ATTACHMENT 11

NYS DEC Air Permit Determination Letter

J. Trad

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, Room 287
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-9280 FAX: (518) 457-7743

John P. Cahill
Commissioner

OCT 0 8 1998

Mr. Robert Bailey
Project Manager
Claremont Superfund Site
501 Winding Road
Old Bethpage, New York 11804

Dear Mr. Bailey:

RE: Claremont Polychemical Site ID No. 1-30-015
Old Bethpage, Nassau County, New York
Radian Project No. 006044-0560
SPDES and Air Permit Requirements

Please find enclosed a copy of the current effluent criteria developed by the New York State Department of Environmental Conservation (NYSDEC), Division of Water for the Claremont Polychemical site. These effluent limitations and monitoring requirements began January 1, 1998 and will last until December 31, 2002. These criteria meet the substantive requirements of a SPDES permit per 6 NYCRR Part 375-1.7. As indicated in the January 2, 1998 letter from Mr. Eaton, the Bureau of Hazardous Site Control and the Regional Water Engineer (addresses on page 2 of 2 of enclosure) must receive information as specified in the letter and the attached criteria.

As Mr. Caratura indicated via his August 17, 1998 letter to Mr. Trad, an air permit may not be necessary under CERCLA. Specifically, under 6NYCRR Part 375-1.7, no permit is required when the substantive compliance is achieved as indicated by the NYSDEC approval of the workplan. Based on the review of the information pertaining to the treatment system, Volatile Organic Chemical (VOC) air emissions from the treatment system should be negligible, therefore, substantive requirements of an air permit would be achieved and no air permit would be required.

If you have any concerns regarding this matter, please call Mr. Jeff Trad at (518) 457-9285.

Sincerely,

Robert C. Knizek

Robert C. Knizek, P.E.
Chief, Eastern Field Services Section
Bureau of Construction Services
Division of Environmental Remediation

cc: Mr. Kucera - USACOE
Ms. Jon - USEPA

ATTACHMENT 12

USEPA Letter re: Water Reinjection Permit

J-ISO SHTFS
AYZ

R4 44 PROJECTS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

RECEIVED
SEP 03 1998

Mr, 2 * iQOA

Mr. Bob Bailey
Radian International, LLC
Project Manager
for the Claremont Superfund Site
501 Winding Road
Old Bethpage, New York 11804

Dear Mr. Bailey,

This letter is in response to Mr. James Caratura's letter dated August 18, 1998, in which he requested an explanation of EPA's statutory authority regarding the need to obtain a groundwater reinjection permit from governmental authorities for the reinjection of treated groundwater as part of the response actions to be performed at the Claremont Polychemical Superfund Site.

Section 121(e) of the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9621 (e) states that:

> No Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section.

Therefore, as a matter of law, it is not necessary to obtain permits when performing a response action that is entirely on-site, which is the case at the Claremont Site. Nevertheless, EPA's policy is to fulfill the substantive requirements of such permits. For example, Radian is required to provide technical drawings to local building departments, to meet pre-treatment standards prior to discharges into local publicly-owned treatment works, and to meet effluent limitations prior to discharges into groundwater or surface water.

If you need any further information from EPA, please contact Ms. Maria Jon, of my staff, at (212) 637-3967.

