

June 12, 1996

Bayer Corporation
ATTN: Frank Hinrichs
Radiation Safety Officer
Engineering Department
New Martinsville, WV 26155

SUBJECT: NRC INSPECTION REPORT NO. 47-06773-02/96-01

Dear Mr. Hinrichs:

Thank you for your response of June 4, 1996, to our Notice of Violation, issued on May 6, 1996, concerning activities conducted under NRC License No. 47-06773-02.

Your response to this Notice of Violation should include the reason for the violation, or, if contested, the basis for disputing the violation; and corrective measures to avoid further violations. This is in addition to the information you provided, that of the corrective actions and the date when compliance will be achieved.

We will evaluate your response when this additional information is provided. If you have any questions, please call Ms. Orysia Masnyk Bailey at (404) 331-2687.

Sincerely,

(original signed by
J. P. Potter)

John P. Potter, Chief
Materials Licensing/Inspection Branch 2
Division of Nuclear Materials Safety

Docket No. 030-14874
License No. 47-06773-02

cc: State of West Virginia

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Bayer Corporation
New Martinsville, WV 26155-0500
Phone: 304 455-4400

June 4, 1996

Regional Administrator
US Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W., Suite 2900
Atlanta, GA 30323-0199

RE: NRC Inspection Report 30-14874/96-01 and NOTICE OF VIOLATION dated May 6, 1996

Dear Sir:

The items described in the NRC Inspection Report cited above were thoroughly investigated and the following responses prepared:

Violation A: 10 CFR 20.1301 (a)(2) requires that the licensee conduct operations so that the dose in any unrestricted area from external sources does not exceed 2 millirem in any one hour.

Contrary to the above on April 3, 1996, licensee operations resulted in doses of 5, 4.8, 39.1, 73.8, and 40.3 millirems respectively, in one hour at 30 centimeters from the gauge at various gauges within the plant in unrestricted areas.

Response: Bayer Corporation has recently taken several new readings in the same areas that were mentioned above. Three separate instruments that had recently been calibrated gave much lower responses than the ones mentioned above (see Attachment 1).

Some of the follow-up readings however, were still above 2 millirems per hour at 30 centimeters from the source. Occupancy studies and task evaluations were then re-evaluated (See Attachment 1). Based on these studies, employee exposure potential is less than 100 mRem/yr. 10 CFR 20.1302(a) allows for radiation levels up to 5 mRem/hr. as long as the exposure potential is less than 100 mRem/yr. None of the readings obtained by Bayer Corporation exceeded 5 mRems/hr. around the source while not directly in the radiation beam. We are confident that employee exposures cannot approach and certainly do not exceed 100 mRems/yr. Therefore we do not believe that dosimetry is required.

9604100041 13pp.

Regional Administrator

June 4, 1996

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Response: (cont.) Although all readings obtained by Bayer were within the 5 mRems per hour limit, we did see two areas that we could improve. These areas will have guards extended to further eliminate the potential for hand exposure. These changes in guards will be completed within 30 days.

Violation B: 10 CFR 20.1502(a)(3) requires, in part, that each licensee supply and require the use of individual monitoring devices by adults likely to receive, in one year from sources external to the body, a dose in excess of 10 percent of the limits in 10 CFR 20.1201(a).

Contrary to the above, as of April 3, 1996, the licensee could not demonstrate that an analysis had been performed to determine that the plant workers would not receive a dose in excess of 10 percent of these limits.

Response: As noted in the previous response, the radiation measurements and occupancy studies recently re-evaluated indicate that Bayer employees will not be exposed at or above 10 percent of the limits in 10 CFR 20.1201(a). Please refer to Attachment 1 for the details of the occupancy study, and task evaluations.

Violation C: 10 CFR 20.1801 requires that the licensee secure from unauthorized removal or access licensed materials that are stored in unrestricted areas. As defined in 10 CFR 20.1003, unrestricted area means an area, access to which is neither limited nor controlled by the licensee for the purpose of protection; individuals against undue risks from exposure to radiation and radioactive materials

Contrary to the above, on April 3, 1996, the licensee did not secure from unauthorized removal or limit access to three fixed type gauges which were stored in a warehouse located in an unrestricted area, nor did the licensee control and maintain constant surveillance of this licensed material.

