the dusty and fuming operations showed higher concentrations than the others. Respirators need not be generally worn in the area, but it is recommended that they be used for the dusty operations or bad fume conditions, i.e., feeding tet.

Protective clothing (caps, gloves, and coveralls) should be worn to prevent contamination whenever contact is made with the open systems or there is a possibility of contact with solutions, powders, etc.

The sign "Caution - Radioactive Materials" is required at all entrances to the Separations Building and on all process vessels, tanks, etc.

D. Maintenance: Air concentrations for maintenance operations are not known, but possibly could be high. Coveralls, caps, gloves, and respirators should be worn anytime radioactive material is encountered or the process system is opened. This must be carefully watched!

E. General Items:

a. Temporary change shed is not necessary. The locker room in the Carbide Building and the change room in the Chlorination Building can be used to change into protective clothing. Emphasis

must be placed, however, on keeping these change rooms clean and on providing proper washing facilities for the workers.

b. There should be a designated area in each building for lunching and no eating should be allowed at other places. The lunch rooms must be kept clean and hand washing facilities provided.

c. The record of each man's time in the various areas is now unnecessary since the total plant is on 100% Nigerian.

d. It is recommended that work shoes be provided in the carbiding operation only. These shoes should remain at the plant and should not be worn home.

e. Laboratory personnel should be advised that the samples may contain radioactivity and the samples should be handled with care.

f. All personnel should be advised of the necessity for cleanliness in working with the radioactive material. Handwashing after contact with the process stream and especially before eating should be required. A shower before going home is highly recommended and should be encouraged.

F. Routine Radiological Program: Table 4 shows a proposed routine radiological program of sampling and monitoring to be carried out by plant personnel during operation with radioactive materials.

All air samples taken with the High Volume Sampler should be for a sampling duration of 10 minutes if possible or until the flow rate drops to 18 c.f.m. The off-site continuous air samplers should be changed every 48 hours.

A sewer effluent monitoring program will be set up after the intensive effluent survey has been accomplished.

The importance of recording the results of all sampling and monitoring information in a permanent log book can not be over-emphasized!

Table 4

ROUTINE RADIOLOGICAL PROGRAM

Air Samples:

AREA	LOCATION	FREQUENCY
Carbide	ore and coke hole	1 per week during loading
	locker room	1 per week
	control room	1 per week
	main floor	1 per week
	catwalk	1 per week
	car pulling	1 per car
	carbide sorting	1 per car
	drumming operations	1 per car
Chlorination	feeding carbide	1 per week
	$ZrCl_4$ drum pull	1 per week
	bed residue pull	1 per residue pull
	general area	1 per week
	change room	1 per week
	lunch room	1 per week
Separations	feeding tet	1 per week
	Zr oxide drumming	1 per week
	lunch room	1 per week
Off-site	four directions from plant at nearest neighbor	continuous

Table 4 (Continued)

Laundry Samples:

100 ml. of first wash water, 1 per week.

Gamma Measurements:

AREA	LOCATION	FREQUENCY
Carbide	drums or bags of ore	1 per week
	drums of carbide	1 per week
	drums of old mix	1 per week
Chlorination	chlorinator	1 per week
	chlorinator condenser	1 per week
	drum of bed residue	1 per week
	drum of tet	1 per week
Separations	feed storage tank	1 per week
	feed filter press	1 per week
	Zr raffinate tank	1 per week
	H_f raffinate tank	1 per week
	Zr sulfate tank	1 per week
	Zr OH tank	1 per week
	drum of H_f OH	1 per week
	H_f filter press	1 per week

Urinalysis:

Recommended for all personnel after 6 months of operation with 100% Nigerian ore and as a part of a pre-employment and terminal employment physical examination.

R. J. Augustine
R. J. Augustine

D E Barber
D. E. Barber

G. Hoyt Whipple/rmw
G. Hoyt Whipple

Copy: G. Chapman

AMAX

Central file (2)

3 AM: 55

October 31, 1978

40 201

Mr. Jack T. Sutherland
Chief, Fuel Facility and Material Safety Branch
U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W.
Atlanta, Georgia 30303

Dear Mr. Sutherland:

This will confirm my telephone conversation with John Potter on October 26, 1978, and is in reply to your letter of October 6, 1978, to Mr. G.R. Couch, concerning the placement of NRC reports in the Public Document Room.

We have reviewed the copies of inspection report numbers 78-03, 78-04, 78-05, and 78-06, that you enclosed with your letter, and are satisfied that these reports do not contain proprietary information. Therefore, we have no objection to these reports being placed in the NRC's Public Document Room.

We appreciate Mr. Potter taking the time to inquire about our position on these reports.

