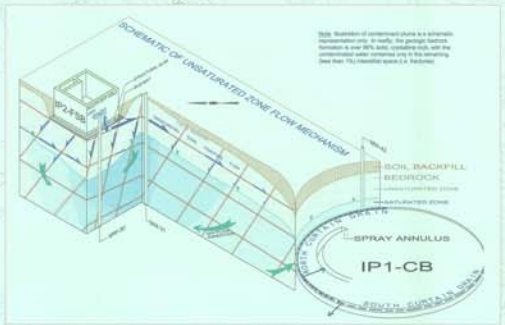
BOUNDING UNIT 2 ACTIVITY ISOPLETHS[1]

Well ID	Date Sample Collected	Bounding Tritium Concentration pCi/L	Well ID	Date Sample Collected	Bounding Tritium Concentration pCi/L
U2	8/13/06	ND	MW-54-37	7/31/07	660
MW-30-80	9/13/07	267,000	MW-54-48	8/3/07	1,100
MW-30-94	8/13/06	13,900	MW-54-72	8/3/07	1,100
MW-31-49	8/7/07	17,800	MW-54-144	7/31/07	1,200
MW-31-63	8/7/07	40,600	MW-54-172	7/31/07	1,200
MW-31-85	9/13/07	4,300	MW-54-192	7/31/07	1,200
MW-32-90	8/28/07	29,100	MW-55-24	8/28/07	1,200
MW-32-95	11/16/07	21,200	MW-55-39	11/9/06	8,040
MW-32-140	11/16/07	11,300	MW-55-54	11/9/06	13,100
MW-32-189	11/9/07	10,500	MW-56-53	11/6/07	760
MW-32-217	11/9/07	7,300	MW-56-63	8/22/07	1,200
MW-33	7/2/96	284,000	MW-57-11	8/22/07	4,400
MW-34	4/7/06	276,000	MW-57-26	8/22/07	1,000
MW-35	5/2/06	116,000	MW-57-46	8/24/06	4,200
MW-36-24	5/2/06	34,200	MW-58-28	7/31/07	600
MW-36-41	5/4/06	55,200	MW-58-46	7/30/07	1,100
MW-36-52	5/24/06	28,800	MW-59-32	8/21/07	487
MW-37-32	5/21/06	34,900	MW-59-48	8/21/07	754
MW-37-50	5/24/06	20,100	MW-59-68	7/31/07	819
MW-37-66	5/12/06	11,000	MW-59-80	8/21/07	716
MW-37-87	8/2/06	44,800	MW-60-53	7/27/07	560
MW-38	5/23/06	3,830	MW-60-70	7/27/07	1,400
MW-39-87	5/22/07	477	MW-60-128	7/27/07	560
MW-39-94	5/22/07	591	MW-60-168	7/27/07	460
MW-39-152	5/22/07	899	MW-60-178	7/27/07	460
MW-39-236	5/22/07	251	MW-61	No Sample	
MW-40-48	5/22/07	247	MW-62-16	7/26/07	556
MW-36-166	5/22/07	240	MW-62-37	8/1/07	287
MW-40-24	7/3/07	NC	MW-62-63	8/1/07	560
MW-40-46	7/23/07	NC	MW-62-71	8/10/07	502
MW-40-60	7/23/07	NC	MW-62-92	8/10/07	560
MW-40-100	8/6/07	176	MW-62-128	7/26/07	336
MW-40-220	8/6/07	197	MW-62-162	8/10/07	647
MW-40-260	7/3/07	NC	MW-63-16	8/10/07	560
MW-41-13	No Sample		MW-63-34	7/30/07	280
MW-41-40	8/10/07	3,810	MW-63-50	8/10/07	1,100
MW-41-63	8/12/06	731	MW-63-65	8/10/07	281
MW-42-48	4/7/06	3,960	MW-63-112	8/10/07	434
MW-42-78	5/24/06	1,280	MW-63-121	8/10/07	511
MW-42-89	4/12/06	346	MW-63-162	8/10/07	560
MW-43-40	4/12/06	260	MW-63-174	8/10/07	560
MW-44-47	7/20/06	662	MW-64-16	7/30/07	1,100
MW-44-100	8/4/06	781	MW-64-80	7/30/07	1,100
MW-45-42	8/13/06	4,190	MW-66-21	7/30/07	3,810
MW-45-61	5/25/06	1,710	MW-66-36	7/30/07	8,100
MW-46	8/14/07	3,430	MW-66	No Sample	
MW-47-86	8/13/06	780	MW-67-38	8/31/2007	480
MW-47-80	8/10/07	3,210	MW-67-108	8/31/2007	1,660
MW-48-23	5/2/06	760	MW-67-175	8/31/2007	1,100
MW-48-37	8/5/06	573	MW-67-219	8/31/2007	1,100
MW-48-26	5/2/06	18,440	MW-67-276	8/31/2007	1,100
MW-48-42	5/2/06	11,500	MW-67-323	8/31/2007	717
MW-48-69	8/1/06	3,750	MW-67-360	8/31/2007	560
MW-49-40	5/2/06	8,730	MW-68	8/9/06	1,100
MW-50-66	5/19/06	12,800	MW-105	8/9/06	NC
MW-51-40	7/3/07	NC	MW-107	8/9/06	NC
MW-51-78	7/3/07	NC	MW-108	8/13/06	776
MW-51-102	7/3/07	NC	MW-109	8/13/06	1,100
MW-51-136	7/3/07	NC	MW-110	8/9/06	560
MW-51-156	7/3/07	NC	MW-111	8/9/06	560
MW-51-186	8/30/07	181	RW-1	10/31/96	207,000
MW-52-14	8/6/07	NC	GZ-1-032	2/7/07	4,300
MW-52-18	8/6/07	NC	GZ-1	2/7/07	NC
MW-52-48	8/6/07	NC	GZ-2	1/26/06	NC
MW-52-68	8/6/07	NC	GZ-3	1/26/06	NC
MW-52-114	8/6/07	NC	GZ-4	1/26/06	647
MW-52-148	8/6/07	NC	GZ-5	8/22/06	712
MW-52-162	8/6/07	NC	GZ-5-40	No Sample	
MW-52-187	8/24/07	244	GZ-6	1/26/06	1,360
MW-53-40	8/23/07	13,000	GZ-7	1/8/06	2,400
MW-53-120	8/23/07	8,810			