Response: It was our belief that the storage location for the gauges was adequate. This facility was locked at night, and was under supervision during the day. However, in response to the citation and the inspectors comments, an alternate storage location for nuclear level gauge storage has been located. All presently held nuclear materials and future materials shall be stored in this new facility under lock and key. Access to the new area will be strictly limited to authorized personnel. The change in storage location for the nuclear material has already been accomplished.

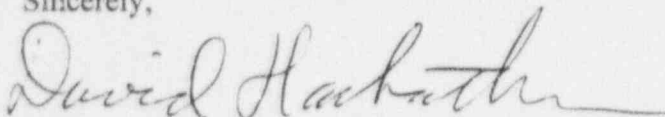
Regional Administrator

June 4, 1996

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Please let us know if these responses provide sufficient resolution for the notice of violation referenced above. If you have any questions please call me at (304) 455-4400, Ext. 2111 or Frank Hinrichs at Ext. 2592.

Sincerely,

A handwritten signature in cursive script, reading "David Hackathorn". The signature is written in dark ink and is positioned below the word "Sincerely,".

D. R. Hackathorn, Director
Health, Environment and Safety

cc: U. S. Nuclear Regulatory Commission

Attachments: (1) Radiation Exposure Calculation Spreadsheet
(2) Source Inventory

DRH1197:kpj

Radiation Exposure Calculation Spreadsheet
Attachment 1 (2 pages)