Very truly yours,

Stanley A. Thielke
Manager of Industrial Hygiene

SAT/lmn
cc: J. Potter

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C12

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

OCT 11 1978

In Reply Refer To:
RII:RLW
SMA-1219
STB-440

AMAX Specialty Metals Corporation
ATTN: Mr. G. R. Couch, President
One Greenwich Plaza
Greenwich, Connecticut 06830

Gentlemen:

This refers to the four special inspections conducted by Messrs. R. L. Woodruff and R. A. Brown of this office during the period of July 18, 1978 thru September 28, 1978, of activities authorized by NRC License Nos. SMA-1219 and STB-440 for the Washington, West Virginia Facility, and to the discussions of our activities held with L. B. Foster Company representatives during the inspections.

Areas examined during the inspection and our findings are discussed in the enclosed inspection reports. Within these areas, the inspections consisted of environmental sample collections, interviews with personnel, and independent environmental measurements performed by the inspectors.

Within the scope of this inspection, no items of noncompliance were disclosed.

In accordance with Section 2.790 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must include a full statement of the reasons on the basis of which it is claimed that the information is proprietary, and should be prepared so that proprietary information identified in the application is contained in a separate part of the document. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,

Jack T. Sutherland, Chief
Fuel Facility and Materials
Safety Branch

Enclosure:
Inspection Report Nos. 78-03, 78-04,
78-05 and 78-06

cc w/encl:
L. B. Foster Company
Attn: Mr. H. F. Ford, Vice President
Eastern Operations
3169 Holcomb Bridge Road - Suite 210
Atlanta, Georgia 30017

Mr. L. W. Bechtold, Sheriff
of Wood County
Post Office Box 1076
Parkersburg, West Virginia 26101

Mr. Lee Bettenhausen
Region III
U. S. Environmental Protection Agency
Curtis Building
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report No.: 78-03

License No.: SMA-1219 and STB-440

Licensee: AMAX Specialty Metals, Inc.
P. O. Box 32
Akron, New York 14001

Facility Name: Parkersburg Facility

Inspection at: Washington, West Virginia

Inspection conducted: July 18, 1978 and August 1, 1978

Inspector: R. L. Woodruff

Accompanying Inspector: A. A. Brown

Approved by: J. P. Potter 10/4/78
J. P. Potter, Chief Date
Fuel Facilities and Materials Safety Section
Fuel Facility and Materials Safety Branch

Inspection Summary

Inspection on July 18, 1978 and August 1, 1978 (Report No. 78-03)
Areas Inspected: Special, announced inspection at the AMAX/Foster Washington plant to conduct background radiation measurements at the site area, to collect TLD dosimeters and to interview persons who had formally worked at the site. The inspection involved approximately 30 inspector-hours by the NRC inspectors.
Results: No items of noncompliance or deviations were identified.

DETAILS I

Prepared by: Richard L. Woodruff 10/4/78
R. L. Woodruff, Radiation Specialist Date
Fuel Facilities and Materials Safety Section
Fuel Facility and Materials Safety Branch

Dates of Inspection: July 18 and August 1, 1978

Reviewed by: John Potter 10/4/78
J. P. Potter, Chief Date
Fuel Facilities and Materials Safety Section
Fuel Facility and Materials Safety Branch

1. Purpose

On July 18, 1978, Richard Woodruff and Robert Brown went to the Washington site above for the purpose of collecting the thermoluminescent dosimeters (TLDs) that had been placed at the facility on May 31, 1978, and to meet with bulldozer operators who reportedly buried various materials at the site during the past several years. On Tuesday, August 1, 1978, R. Woodruff returned to the site for the purpose of evaluating and observing the ATCOR survey.

2. Contacts

The following persons were contacted during the July 18, 1978 visit.

Walter Pavlo, Plant Manager, L. B. Foster Co.
Gene Lawson, Spiralweld Division Manager, L. B. Foster Co.
Harold Kall, Vice President, AMAX, Inc.
R. G. Levesque, ATCOR, Inc.
G. L. Williams, ATCOR, Inc.
Ron Smith, L. B. Foster Co.
Buck Talbot, Set Excavating Co.
Mel Young, Industrial Hygiene, AMAX, Inc.

The following persons were contacted during the August 1, 1978 visit.

W. Pavlo, L. B. Foster, Plant Manager
M. Young, AMAX, Industrial Hygenist
R. Levesque, ATCOR
G. Williams, ATCOR
M. Snieckus, ATCOR

O. Sullivan, ATCOR
D. Milewski, ATCOR, Project Manager
B. DeBord, West Virginia State Health Dept.

3. Scope

On July 18, 1978, brief discussions were held with AMAX/ATCOR people who were conducting the preliminary radiological survey. The discussions were mostly about topics related to the NRC surveys, type of equipment used, and the objectives of the ATCOR surveys and the survey methods they would use.