Sincerely yours,

Doug Garbarini, Chief
Eastern New York Remediation Section

cc: James Caratura, Radian International LLC
Mark Kucera, USACOE

ATTACHMENT 13

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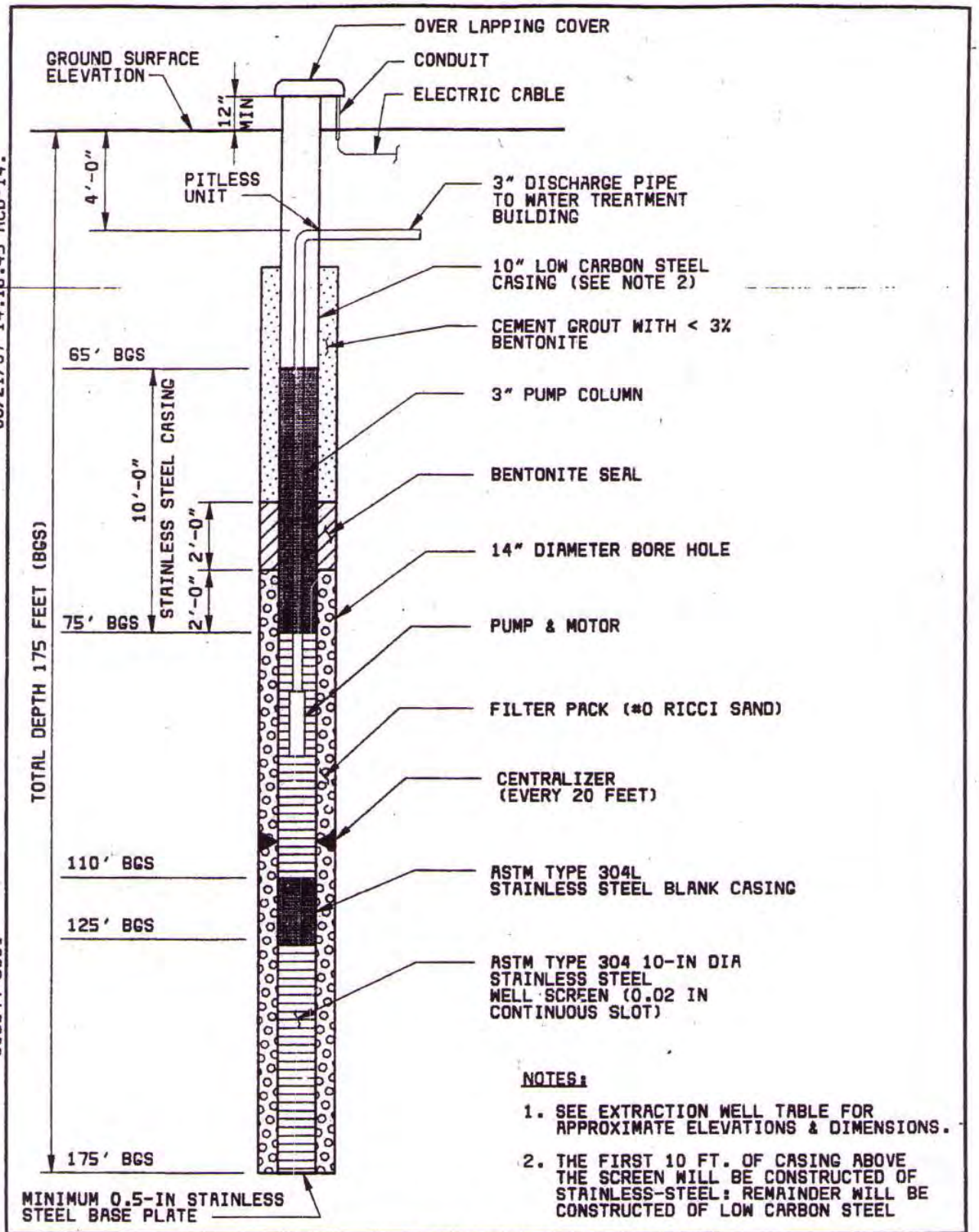
ATTACHMENT 14

Extraction Well, Injection Well, and Infiltration Gallery

Construction Logs

Figure	Doc. Description
Data sheet	**Well construction data**
3-2A	**Ext-1 Construction**
3-2B	**Ext-2 Construction**
3-2C	**Ext-3 Construction**
3-2D	**IW-1 Construction**
3-2E	IW-2 Construction
3-2-F	IW-3 Construction
3-2-G	IW-4 Construction
C-2	**IG-1, IG-3 'as-built' features**
C-3	**IG-1, IG-3 'as-built' features**



NOTES:

1. SEE EXTRACTION WELL TABLE FOR APPROXIMATE ELEVATIONS & DIMENSIONS.
2. THE FIRST 10 FT. OF CASING ABOVE THE SCREEN WILL BE CONSTRUCTED OF STAINLESS-STEEL; REMAINDER WILL BE CONSTRUCTED OF LOW CARBON STEEL