SOURCE NUMBER	TAG NUMBER	LOCATION	PLANT	ACTIVITY	ISOTOPE	HR/YR NEAR SOURCE	DISTANCE FROM SOURCE	AVG RADIATION AT 1 FOOT mRem/yr	RADIATION AT NORMAL DISTANCE mRem/yr
B1186/TN	AX-001-1901	PROD UNDERFLOW	TDA	100Mci	CS-137	1.75	10	3.8	0.0665
B1187/TN	AX-001-1501	PROD RECEIVER	TDA	100Mci	CS-137	1.75	10	2.3	0.0403
B161/TN	LX-001-01102A	PRIMARY SEP LVL	TDA	1000Mci	CS-137	1.00	10	3	0.0300
B182/TN	LX-001-01102B	PRIMARY SEP LVL	TDA	1000Mci	CS-137	1.00	8	1.94	0.0303
B183/TN	LX-001-01102C	PRIMARY SEP LVL	TDA	1000Mci	CS-137	1.00	8	2.1	0.0328
B2352/TN	LT-0001-31901	METHANOL COL FEED VAP/LIQ SEP	TDA	50Mci	CS-137	1.00	3	2.1	0.2333
B2353/TN	LT-0001-35401	DISTILLATE RECEIVER	TDA	50Mci	CS-137	1.00	3	1.7	0.1889
B2520/TN	LX-0001-17502	PUMP TANK	TDA	50Mci	CS-137	1.00	8	1.6	0.0250
B2521/TN	LX-0001-53501	TDA PRODUCT RECEIVER VENT CONDENSER	TDA	20Mci	CS-137	1.00	5	1.1	0.0440
B756/TN	LT-0001-32701	DEHYDRATION COL REBOILER	TDA	100Mci	CS-137	1.00	3	3.6	0.4000
B756/TN	LT-0001-34001	ORTHO TDA COL	TDA	100Mci	CS-137	1.50	3	2.5	0.4167
B757/TN	LT-0001-30401	METHANOL COL	TDA	100Mci	CS-137	1.50	3	2.70	0.4500
B758/TN	LT-0001-33501	CONDENSER STRIPPER REBOILER	TDA	50Mci	CS-137	1.50	3	2.80	0.4867
B759/TN	LT-0001-32901	DEHYDRATION COL THERMOSYPHON REB	TDA	50Mci	CS-137	0.25	3	1.28	0.0356
B760/TN	LT-0001-33301	DEHYDRATION COL REFLUX TANK	TDA	50Mci	CS-137	1.50	3	1.42	0.2367
B761/TN	LT-0001-35101	ORTHO TDA CLEAN-UP REFLUX TANK	TDA	50Mci	CS-137	1.50	3	1.90	0.3167
B809/TN	LX-0001-004101	REACTOR FEED	TDA	50Mci	CS-137	1.73	4	1.52	0.1647
B810/TN	LX-0001-01902	UNDERFLOW RECEIVER	TDA	50Mci	CS-137	1.73	4	1.66	0.1798
B811/TN	LX-0001-01502	PRODUCT RECEIVER	TDA	100Mci	CS-137	2.00	4	3.90	0.4875
B812/TN	LX-0001-09901	SEPERATOR FLUSH TANK	TDA	20Mci	CS-137	1.50	8	1.10	0.0258
B850/TN	LX-0073-37102	CARBONATE REMOVAL COLUMN	TDA	20Mci	CS-137	1.50	4	0.80	0.0656
B851/TN	LX-0073-37101	CARBONATE REMOVAL COLUMN	TDA	10Mci	CS-137	1.50	4	0.70	0.0656
B065/TN	LX-57601B	CONTINUOUS LEVEL	TDI	4000Mci	CS-137	0.50	10	3.20	0.0160
B065/TN	LX-57601B	CONT LEVEL	TDI	4000Mci	CS-137	2.00	10	3.60	0.0720
B066/TN	LX-002-57601	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.45	0.0002
B1804/TN	LX9900-97401	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.56	0.0003
B1805/TN	LX9900-97402	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.44	0.0002
B1806/TN	LX9900-97403	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.56	0.0003
B1807/TN	LX9900-97404	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.56	0.0003
B1808/TN	LX9900-97405	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.66	0.0003
B1809/TN	LX9900-97407	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.52	0.0003
B1810/TN	LX-1400-97408	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.60	0.0003
B1811/TN	LX-1400-97409	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.60	0.0003
B1812/TN	LX-0002-97405	CL2 PIPELINE	TDI	20Mci	CS-137	0.20	20	0.60	0.0003
B2570/TN	LX-0002-67901	LIQ/VAP SEPARATOR	TDI	50Mci	CS-137	0.25	3	1.75	0.0488
B348/TN	LX-002-15602A	PRECON REBOIL	TDI	50Mci	CS-137	0.25	3	1.70	0.0472
B349/TN	LX-002-15602B	PRECON REBOIL	TDI	50Mci	CS-137	0.25	3	2.20	0.0611
B350/TN	LX-002-56302A	EMERG TANK	TDI	50Mci	CS-137	0.50	8	2.80	0.0219
B351/TN	LX-002-56302B	EMERG TANK	TDI	100Mci	CS-137	0.50	14	3.00	0.0077
B351/TN	LX-002-56302B	EMERG TANK	TDI	100Mci	CS-137	1.00	3	1.90	0.2111
B373/TN	LX-10853	PRECON SUMP	TDI	100Mci	CS-137	1.00	3	2.00	0.0400
B430/TN	LX-0002-06001A	CRUDE FLASHER	TDI	200Mci	CS-137	2.00	10	2.70	0.0750
B500/TN	LX-002-09102	INTERM COLUMN	TDI	50Mci	CS-137	0.25	3	2.70	0.0750
B501/TN	LX-002-10202	FINAL COLUMN	TDI	50Mci	CS-137	0.25	3	3.40	0.2040
B623/TN	LX-002-56102	AMMONIA TANK	TDI	100Mci	CS-137	1.50	5	2.20	0.0440
B624/TN	LX-002-03002	DEFOSS COLUMN 2ND FLOOR	TDI	50Mci	CS-137	2.00	10	0.90	0.1440
B665/TN	LX-002-63901	SS VAC PUMP SURGE TK	TDI	20Mci	CS-137	4.00	5	0.90	0.1440
B666/TN	LX-002-63901	DIST VAC PUMP SURGET TANK	TDI	20Mci	CS-137	4.00	5	2.80	0.0880
B669/TN	LX-0002-13802A	CRUDE TANK	TDI	100Mci	CS-137	2.00	10	3.80	0.0720
B669/TN	LX-0002-13802B	CRUDE TANK	TDI	100Mci	CS-137	2.00	10	1.10	0.0440
B813/TN	LX-0002-18801	NASH LIQUID TANK	TDI	20Mci	CS-137	4.00	10	1.20	0.0480
B814/TN	LX-0002-18801	NASH LIQUID TANK	TDI	20Mci	CS-137	4.00	10	2.00	0.0800
B822/TN	LX-0002-08101	CONDENSATE SURGE TANK	TDI	50Mci	CS-137	4.00	10	1.80	0.0180
B823/TN	LX-0002-03601	SOLVENT SEPARATOR	TDI	50Mci	CS-137	4.00	20		