Discussions with L. B. Foster personnel were mostly of a general nature including Foster's plans to move their plant operations to an area free of radioactive and zirconium materials. Mr. Lawson and Mr. Smith furnished a set of blueprints showing the location of a storm sewer that emptied into the Ohio River. This sewer was established during the tenure of the Carborundum Metals Co. Inc., at the site. These blueprints have been added to the Region II files. Previous knowledge of the exact location of this sewer had not been revealed to the NRC. It had been previously suggested by Foster personnel that the storm sewer pipe terminated in the ravine close to the settling ponds. Although this pipe was known to exist in the "old fenced area" of the site, it was never considered to be a major problem to the environment or to personnel. The pipe was surveyed thru various "man holes", and water and sediment samples were taken at the "sewer outfall" at the Ohio River. These samples (AMW-9 and AMS-29) were sent to DOE/RESL in Idaho Falls, for analysis. The "manhole" survey was performed with the SPA-3A probe and it indicated that some contamination does exist at the "manhole" just west of the settling ponds. The contribution from natural radioactivity in the brick liner could not be distinguished from any thorium residues, and the AMAX/ATCOR personnel were informed of our findings.

On August 1, 1978, the inspector was told that the survey had been delayed and that the water-jet drilling would not be started until the following Monday, August 7, 1978; and the dry mechanical auger (drilling) work would not be performed until later in the week.

4. Interviews

a. The following persons were contacted by telephone on July 18, 1978, to establish an appointment time for them to "point-out" the "burial sites" to the NRC inspectors:

Marvin Eddy, Set Excavating, Vienna, W. Va.; [redacted] EX-6
Darrell Drain, former employee of above;

Appointments were made for 6:00 p.m. July 19, 1978, for the above persons to meet NRC inspectors at the AMAX site. Neither person showed up for the appointment. Further attempts to contact Mr. Eddy failed. Mr. Drain's home phone number was called and his wife stated that he would be working until about 8:00 p.m. Mr. Buck Talbot, who is a partner of Mr. Eddy, was contacted by telephone and he agreed to come to the site. Mr. Talbot arrived at the site at 7:00 p.m. and he pointed out an area between, and south of the new buildings where he, Mr. Eddy, Mr. Drain, and a Mr. Fry had buried barrels and other materials over the past nine years. He could not define the area exactly but he stated that the barrels had no markings, and that several fires had occurred during the burials. He further stated that exact burial dates could be obtained from his files if needed. He stated that the trenches were up to 20 feet deep and 35 feet wide.

b. On July 19, the inspectors went to the West Virginia Division of Radiological Health and briefed Mr. William Aaroe on the NRC activities at the AMAX/Foster site concerning the ongoing activities conducted by ATCOR/AMAX personnel.

c. On August 1, 1978, Mr. Levesque was asked to describe what had been done, in regard to their survey, and what was yet to be done. He stated that they (ATCOR) had completed their survey of the clean areas and had found hot spots from 2 to 5 times background in the sewer manholes, and one area south of the sewer outfall, about 20 feet from the river that was above background levels. A sediment sample had been obtained from the sewer outfall catch tank. Except as noted above this area was considered by ATCOR to be free of contamination and suitable for L. B. Foster to move their buildings onto. Mr. Levesque stated that the survey was taking longer to complete than expected; however, they intended to meet the eight weeks deadline. He informed the inspector that the wet drilling will be performed by a husband and wife team that have done work for ATCOR at other sites. He said they were aware of the zirconium problems at this site and their names are Charles and Julia Martin. The "dry" auger drilling was expected to begin later in the week. Mr. Levesque described how the area designated in the survey protocol would be monitored with a Ludlum one inch NaI(TL) scintillation detector and the radiation levels measured with a Reuter-stokes Pressurized Ion Chamber (PIC) instrument. He described how the samples of soil would be monitored in the

field and he stated that 10 percent of the samples would be sent to an independent testing laboratory for radioisotope analysis.

d. On August 1, 1978, during a discussion, Mr. Pavlo stated that Stephens Construction Company had been contracted to move the steel buildings to the new site and that the Insurance Agency for Stephens Company may want a statement that there would be no radiation hazard to the Stephens Company employees. The inspector called the Insurance Co. "S. Byrd Ross Agency", Parkersburg, W. Va.; 304-485-4475, and informed a Mrs. Mitchell that there should not be a radiation hazard while moving the buildings to the new location. After confering with Mr. Potter by telephone the inspector called Mr. Pavlo and informed him that a NRC representative would be on site frequently and that we did not intend to allow any person to be exposed unnecessarily and to feel free to call the Region II office at any time.

