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Westinghouse Electric Corporation
Water Reactor Divisions
Box 355
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May 21, 1979

WRD-LS&S-760

U. S. Nuclear Regulatory Commission
Office of Nuclear Material Safety & Safeguards
Division of Fuel Cycle & Material Safety
Washington, D. C. 20555

Attention: L. C. Rouse, Acting Chief
Fuel Reprocessing & Fabrication Branch

Gentlemen:

Subject: Withdrawal of Proprietary Information, License SNM-1120
Docket 70-1143

Reference: PFDL-78-148 dated April 27, 1978

The Westinghouse Electric Corporation hereby transmits the attached information indicating locations and typical quantities of SNM which might be present in unencapsulated forms at PFDL. Please note that the residence time frames for the two conditions (fabrication and development) are different.

The information included with this submittal was previously transmitted as proprietary information by the reference. This information has been reclassified as non-proprietary and supersedes the previous referenced transmittal.

If you have any questions regarding this transmittal, please write me at the above address or telephone me on 412-373-4652.

Very truly yours,

Ronald P. DiPiazza

Ronald P. DiPiazza, Manager
NES License Administration

/slw

Attachments

FEE EXEMPT

415 125 12990

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Glove Box Unit Nos.	Function	Material Type[1]	Max. Batch	Typical Fabrication Batch Size[2]	Typical Fabrication Residence Time Per Week[3]	Typical Development Batch Size[2]	Typical Development Residence Time Per 2 Weeks[3]
301	Miscellaneous	PuO_2, MOX	2 kg Pu	Variable		Variable	
302	PuO_2 Receiving Inspection	PuO_2	4 kg	2 kg	8 hrs/10 wks	2 kg	-0-
303	Sieving	PuO_2	4 kg	2 kg	3 hrs	2 kg	-0-
304	Sieving	MOX	90 kg	10 kg	12 hrs	45 kg	60 hrs
305	PuO_2 Weighing and Storage	PuO_2	4 kg	2 kg	1 wk	-0-	-0-
400	Blending	MOX	105 kg	95 kg	24 hrs	-0-	-0-
401	Slugging Press	MOX	105 kg	95 kg	16 hrs	45 kg	8 hrs
402	Die Lube Addition	MOX	105 kg	95 kg	16 hrs	45 kg	8 hrs
403	Storage	MOX	105 kg	95 kg	100 hrs	45 kg	48 hrs
404	Development Blending	MOX	100 kg	-0-	-0-	100 kg	[4]
411	Pellet Pressing	MOX	105 kg	20 kg	32 hrs	45 kg	16 hrs
412	Green Pellet Storage	MOX	105 kg	95 kg	80 hrs	45 kg	24 hrs
414,415,416	Pellet Sintering	MOX	190 kg	95 kg	100 hrs	45 kg	60 hrs
417	Sintered Pellet Storage	MOX	105 kg	50 kg	24 hrs	25 kg	24 hrs
418	Pellet Pressing	Same as Box 411; would not be used concurrently with 411.					
420	Finished Pellet Storage	MOX	150 kg	95 kg	150 hrs	-0-	-0-
420	Fuel Rod Loading	MOX	4 Rods[5]	4 Rods[5]	24 hrs	-0-	-0-