RADIATION EXPOSURE CALCULATION EXPLANATION

Spreadsheet Column	Value
G	hours per year spent in vicinity of source
H	Distance from source when personnel near source
I	Average radiation (average of readings of top, bottom, left, right and behind)mRem/hr at 1 foot from the source
J	Exposure from source per year at approach distance

$$Exposure / yr = I \times (1 / H \times H) \times G$$

Example:

G	H	I	J
HR/YR NEAR SOURCE	DISTANCE FROM SOURCE F.	AVG RADIATION AT 1 FOOT mRem/hr	RADIATION AT NORMAL DISTANCE mRem/yr
1.75	10	3.8	0.0665

$$Exposure/yr=3.8X(1/10X10)X1.75$$

$$Exposure/yr=.0665 \text{ mRem/yr}$$

SOURCE INVENTORY
ATTACHMENT 2 (8 PAGES)
BAYER NEW MARTINSVILLE WV

**SOURCE
NUMBER AND
MANUFACTURER**

MANUFACTURER	TAG NUMBER	LOCATION	MODEL NUMBER	ACTIVITY	ISOTOPE	License Type
001/001/1/GRASEBY	NONE	ENV RESEARCH	AVM	15Mci	NI-63	Specific
09971/KR	WIT-040-058.1	Scale/040	7062	25Mci	CS-137	Specific
09972/KR	WIT-040-058.2	SCALE/040	7062	25Mci	CS-137	Specific
09973/KR	WIT-040-062	SCALE/040	7062	25Mci	CS-137	Specific
B1222/TN	LX8369	#2 REACTOR 5600-504.2	5200	50Mci	CS-137	Specific
B1223/TN	LX8370	#1 REACTOR 5600-504.1	5200	50Mci	CS-137	Specific
S94J1405/KR	AE-041-042	PASTE THICKENER	7062BP	100Mci	CS-137	Specific
20517/KR	LT-040-194	ANILINE SLUDGE Tank	7062P	100Mci	CS-137	Specific
2062-10-86/BT	LI-025-54401	PHOSGENE SOLN TANK	LB323-2	20Mci	CO-60	Specific
23047/KR	AE-041-128.2	WASHING FILTER CAKE RECYCLE DENSITY	7062BP	100Mci	CS-137	Specific
23386/KR	AX-040-293	FECL DENSITY	7062BP	100Mci	CS-137	Specific
24224/KR	AX-041-067	FELLUVA PUMP DISCHARGE	7062BP	100Mci	CS-137	Specific
28/GRASEBY	NONE	ENV RESEARCH	AVM	15Mci	NI-63	Specific