UNIT 1

UNIT 2

UNIT 3

HUDSON RIVER

LEGEND

Probable Legacy Release Locations

- Terminated Connection To Storm Drain
- Footing / Storm Drain Exfiltration
- Inter Structure Joint / Mud Mat
- Containment Spray Sump Pipe Trench
- Unit 1 West Fuel Pool
- Unit 2 Fuel Pool

MW-30 — Boring / Monitoring Installation Designation

Boring / Monitoring Installation

Depth-Specific Data

Activity of H3 (pCi/L x1000) for each screened interval

Multiple Screened Intervals w/ Depth

Screened in Soil

Screened in Bedrock

Average Total Response for each screened interval (measured between 10/1/2006 and 11/30/2006)

Groundwater elevation at time of low river tide for each screened interval. 8/1/2007

Activity Data[1]

Bar Graphs; Bounding H3, pCi/L	Isopleths; Bounding H3, pCi/L
No Depth-Specific Samples	5,000 - 10,000
Not Detected (ND)	10,000 - 50,000
ND - 1,000	50,000 - 100,000
1,000 - 5,000	100,000 - 250,000
5,000 - 10,000	> 250,000
10,000 - 50,000	
50,000 - 100,000	
100,000 - 250,000	
> 250,000	

Note: Illustration of contaminant plume is a schematic representation only. In reality, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).

H3 data in pCi/L x1,000 (pCi/L)

Groundwater Elevation Contours

- Ambient "Watertable" Contours 6/1/2007 (10' Interval)
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Note:
Groundwater contours developed from limited data available on 8/1/2007. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

Data Notes:
1. H3 bounding isopleths / data represent upper bound values measured over both depth and time (available results for sample dates through 8/23/2007). As such, the "plume" is an overestimate of contaminant levels actually existing on site at any time.
2. Tritium activity as high as 601,000 pCi/L, as measured on 11/23/2005 in MW-30 open borehole prior to multi-level well completion.
3. Tritium activity as high as 64,400 pCi/L, as measured on 8/27/2006 in MW-32 open borehole prior to multi-level well completion.
4. This upper bound Tritium concentration was obtained from the RW-1 open borehole during a pumping test.
5. Tritium activity as high as 337 pCi/L, as measured on 7/19/2006 in MW-52 open borehole prior to multi-level well completion.
6. Tritium activity as high as 18,000 pCi/L, as measured on 8/25/2006 in MW-58 open borehole prior to multi-level well completion.

General Notes:
1. Base map was developed from an untitled electronic file provided by Badey & Watson Surveying and Engineering, P.C., Dated 2/3/06. CAD file name: "GZA.dwg".
2. Additional legend on Figure 1.3.

