



Healthcare

Mallinckrodt

Mallinckrodt Inc.
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P.O. Box 5840
St. Louis, MO 63134

Tele: 314 654-2000

May 24, 2007

Post Docket:
40-6563

Mr. Amir Kouhestani
US Nuclear Regulatory Commission
2 White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738

Re: Docket 40-6563; License STB-401

Dear Mr. Kouhestani:

Mallinckrodt proposes to transfer approximately 350 yd³ solid waste (soils and debris) containing less than 0.05 weight percent of source material to either the US Ecology Idaho facility, located at 10.5 miles NW on Highway 78, Lemley Road, Grand View, Idaho, 83624 or Waste Control Specialists, 9998 Highway West, Andrews, Texas, 79714 in accordance with 10 CFR Part 40.13, "Unimportant Quantities of Source Material." A tabulation of the solid wastes that are subject to this request is attached as Table 1.

The solid waste which is currently stored in rolloff containers at the site was generated from maintenance/capital projects performed at the St. Louis site outside of the CT area licensed footprint located in Plant 5. It is of the similar nature of the materials (soil and debris) reviewed and approved for disposal to WCS in a letter from the NRC dated April 28, 2000 and disposal to US Ecology in a letter from the NRC dated August 27, 2002. The solid waste was appropriately evaluated for chemical disposal characterization and is considered to be non-hazardous under RCRA and does not include asbestos containing materials.

An evaluation of potential radiological dose that might result from disposition of an unimportant concentration of source material at the proposed facility was prepared and was accepted by NRC staff in a letter dated June 8, 2000 as sufficient demonstration that estimated dose to members of the public would be less than 25 mrem/yr. That evaluation thus demonstrates that the potential dose to members of the public as a consequence of the proposed waste disposal will be substantially less than 100 mrem/yr.

Rec'd
5.29.07
JRM

Mr. Amir Kouhestani

5/24/2007

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Mallinckrodt believes that the proposed disposal will satisfy our mutual interests in disposing of waste safely and in accordance with applicable regulations. We will appreciate it if you will confirm the acceptability of this proposed disposition of waste as soon as you reasonably can.

If you have any questions or comments about the enclosed analysis, please contact me at 314-654-5838.

Sincerely yours,

A handwritten signature in cursive script that reads "Karen Burke".

Karen Burke

Enc.

Table 1. Soil, Sediment, and Pavement Rubble from Mallinckrodt St. Louis Downtown Plant Site

Container Identification	Waste Volume (cu ft)	Radionuclide Concentration							Fraction of Exempt Limit
		U-234 (pCi)	U-238 (pCi)	Th-228 (pCi)	Th-230 (pCi)	Th-232 (pCi)	Ra-226 (pCi)	Ra-228 (pCi)	
1108	270	4.38	4.44	1.04	4.52	1.19	2.6	1.15	0.05
119	270	6.05	5.45	1.16	4.6	1.03	2.26	1.36	0.05
121	270	10.7	10.2	1.34	7.25	1.32	3.11	1.17	0.09
122	270	4.51	4.7	1.2	5.4	1.33	3.47	1.91	0.05
127	270	5.11	5	1.34	5.53	1.2	4.34	1.67	0.05
282	270	12.6	14.7	1.41	9.6	1.32	3.19	1.36	0.11
105	270	5.39	5.15	1.2	4.13	1.19	2.56	0.91	0.05
106	270	5.39	5.15	1.2	4.13	1.19	2.56	0.91	0.05
107	270	3.16	3.15	1.37	3.16	1.19	2.61	1.28	0.04
108	270	3.16	3.15	1.37	3.16	1.19	2.61	1.28	0.04
109	270	2.37	2.77	1.41	2.09	1.15	2.36	1.17	0.04
110	270	2.37	2.77	1.41	2.09	1.15	2.36	1.17	0.04
112	270	2.37	2.77	1.41	2.09	1.15	2.36	1.17	0.04
20126	270	5.59	5.31	1.08	8.1	1.13	6.98	1.15	0.05
20335	270	5.59	5.31	1.08	8.1	1.13	6.98	1.15	0.05
20446	270	3.48	3.71	1.13	4	0.99	3.48	1.36	0.04
20453	270	1.84	1.98	1.16	2.07	0.9	1.47	0.93	0.03
149	270	4.6	4.4		2.88	1.19	2.15	1.88	0.05
175									
104									
10	270	25.4	26.3		40	10.3	46.5	8	0.34
107	270	9.6	9.8		21.1	3.13	50.4	5.4	0.11
124	270	4.9	4.9		6.3	1.8	13.2	1.77	0.06
171A									
20139	270	2.06	1.8		2.91	1.09	1.46	1.48	0.03
20365									
20519	270	8.4	9.2		5.1	6.5	18	6.49	0.17
209									
300	270	2.23	2.07		8	13.1	6.93	13.4	0.25
CT-B2									
CT-B3									
175A									
20507									
14944	270	5.5	4.3		27		3.19	6.77	0.03
20371	270	3.98	4.1	1.21	2.82	0.94	2.23	1.66	0.04

Waste volume estimate assumes 10 cubic yards of solid waste in each container.

Exempt limit is sum of fractions of 167 pCi U238/g and 55 pCi Th232/g soil