**SOURCE
NUMBER AND
MANUFACTURER**

SOURCE NUMBER AND MANUFACTURER	TAG NUMBER	LOCATION	MODEL NUMBER	ACTIVITY	ISOTOPE	License Type
S593L1515/KR	Lx-1111111	ECD SCREW CONVEYOR	7062B	50Mci	CS-137	Specific
80168/OM	LX-041-826	E. B/M BAGGER	SH-100	50Mci	CS-137	Specific
71284/OM	LX-041-741	E. B/M BAGGER	SH-100	50Mci	CS-137	Specific
71285/OM	LX-041-727	W. B/M BAGGER	SH-100	50Mci	CS-137	Specific
71287/OM	LX-041-744	W. B/M BAGGER	SH-100	50Mci	CS-137	Specific
71289/OM	LX-041-743	W. J/M BAGGER	SH-100	50Mci	CS-137	Specific
73123/OM	LX-041-742	E. J/M BAGGER	SH-100	50Mci	CS-137	Specific
8065/TN	Lx-576018	CONTInous. LEVEL	5208	4000Mci	CS-137	Specific
B066/TN	LX-002-57601	CONT. LEVEL	5208	4000Mci	CS-137	Specific
B102/TN	LIA-025-54402A	PHOSGENE SOLN TANK	5207	2000Mci	CS-137	Specific
B103/TN	LIA-025-54402B	PHOSGENE SOLN TANK	5207	2000Mci	CS-137	Specific
B1186/TN	AX-001-1901	PROD. UNDERFLOW	5201	100Mci	CS-137	Specific
B1187/TN	AX-001-1501	PROD. RECEIVER	5201	100Mci	CS-137	Specific
B1385/TN	LXL041-329	B/M MILL FEED SILO	5200	100Mci	CS-137	Specific
B1386/TN	LXL041-333	B/M DISCHARGE HOPPER	5200	100Mci	CS-137	Specific
B1387/TN	LXL041-340-2A	VAC PRESS	5200	100Mci	CS-137	Specific
B1388/TN	LXL041-340-2B	VAC PRESS	5200	100Mci	CS-137	Specific
B1389/TN	LXL041-343.2	B/M MILL BAG SILO	5200	100Mci	CS-137	Specific

**SOURCE
NUMBER AND
MANUFACTURER**

MANUFACTURER	TAG NUMBER	LOCATION	MODEL NUMBER	ACTIVITY	ISOTOPE	License Type
B149/TN	LE-0016-61601	INTERM. FLASHER	5196	10Mci	CS-137	Specific
B155/TN	LX-024-11-2A	#2 Digester	5207	2000Mci	CS-137	Specific
B156/TN	LX-024-11-2B	#2 Digester	5207	2000Mci	CS-137	Specific
B1604/TN	LX9900-97401	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B1605/TN	LX9900-97402	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B914/TN	LT-002055501	(EVACUATION TANK LEVEL) area 2 shop	5205	100Mci	CS-137	Specific
B1606/TN	LX9900-97403	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B1607/TN	LX9900-97404	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B1608/TN	LX9900-97406	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B1609/TN	LX9900-97407	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B161/TN	LX-001-01102A	PRIMARY SEP LVL	5207	1000Mci	CS-137	Specific
B1610/TN	LX-1403-97408	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B1611/TN	LX-1400-97409	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B1612/TN	LX-0002-97405	CL2 PIPELINE	5205	20Mci	CS-137	Specific
B162/TN	LX-001-01102B	PRIMARY SEP LVL	5207	1000Mci	CS-137	Specific
B163/TN	LX-001-01102C	PRIMARY SEP LVL	5207	1000Mci	CS-137	Specific
B1632/TN	LXLS560004801	PRE-DISSOLVER	5200	50Mci	CS-137	Specific
B1668/TN	LE-34001	MILLING HOPPERS	5200	100Mci	CS-137	Specific
B1669/TN	LE-34002	MILLING HOPPERS	5200	100Mci	CS-137	Specific

SOURCE**NUMBER AND****MANUFACTURER**

MANUFACTURER	TAG NUMBER	LOCATION	MODEL NUMBER	ACTIVITY	ISOTOPE	License Type
B1670/TN	LE-34301	MILLING HOPPERS	5200	100Mci	CS-137	Specific
B1671/TN	LE-32900	MILLING HOPPERS	5200	100Mci	CS-137	Specific
B1672/TN	LE-34301	MILLING HOPPERS	5200	100Mci	CS-137	Specific
B1673/TN	LE-34302	MILLING HOPPERS	5200	100Mci	CS-137	Specific
B1674/TN	LE-33300	MILLING HOPPERS	5200	100Mci	CS-137	Specific
B2057/TN	LSH-040-140-2	BMU HEADER	5200	20Mci	CS-137	Specific
B2086/TN	LX-0025-02802	PHOSGENE ABSORBER	5200	50Mci	CS-137	Specific
B2352/TN	LT-0001-31901	METHANOL COL FEED VAP/LIQ SEP.	5200	50Mci	CS-137	Specific
B2353/TN	LT-0001-35401	DISTILLATE RECEIVER	5200	50Mci	CS-137	Specific
B2420/TN	LX-11340	PHOSGENE ABSORBER	5200	50Mci	CS-137	Specific
B291/TN	LA-500-00702	COCI LVL	5205	100Mci	CS-137	Specific
B348/TN	LX-002-15602A	PRECON REBOIL	5205	50Mci	CS-137	Specific
B349/TN	LX-002-15602B	PRECON REBOIL	5205	50Mci	CS-137	Specific
B350/TN	LX-002-56302A	EMERG TANK	5205	50Mci	CS-137	Specific
B351/TN	LX-002-56302B	EMERG TANK	5205	100Mci	CS-137	Specific
B373/TN	LX-10853	PRECON SUMP	5205	100Mci	CS-137	Specific
B441/TN	LX-019-54101	Purification Column	5205	10Mci	CS-137	Specific
B442/TN	LX-019-03001	Secondary Flasher	5205	50Mci	CS-137	Specific
B491/TN	LE-041-1327A	FINES SILO	5205	100Mci	CS-137	Specific