5. Inspector Observations

a. It was observed that ATCOR personnel had established a laboratory in the main office building which consisted of the following equipment:

An Eberline PAC-4S lin-log meter with an alpha probe which would be used for monitoring shoes, clothing, etc., for contamination.

An Eberline PS-2 scaler attached to an Eberline RD-13 alpha sample counter which would be used for smear evaluation.

A Reuter-Stokes PIC instrument that would be used to survey environmental radiation levels, as necessary.

A Ludlum survey meter equipped with a one inch NaI(TL) crystal that would be used to locate hot spots above background.

An Eberline GM survey meter would also be available.

All of the above instruments were calibrated by Eberline Instrument Co., Inc. within the past three months and were operable. All persons had been issued R. S. Laudauer Co., Inc. film badges and were instructed in the use of the instruments and the nature of the pyrophoric material and potential contamination problems for facilities and to themselves.

b. Much of the area around the new buildings had been marked off in 25 feet grids. The maximum and average radiation levels had been recorded from the NaI detector survey. ATCOR personnel were currently taking measurements with the PIC instrument in each grid. The measurements were being supervised and the readings were taken by Mr. Levesque.

c. A NRC Form-3 was posted in the office laboratory. ATCOR employees had been instructed to wash their hands before eating, not to smoke in known pyrophoric material areas, and a paper "runner" was installed on the hallway floor to keep contamination out of the laboratory and other parts of the office building.

6. TLD Recovery and Data Summary

On July 18, 1978, the TLD's were recovered after a total exposure time of 1052 hours. Another survey reading was taken with the Eberline SPA-3A scintillation detector. The SPA-3A detector measurements taken on July 18, were taken at the position of the TLD locations; whereas, in the previous survey of May 31, 1978, measurements were taken at the PIC locations. The two measurements were in general agreement with each other; however, some differences were found and these differences are mainly due to hot spots and detector geometry, as it was not always possible to get both the TLD's and the PIC meter in exactly the same locations.

Attachment A to this report is an updated version of Attachment A from Report No. 78-02. The PIC reading at location number 31 was erroneous and for this report, the PIC value was adjusted downward to 354 μR/hr to correspond to the maximum digital readout capability of the PIC instrument. The TLD data was converted from millirem to microroentgens per hour for comparability with the PIC data.

Attachment B is a summary of the PIC and TLD data after corrections were made for background radiation. The TLD data were expected to differ from the PIC data because the TLD's represent an integrated exposure over several weeks, and the background exposure rate could vary during any 24 hour period. It is believed that the two sets of data are in general agreement, the differences being due to factors previously mentioned.

It should be noted that location number 6 (U.S. Post Office, 26181) shows a larger TLD reading, which is probably due to the TLD being positioned on an inside concrete block wall during the exposure period, whereas, the PIC reading was taken outside the block building.

Location 23 (Area "M" at ravine) and location 31 (oil pump, Bldg. C) and location 32 (Northeast Door, Bldg. C) were not in agreement. Again it is believed that the differences shown are mostly due to geometry and position of the detectors during the measurements. Location number 41 (East fence area) was different mainly because the value had exceeded the PIC instrument digital readout capability.

For the purposes of this report, it is believed that the PIC data represents a reasonable evaluation of the environmental radiation levels at the site and with exceptions as noted above, this data is supported by the TLD measurements.

ATTACHMENT A

INSTRUMENT AND TLD MEASUREMENTS

Measurements were taken at 1 meter above ground using a pressurized ion chamber (PIC), and a portable survey meter utilizing a 2 x 2-inch sodium iodide crystal (SPA-3). A TLD was also placed at selected locations one meter above ground. The PIC readings below are in microroentgens per hour (μR/hr); the SPA-3 readings are in counts per minute (cpm), and the TLD readings are in units of microroentgens per hour (μR/hr) and includes the integrated dose from background radiation over the exposure period. The first SPA-3 measurement (second column) corresponds to the PIC measurement, and the SPA-3A readings corresponds to measurements taken at the TLD locations upon removal of the TLDs. This table contains raw data only. See Attachment B for a summary of data corrected for various background radiation influences.

NO.	LOCATION	PIC (μR/hr)	SPA-3 (cpm)	TLD NO.	SPA-3A (cpm)	TLD (μR/hr)
1.	Parking lot, start	10.8	600	N/A	600	
	Parking lot, stop	11.1	N/A*	N/A	N/A	
	^{137}Cs check source surface	None	48K	N/A	50K	
2.	Secretary Office	11.2	N/A	19	N/A	20.25 ± 2.26
3.	Telephone pole by RR	10.0	900	20	900	21.17 ± 2.26
4.	Well No. 2	9.7	900	21	700	20.69 ± 2.01
5.	Foster Drive and Route 892	11.2	1.1K	N/A	N/A	
6.	U.S. Post Office, 26181	9.6	1.0K	Ctl 3	N/A	28.21 ± 2.43
7.	Power pole, Foster Drive	13.2	1.7K	22	1.2K	25.32 ± 3.08
8.	Power pole, parking lot	9.5	800	23	700	21.48 ± 2.13
9.	Barnsite, Foster Drive	9.0	800	N/A	N/A	
10.	Tree near gas well	7.2	550	Ctl 4	500	16.94 ± 2.07