Plant North

50 25 0 50 100 150 Feet

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

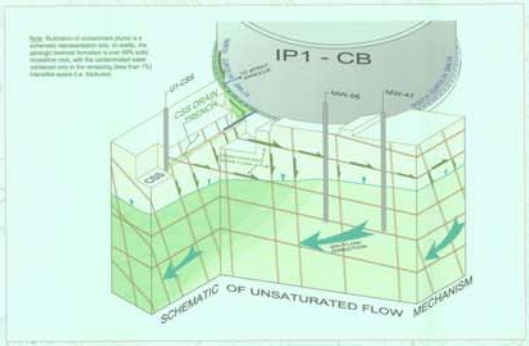
BOUNDING UNIT 2 ACTIVITY ISOPLETHS[1]

Proj. Mgr.: MJB Designed By: MJB Reviewed By: MJB Operator: DAS	Dwg. Date: 1-4-2008 Job No.: 41.0017869.10	Figure No.: 8.1

D-15

BOUNDING UNIT 1 ACTIVITY ISOPLETHS[1]

Well ID	Date Sample Collected	Bounding Strontium-90 Concentration pCi/L	Well ID	Date Sample Collected	Bounding Strontium-90 Concentration pCi/L
4	8/13/96	ND	MW-54-37	5/3/07	0.3
MW-30-60	11/29/96	3	MW-54-56	5/3/07	2
MW-30-94	11/7/96	ND	MW-54-123	5/3/07	21
MW-30-49	8/3/07	ND	MW-54-146	7/31/07	19
MW-31-63	8/2/07	ND	MW-54-173	8/3/07	22
MW-31-82	8/3/07	ND	MW-54-180	8/3/07	19
MW-32-80	8/3/07	ND	MW-55-34	8/3/07	20
MW-32-96	8/1/07	ND	MW-55-55	11/9/06	46
MW-32-146	8/1/07	ND	MW-55-64	11/9/06	33
MW-33-87	8/1/07	ND	MW-56-83	8/16/07	14
MW-33-187	8/1/07	ND	MW-56-93	8/6/96	8
MW-34	8/2/96	1	MW-57-11	8/22/07	46
MW-34	8/2/07	ND	MW-57-20	8/22/07	3
MW-35	8/2/07	ND	MW-57-46	8/22/07	18
MW-38-34	4/5/96	1	MW-58-28	7/31/07	1
MW-38-41	4/5/96	3	MW-59-60	7/31/07	ND
MW-39-32	7/24/96	6	MW-59-75	7/31/07	ND
MW-39-93	8/1/07	19	MW-59-90	7/31/07	ND
MW-39-102	8/1/07	18	MW-59-98	7/31/07	ND
MW-39-140	8/2/07	24	MW-60-35	7/27/07	ND
MW-39-167	8/1/07	21	MW-60-53	7/27/07	ND
MW-39	8/2/96	ND	MW-60-73	7/27/07	ND
MW-39-61	8/1/07	4	MW-60-136	7/27/07	ND
MW-39-64	8/2/07	1	MW-60-154	7/27/07	ND
MW-39-106	8/2/07	1	MW-60-176	7/27/07	ND
MW-39-120	8/2/07	ND	MW-61	No Sample	
MW-39-180	8/1/07	ND	MW-62-18	7/26/07	ND
MW-40-24	8/2/07	1	MW-62-37	7/26/07	ND
MW-40-34	8/5/07	ND	MW-62-55	7/26/07	ND
MW-40-46	8/5/07	ND	MW-62-71	7/26/07	ND
MW-40-61	8/5/07	ND	MW-62-92	7/26/07	ND
MW-40-102	8/5/07	1	MW-62-136	8/15/07	1
MW-40-122	8/5/07	ND	MW-62-160	7/26/07	ND
MW-40-152	8/5/07	ND	MW-63-19	7/30/07	ND
MW-41-3	No Sample		MW-63-25	7/30/07	ND
MW-41-46	7/14/96	7	MW-63-50	7/25/07	ND
MW-41-61	8/2/07	1	MW-63-83	7/25/07	ND
MW-42-40	4/7/96	11	MW-63-112	7/25/07	ND
MW-42-76	8/15/07	ND	MW-63-121	7/25/07	ND
MW-43-28	7/25/96	3	MW-63-163	7/25/07	ND
MW-43-42	8/13/96	1	MW-63-174	7/25/07	ND
MW-44-67	7/24/96	8	MW-65-48	1/8/07	ND
MW-44-102	8/14/07	ND	MW-65-80	1/4/07	ND
MW-45-42	4/4/96	1	MW-66-27	8/30/07	1
MW-45-61	11/21/96	1	MW-66-36	7/30/07	8
MW-45-1	4/12/96	6	MW-66	No Sample	
MW-47-36	4/13/96	2	MW-67-36	8/31/2007	18
MW-47-60	8/1/07	1	MW-67-156	8/31/2007	1
MW-48-3	2/97	ND	MW-67-179	8/31/2007	ND
MW-48-76	8/15/07	ND	MW-67-219	8/31/2007	ND
MW-49-2	3/22/96	18	MW-67-276	8/31/2007	ND
MW-49-42	4/4/96	25	MW-67-322	8/31/2007	ND
MW-49-63	8/6/07	20	MW-67-340	8/31/2007	ND
MW-50-1	8/13/96	19	MW-70	8/6/96	ND
MW-50-56	2/97	31	MW-106	8/6/96	ND
MW-51-46	1/97	ND	MW-107	8/6/96	ND
MW-51-73	1/97	ND	MW-108	8/13/96	ND
MW-51-116	1/97	ND	MW-109	8/13/96	ND
MW-51-163	1/97	ND	MW-110	9/11/96	2
MW-51-1	4/6/96	ND	MW-111	11/13/96	ND
MW-52-1	8/6/07	ND	U1-CSS	8/6/07	28
MW-52-14	8/6/07	ND	U2-1	8/22/96	ND
MW-52-48	8/6/07	ND	U2-3	8/22/96	1
MW-52-64	8/6/07	ND	U2-5	8/22/96	ND
MW-52-82	8/6/07	ND	U2-40	8/22/96	ND
MW-53-16	8/6/07	ND	U3-46	No Sample	
MW-53-34	8/6/07	ND	U3-1	8/8/96	1
MW-53-42	8/30/96	8	U3-72	8/8/96	1
MW-53-72	8/6/07	57			