**SOURCE
NUMBER AND**

MANUFACTURER	TAG NUMBER	LOCATION	MODEL NUMBER	ACTIVITY	ISOTOPE	License Type
B492/TN	LE-041-1327B	FINES SILO	5205	100Mci	CS-137	Specific
B500/TN	LX-002-09102	INTERM. COLUMN	5205	50Mci	CS-137	Specific
B501/TN	LX-002-10202	FINAL COLUMN	5205	50Mci	CS-137	Specific
B598/TN	AE-025-4100-801-01	MCB DENSITY	5201	100Mci	CS-137	Specific
B599/TN	AE-500-00701	MCB DENSITY	5201	100Mci	CS-137	Specific
B623/TN	LX-002-56102	AMMONIA TANK	5205	100Mci	CS-137	Specific
B624/TN	LX-002-03002	DEFOSS COLUMN 2ND FLOOR	5205	50Mci	CS-137	Specific
B655/TN	LX-002-63901	SS VAC PUMP SURGE TK	5205	20Mci	CS-137	Specific
B656/TN	LX-002-63901	DIST VAC PUMP SURGET TANK	5205	20Mci	CS-137	Specific
B673/TN	LX-025-02801	PHOSGENE ABSORBER	5207	50Mci	CS-137	Specific
B689/TN	LX-0002-13802A	CRUDE TANK	5205	100Mci	CS-137	Specific
B690/TN	LX-0002-13802B	CRUDE TANK	5205	100Mci	CS-137	Specific
B722/TN	LX-0500-03601	PHOSGENE ABSORBER	5205	50Mci	CS-137	Specific
B755/TN	LT-0001-32701	DEHYDRATION COL. REBOILER	5205	100Mci	CS-137	Specific
B756/TN	LT-0001-34001	ORTHO TDA COL.	5205	100Mci	CS-137	Specific
B757/TN	LT-0001-30401	METHANOL COL.	5205	100Mci	CS-137	Specific
B758/TN	LT-0001-33501	CONDENSER STRIPPER REBOILER	5205	50Mci	CS-137	Specific

SOURCE**NUMBER AND****MANUFACTURER**

MANUFACTURER	TAG NUMBER	LOCATION	MODEL NUMBER	ACTIVITY	ISOTOPE	License Type
B759/TN	LT-0001-32601	DEHYDRATION COL. THERMOSYPHON REB.	5205	50Mci	CS-137	Specific
B760/TN	LT-0001-33301	DEHYDRATION COL. REFLUX TANK	5205	50Mci	CS-137	Specific
B781/TN	LT-0001-35101	ORTHO TDA CLEAN-UP REFLUX TANK	5205	50Mci	CS-137	Specific
B802/TN	LA-500-00701	COCI LVL	5200	100Mci	CS-137	Specific
B803/TN	LA-043-01	#1 CONCENTRATOR SEPERATOR	5200	100Mci	CS-137	Specific
F2019/HP	1908A01413	HP5730A	5730	15Mci	NI-63	Specific
F6815/HP	NONE	H-P 5890 Research lab 210	HP5890	15Mci	NI-63	Specific
H3733/HP	NONE	HP 5793A	HP5703A	15Mci	NI-63	Specific
m1058/HP	2950a27424	HP 5790	HP5790	15Mci	NI-63	Specific
M2519/HP	2443A03377	HP 5790	HP5790	15Mci	NI-63	Specific
M432/TN	NONE	METALURGY ONLY.	TN 9277	44Mci	Fe-55	General
B254/TN	LX-024-011.1B	DIGESTER 1	5207	2000Mci	CS-137	Specific
B255/TN	LX-024-011.1A	DIGESTER 1	5207	2000Mci	CS-137	Specific
B813/TN	LX-0002-16601	NASH LIQUID TANK	5205	20Mci	CS-137	Specific
B814/TN	LX-0002-16601	NASH LIQUID TANK	5205	20Mci	CS-137	Specific
B2520/TN	LX-0001-17502	PUMP TANK	5200	50Mci	CS-137	Specific
B2521/TN	LX-0001-5J501	TDA PRODUCT RECEIVER VENT CONDENSER	5200	20Mci	CS-137	Specific