NO.	LOCATION	PIC (μR/hr)	SPA-3 (cpm)	TLD NO.	SPA-3A (cpm)	TLD (μR/hr)
11.	Bldg. at pond	8.5	750	24	700	18.77 ± 2.44
12.	Dirt fill south of hay field	23.5	7K	25	4K	38.96 ± 7.68
13.	Ravine bed, boundary	44.8	12K	26	5K	48.31 ± 8.13
14.	Fill dirt, east of #12	8.2	800	42	600	21.48 ± 2.22
15.	Fill dirt, west of #12	8.0	800	N/A	N/A	
16.	NE of Bldg. B, stream	8.8	1K	27	700	19.68 ± 1.85
17.	Dry Stream, east of Bldg. B	9.2	1K	28	1K	21.54 ± 2.61
18.	Southeast boundary	8.9	900	29	800	20.74 ± 2.34
19.	Boundary, SE of Bldg. B	8.7	1K	30	1K	19.05 ± 2.07
20.	Boundary, south of Bldg. B	7.9	750	31	600	19.02 ± 2.30
21.	Boundary, east of ravine	9.6	1K	32	1K	20.14 ± 2.36
22.	Area "N" at ravine	50.3	13K	N/A		
23.	Area "M" at ravine	63.0	17K	40	14K	108.89 ± 15.02
24.	Area "O"	203	48K	N/A	N/A	
25.	Area "P"	74.0	22K	N/A	N/A	
26.	Area "J", south of Bldg. D	63.5	18K	N/A	N/A	
27.	Pit, Bldg. 13	298	70K	N/A	N/A	
28.	Bldg. D, 30 ft. from inner ofc	12.7	N/A	N/A	N/A	