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Glove Box Unit Nos.	Function	Material Type[1]	Max. Batch	Typical Fabrication Batch Size[2]	Typical Fabrication Residence Time Per Week[3]	Typical Development Batch Size[2]	Typical Development Residence Time Per 2 Weeks[3]
421	Sintered Pellet Inspection	MOX	105 kg	95 kg	48 hrs	-0-	-0-
422	Sintered Pellet Drying	MOX	105 kg	95 kg	24 hrs	45 kg	24 hrs
423	Sintered Pellet Grinding	MOX	7 kg	3 kg	24 hrs	3 kg	12 hrs
424	Sintered Pellet Storage	MOX	105 kg	50 kg	24 hrs	25 kg	24 hrs
425	Sintered Pellet Transfer	MOX	110 kg	15 kg	8 hrs	-0-	-0-
501, 502	Fuel Rod Decon and Plug	MOX	25 Rods[5]	12 Rods[5]	24 hrs	-0-	-0-
503	Fuel Rod Welding	MOX	25 Rods[5]	25 Rods[5]			
601, 602	Metallography	MOX	220 g Pu	150 g Pu	Continuous	-0-	-0-
211	Misc. Waste Solidification	Nitrate	2 kg Pu	2 g Pu	[4]	-0-	-0-
212, 213	Oxidation	MOX	5 kg	1.5 kg	16 hrs	1.5 kg	80 hrs
221	Oxalate Precipitation	Liquid	1 kg Pu	0.5 kg Pu	[4]	-0-	-0-
222	Conversion of Oxalate to Oxide	PuO_2	2 kg Pu	0.5 kg Pu	[4]	-0-	-0-
223	Oxide Inspection	PuO_2	2 kg Pu	0.5 kg Pu	[4]	-0-	-0-
231	Pu Recovery - IX Columns	Nitrate	1 kg Pu	0.5 kg Pu	[4]		
232	Operations Equipment	None	-0-	-0-	-0-	-0-	-0-
233	Scrap Dissolution	MOX, Nitrate	2 kg Pu	1 kg Pu	[4]	-0-	-0-
234	Scrap Storage	MOX	2 kg Pu	1 kg Pu	1 Week	-0-	-0-
241, 242	Process Liquid Storage	Nitrate	10 kg Pu	1.5 kg Pu	[4]	-0-	-0-

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Glove Box Unit Nos.	Function	Material Type[1]	Max. Batch	Typical Fabrication: Batch Size[2]	Typical Fabrication: Residence Time Per Week[3]	Typical Development: Batch Size[2]	Typical Development: Residence Time Per 2 Weeks[3]
101, 102	Analytical	All	220 g SNM	175 g SNM	1 week	175 g SNM	2 weeks
121,122,134	Analytical	All	220 g SNM	175 g SNM	1 week	175 g SNM	2 weeks
Hoods	Analytical	All	110 g SNM*	55 g SNM	1 week	55 g SNM	2 weeks
NDA Room	Analytical	All	220 g SNM	75 g SNM	1 week	75 g SNM	2 weeks
151,152,153	Analytical	All	220 g SNM	100 g SNM	1 week	100 g SNM	2 weeks
Safe	Analytical	All	220 g SNM	50 g SNM	1 week	50 g SNM	2 weeks
ARD #1	Transfer Tunnel	MO, MC	2.6 kg	2.6 kg	[4]	[6]	[6]
ARD #2	Weigh, Blend	O	2.6 kg	2.6 kg	18 hrs	[6]	[6]
ARD #3	Calcining, Oxidizing	O	2.2 kg	2.2 kg	24 hrs	[6]	[6]
ARD #4	Crushing, Milling, Sieving	MC	2.0 kg	2.0 kg	48 hrs	[6]	[6]
ARD #5	Pellet Pressing	MO, MC	2.6 kg	2.6 kg	72 hrs	[6]	[6]
ARD #6	Pellet Pressing	MO, MC	2.6 kg	2.6 kg	72 hrs	[6]	[6]
ARD #7	Pellet Pressing	MO, MC	2.6 kg	2.6 kg	72 hrs	[6]	[6]
ARD #8	Analytical	MC	0.2 kg	0.2 kg	Continuous	[6]	[6]
ARD #9	Sintered Pellet Grinding	MO, MC	2.0 kg	2.0 kg	48 hrs	[6]	[6]
ARD #10	Sintering, Reduction	MO, MC	2.6 kg	2.6 kg	24 hrs	[6]	[6]
ARD #11	Inspection, Rod Loading	MO, MC	2.0 kg	2.0 kg	72 hrs	[6]	[6]
ARD #12	Rod Decontamination	MO, MC	1.2 kg	1.2 kg	3 hrs	[6]	[6]
ARD #13	Rod Welding	MO, MC	0.8 kg	0.8 kg	4 hrs	[6]	[6]

*10 g max. each in 11 hoods.

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NOTES:

[1] Material Type: PuO_2 = Undiluted plutonium oxide

MOX = 2 to 6% PuO_2 blended with natural UO_2

O = PuO_2 or fully enriched UO_2

MO = Mixed oxide of 20% Pu and up to 60% ^{235}U

MC = Mixed carbide of 20% Pu and up to 60% ^{235}U

[2] Batch size at any time material is present in the indicated unit

[3] Residence time that the stated batch size quantity is present in the indicated unit

[4] Minimum activity operation; residence time would be approximately 2 to 4 weeks per year

[5] Rods contain 2 to 2.5 kg MOX

[6] Not applicable.