**SOURCE
NUMBER AND
MANUFACTURER**

SOURCE NUMBER AND MANUFACTURER	TAG NUMBER	LOCATION	MODEL NUMBER	ACTIVITY	ISOTOPE	License Type
B809/TN	LX-0001-004101	REACTOR FEED	5205	50Mci	CS-137	Specific
B810/TN	LX-0001-01902	UNDERFLOW RECEIVER	5205	50Mci	CS-137	Specific
B811/TN	LX-0001-01502	PRODUCT RECEIVER	5205	100Mci	CS-137	Specific
B812/TN	LX-0001-09901	SEPERATOR FLUSH TANK	5205	20Mci	CS-137	Specific
B823/TN	LX-0002-03801	SOLVENT SEPARATOR	5205	50Mci	CS-137	Specific
B822/TN	LX-0002-06101	CONDENSATE SURGE TANK	5205	50Mci	CS-137	Specific
B430/TN	LX-0002-06001A	CRUDE FLASHER	5206	200Mci	CS-137	Specific
B2570/TN	LX-0002-67901	LIQ/VAP SEPARATOR	5200	50Mci	CS-137	Specific
M432A/TN	NONE	METALURGY ANLY.	TN 9277	5Mci	Cd-109	General
B306/TN	LX-0026-64503A	X-REACTOR	5207	2000Mci	CS-137	Specific
B307/TN	LX-0026-64503B	X-REACTOR	5207	2000Mci	CS-137	Specific
B308/TN	LX-0026-64503C	X-REACTOR	5207	2000Mci	CS-137	Specific
B305/TN	LX-0024-514-01	REACTOR #2	5207	2000Mci	CS-137	Specific
B316/TN	LX-0024-513.01	No. 1 Condensate Reactor	5207	2000Mci	CS-137	Specific
B850/TN	LX-0073-37102	CARBONATE REMOVAL COLUMN	5205	20Mci	CS-137	Specific
B851/TN	LX-0073-37101	CARBONATE REMOVAL COLUMN	5205	10Mci	CS-137	Specific
B1815/TN	LX-500-50001	LIQUID COLLECTION POT	2652	10Mci	CS-137	Specific

**SOURCE
NUMBER AND
MANUFACTURER**

<i>MANUFACTURER</i>	<i>TAG NUMBER</i>	<i>LOCATION</i>	<i>MODEL NUMBER</i>	<i>ACTIVITY</i>	<i>ISOTOPE</i>	<i>License Type</i>
B862/TN	LX-5300-57101	LIQUID COLLECTION POT	5205	100Mci	CS-137	Specific
B897/TN		Const Whse	5205	50Mci	CS-137	Specific
B898/TN		Const Whse	5205	20Mci	CS-137	Specific
B2804/TN		Const Whse	5200	10Mci	CS-137	Specific
B2805/TN		Const Whse	5200	10Mci	CS-137	Specific
K1288/HP	NONE		HP5890	15Mci	NI-63	Specific
K1507/HP	NONE	H-P 5890	HP5890	15Mci	NI-63	Specific

KR=KAY RAY TN=TEXAS NUCLEAR OM=OHMART BT=BERTHOLD HP=HEWLETT PACKARD