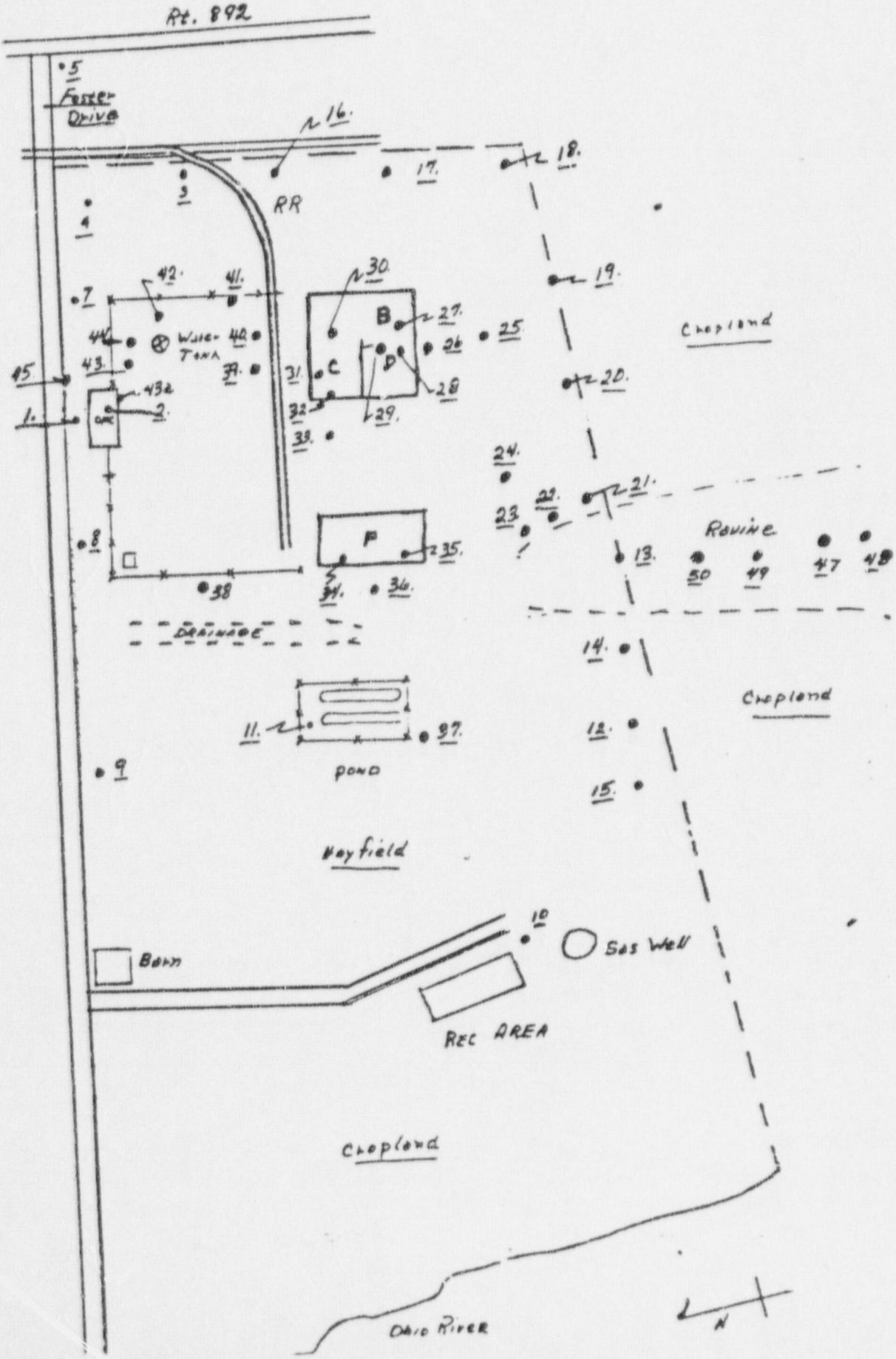
NO.	LOCATION	PIC (μR/hr)	SPA-3 (cpm)	TLD NO.	SPA-3A (cpm)	TLD (μR/hr)
28A.	Steel beam, 6 ft. from pit	N/A	N/A	33	37K	254.57 ± 16.41
29.	Inner Ofc. Bldg. D	9.3	1.1K	34	800	19.59 ± 2.13
30.	Clock area, Bldg. C	7.0	500	35	450	16.81 ± 2.41
31.	Oil pump, Bldg. C	354	110K	36	2K	23.95 ± 3.17
32.	Northwest door, Bldg. C	69.0	15K	37	8K	52.05 ± 8.33
33.	50 ft. W of Bldg. C	354	115K	N/A	N/A	
34.	Bldg. F, West inside	10.1	1.2K	38	700	17.56 ± 1.75
35.	Trench, Bldg. F, SW corner	19.6	2.5K	39	1.7K	22.26 ± 1.89
36.	Bldg. F, 15 ft west	31.0	7K	N/A	N/A	
37.	Pond, S.E. corner	8.5	800	43	500	20.76 ± 3.57
38.	West Perimeter	8.2	800	44	600	20.56 ± 2.96
39.	"L" Bldg. site	354	110K	N/A	N/A	
40.	Loading hopper area	111	32K	N/A	N/A	
41.	East fence area (TLD at 100K reading)	354	200K	45	52K	571.50 ± 33.06
42.	25 ft. East of Tower	267	50K	N/A	N/A	
43.	North fence, 50 ft. N of office	216	50K	N/A	N/A	
43A.	Window ledge, Office Bldg.	17.9	2.5K	46	2.2K	29.76 ± 2.80
44.	North of tower	87.0	20K	N/A	N/A	
45.	Power pole, NE of office	13.8	1.8K	47	1.5K	26.09 ± 2.04

NO.	LOCATION	PIC (μR/hr)	SPA-3 (cpm)	TLD NO.	SPA-3A (cpm)	TLD (μR/hr)
46.	Tree on Hill E of Rt. 892	N/A	N/A	48	1K	22.48 ± 3.14
47.	Tree, end of ravine at hay field	26.5	3.8K	41	3.5K	36.28 ± 2.63
48.	20' into hay field, from ravine	11.7	N/A	N/A	N/A	
49.	Tree, 2/3 down ravine from S boundary	N/A	7.5K	49	7K	55.86 ± 8.33
50.	Tree, 1/3 down ravine from S boundary	N/A	7.0K	50	6K	49.69 ± 8.14
51.	Sheriff Bechtold's Office	N/A	N/A	Ctl 5	N/A	21.25 ± 2.49

*N/A - Not Available or Not Applicable
** - The maximum digital readout capability on the PIC instrument is 354 μR/hr.
*** - Ctl represents a "Control" TLD number.

ATTACHMENT A

PIC AND TLD LOCATIONS



ATTACHMENT B

SUMMARY OF PIC AND TLD DATA

Background areas were selected as location numbers 8, 10, 11, 37 and 38. This selection was based upon the physical location relative to the facility and confirmed by survey meter measurements performed with the SPA-3 and SPA-3A sodium iodide crystal detectors. Arithmatic means were calculated for the pressurized ion chamber (PIC) data and for the TLD data from the above 5 locations. For the purpose of this report, background values were established as the mean value plus two times the standard deviation for each set of data and rounded up to the nearest 0.1 μR per hour. The PIC background value was established at 10.1 μR per hour, and the TLD background value was established at 23.4 μR/hr. The net values above background are presented below. Refer to the text of Report 78-03 for further discussion, specifically location numbers 6, 23, 31, 32, and 41.