LEGEND

Probable Legacy Release Locations

- Terminated Connection To Storm Drain
- Footing / Storm Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench
- Unit 1 West Fuel Pool
- Unit 2 Fuel Pool
- Boring / Monitoring Installation Designation
- Boring / Monitoring Installation

Depth-Specific Data

Activity of Sr90 (pCi/L) for each screened interval

Multiple Screened Intervals w/ Depth

Screened in Soil

Screened in Bedrock

Average Tidal Response for each screened interval (measured between 10/1/06 and 11/30/06).

Groundwater elevation at time of low river tide for each screened interval, 8/1/2007.

Activity Data[1]

Bar Graphs; Bounding Sr-90, pCi/L	Isopleths; Bounding Sr-90, pCi/L
No Depth-Specific Samples	2 - 4
Not Detected (ND)	4 - 8
ND - 1.0	8 - 25
1.0 - 2.0	25 - 75
2.0 - 4.0	> 75
4.0 - 8.0	
8.0 - 25	
25 - 75	
> 75	

Note: Illustration of contaminant plume is a schematic representation only. In reality, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).

Groundwater Elevation Contours

- Ambient "Watertable" Contours 6/1/2007 (10' Interval)
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Note:
Groundwater contours developed from limited data available on 6/1/2007. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

Data Notes:
1. Sr-90 "bounding isopleths" / data represent upper bound values measured over both depth and time (available results for sample dates through 8/29/2007). As such, the "plume" is an overestimate of contaminant levels actually existing on-site at any time.
2. Sr-90 activity at MW-111 and MW-50 may be due to deposition of residual Sr-90 from backfill used in the Transformer Yard.
3. Sr-90 only detected in MW-30 during pumping test of RW-1 on 11/29/06.
4. A Sr-90 value of 0.9 was measured on 5/24/2006 in MW-31 open borehole.
5. Three discrete isopleths have been drawn around MW-39, 41, and 43 given measured concentrations greater than 3 pCi/L. It is expected that similar concentrations exist at other locations along the legacy piping alignment in addition to the locations shown.
6. The low Sr-90 concentrations measured in these wells are consistent with that expected due to residual levels remaining as the legacy plume has attenuated over time.

General Notes:
1. Base map was developed from an untitled electronic file provided by Badey & Watson Surveying and Engineering, P.C., Dated 2/3/06; CAD file name : "GZA.dwg".
2. Additional legend on Figure 1.3.

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BOUNDING UNIT 1
ACTIVITY ISOPLETHS[1]

Proj. Mgr.: MJB	Designed By: MJB	Reviewed By: MJB	Operator: GAS	Dwg. Date: 1-4-2008	Job No.: 41.0017869.10	Figure No.: 8.2