NO.	LOCATION	PIC (μR/hr.)	TLD NO.	TLD (μR/hr.)
1.	Parking lot, start time	0.7	N/A	
	Parking lot, stop time	1.0	N/A	
	^{137}Cs check source surface	N/A	N/A	
2.	Secretary Office	1.1	19	BG
3.	Telephone pole by RR	BG	20	BG
4.	Well No. 2	BG	21	BG
5.	Foster Drive and Route 892	1.1	N/A	
6.	U. S. Post Office, 26181	BG	Ctl-3	4.9
7.	Power pole, Foster Drive	3.1	22	2.0
8.	Power pole, parking lot	BG	23	BG
9.	Barnsite, Foster Drive	BG	N/A	
10.	Tree near gas well	BG	Ctl-4	BG
11.	Bldg. at pond	BG	24	BG
12.	Dirt fill south of hay field	13.4	25	15.6

NO.	LOCATION	PIC (μR/hr.)	TLD NO.	TLD (μR/hr.)
13.	Ravine bed, boundary	34.7	26	24.9
14.	Fill dirt, east of #12	BG	42	BG
15.	Fill dirt, west of #12	BG	N/A	
16.	NE of Bldg. B, stream	BG	27	BG
17.	Dry Stream, east of Bldg. B	BG	28	BG
18.	Southeast boundary	BG	29	BG
19.	Boundary, SE of Bldg. B	BG	30	BG
20.	Boundary, south of Bldg. B	BG	31	BG
21.	Boundary, east of ravine	BG	32	BG
22.	Area "N" at ravine	40.2	N/A	
23.	Area "M" at ravine	52.9	40	85.5
24.	Area "O"	192.9	N/A	
25.	Area "P"	63.9	N/A	
26.	Area "J", south of Bldg. D	63.4	N/A	
27.	Pit, Bldg. 13	297.9	N/A	
28.	Bldg. D, 30 ft. from inner ofc	2.6	N/A	
28A.	Steel beam, 6 ft. from pit	N/A	33	231.2
29.	Inner office, Bldg. D	BG	34	BG
30.	Clock area, Bldg. C	BG	35	BG
31.	Oil pump, Bldg. C	343.9	36	0.6
32.	Northwest door, Bldg. C	58.9	37	28.7
33.	50 feet west of Bldg. C	343.9	N/A	

NO.	LOCATION	PIC (μR/hr.)	TLD NO.	TLD (μR/hr.)
34.	Bldg. F, west inside	BG	38	BG
35.	Trench, Bldg. F, SW corner	9.5	39	BG
36.	Bldg. F, 15 feet west	20.9	N/A	
37.	Pond, S. E. corner	BG	43	BG
38.	West Perimeter	BG	44	BG
39.	"L" building site	343.9	N/A	
40.	Loading hopper area	100.9	N/A	
41.	East fence area (TLD at 100K reading)	343.9	45	548.1
42.	25 feet East of Tower	256.9	N/A	
43.	North fence, 50 ft. N of ofc	205.9	N/A	
43A.	Window ledge, office Bldg.	7.8	46	6.4
44.	North of tower	66.9	N/A	
45.	Power pole, NE of office	3.7	47	2.7
46.	Tree on Hill E. of Rt. 892	N/A	48	BG
47.	Tree, end of ravine at hay field	16.4	41	12.9
48.	20' into hay field, from ravine	1.6	N/A	
49.	Tree, 2/3 down ravine from S boundary	N/A	49	32.5
50.	Tree, 1/3 down ravine from S. Boundary	BG	50	26.3
51.	Sheriff Bechtold's Office	N/A	Ctl-5	BG

*N/A - Not Available or Not Applicable
**BG - Background
***Ctl represents a "Control" TLD number

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report No.: 78-04

License Nos.: SMA-1219 and STB 440

Licensee: AMAX Specialty Metals, Inc.
P. O. Box 32
Akron, New York 14001

Facility Name: Parkersburg Facility

Inspection at: Washington, West Virginia

Inspection conducted: August 7 to August 11, 1978 and August 28 and 29, 1978

Inspector: R. A. Brown

Accompanying Personnel: D. Montgomery
J. Potter
K. Clark

Reviewed by: J. P. Potter 10/3/78
J. P. Potter, Chief Date
Fuel Facilities and Materials Safety Section
Fuel Facility and Materials Safety Branch

Inspection Summary

Inspection on August 7-11 and 28-29, 1978: (Report No. 78-04)
Areas Inspected: Special, announced inspection at the AMAX/Foster Washington plant to observe survey being performed by Atcor Inc., to collect environmental samples, to evaluate radiation levels in storm drainage system, to provide ground support for EG&G aerial survey and to meet with various media representatives. The inspection involved approximately 96 inspector-hours by three NRC inspectors.
Results: No items of noncompliance or deviations were identified.

(130)

October 1, 1997

MEMORANDUM TO: Claudia A. Seelig, Chief
Program Analysis Branch
Program Management, Policy Development
and Analysis Staff, NMSS

FROM: John W. N. Hickey, Chief [ORIGINAL SIGNED BY:]
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management, NMSS

SUBJECT: DATA FOR FUTURE BUDGETS

In a memorandum from Carl Paperiello, dated June 5, 1997, the Division of Waste Management (DWM) was requested to provide information on the costs and Full Time Equivalents (FTEs) spent on the close out of each Site Decommissioning Management Plan (SDMP) site and the two reactors that were decommissioned by DWM. The attached table summarizes the SDMP sites that have been closed out since 1992 and the 2 reactors mentioned in Dr. Paperiello's memorandum. We are requesting your assistance in obtaining the information requested by Dr. Paperiello. Please provide the RITS data which shows the total hours and FTE expended for each of these facilities, broken out by NRC Headquarters and Regional employees, for 1990 through 1997. Please include overtime and compensatory time. In addition, please provide the hours and FTE expended for PA Numbers 232BA, 232BAA, 232BAB, 232BAC, which are not already included in the data for the facilities on the attached list. In order to meet our Division deadline, I am requesting that you provide this information by October 17, 1997.

Attachment: As stated

Contact: Dominick Orlando, DWM/NMSS
301-415-6749

TICKET: N9700239 (Do not close)
DISTRIBUTION: Central File LLDP r/f NMSS r/f RJohnson

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OFC	LLDP		LLDP		LLDP					
NAME	DOrlando/cv		RNelson		JHickey					
DATE	9/30/97		9/30/97		10/1/97		1/97		1/94	

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LSS: YES ___ NO _X
ACNW: YES X NO ___
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 1, 1997

MEMORANDUM TO: Claudia A. Seelig, Chief
Program Analysis Branch
Program Management, Policy Development
and Analysis Staff, NMSS

FROM: John W. N. Hickey, Chief
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management, NMSS

SUBJECT: DATA FOR FUTURE BUDGETS

In a memorandum from Carl Paperiello, dated June 5, 1997, the Division of Waste Management (DWM) was requested to provide information on the costs and Full Time Equivalents (FTEs) spent on the close out of each Site Decommissioning Management Plan (SDMP) site and the two reactors that were decommissioned by DWM. The attached table summarizes the SDMP sites that have been closed out since 1992 and the 2 reactors mentioned in Dr. Paperiello's memorandum. We are requesting your assistance in obtaining the information requested by Dr. Paperiello. Please provide the RITS data which shows the total hours and FTE expended for each of these facilities, broken out by NRC Headquarters and Regional employees, for 1990 through 1997. Please include overtime and compensatory time. In addition, please provide the hours and FTE expended for PA Numbers 232BA, 232BAA, 232BAB, 232BA which are not already included in the data for the facilities on the attached list. In order to meet Division deadline, I am requesting that you provide this information by October 17, 1997.

Attachment: As stated

Contact: Dominick Orlando, DWM/NMSS
301-415-6749

Facility Name	License/ Docket Number
Allied Signal Corp	STB-424 040-00772
ALCOA	NA 040-00501
AMAX	SNM-1418 040-08820
Anne Arundel County/Curtis Bay Depot	STC-133 040-00341
Army - Aberdeen Proving Ground	SMB-141 040-06354
Babcock and Wilcox - Apollo	SNM-145 070-00135
Budd Company	37-05680-04 030-19963
Engelhard Corp.	NA 070-00139
Fromme Investment Corp.	NA 040-0235
Magnesium Electron	NA 040-008984
Nuclear Metals, Inc.	SUB-179, SUB-1452 040-00672, 040-08866
Old Vic, Inc	31-26394-01 030-19594
Pawling (Chevron)	SNM-871 070-00903
RTI, Inc.	29-13613-12 030-07022
Texas Instruments	SNM-23 070-00033
United Nuclear Recovery Systems	SNM-777 070-00820
United Technologies/ Pratt & Whitney	06-00550-03 unknown
Westlake Landfill	NA 040-08035, 040-08801
Wyman-Gordon Company	STB-840 040-01650
Ft. St. Vrain Nuclear Generating Station - Unit 1	DPR-34 50-267
Shoreham Nuclear Power Plant - Unit 1	DPF-82 50-322

Attachment