RADIAN INTERNATIONAL

"EX-1" EXTRACTION WELL CONSTRUCTION

FIGURE 3-2A

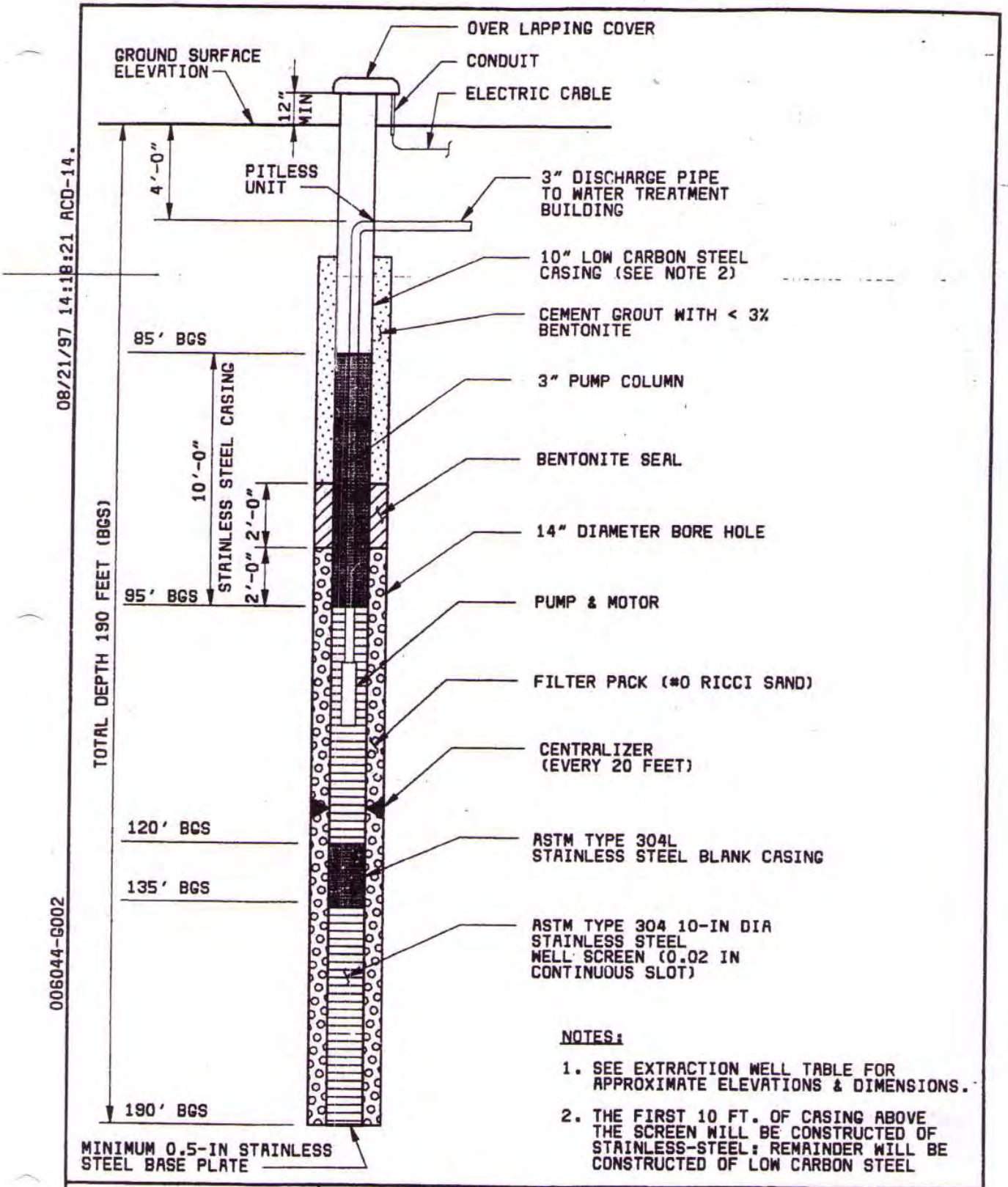
CLAREMONT POLYCHEMICAL | PROJECT NUMBER: 006044

SCALE: N.T.S. | DATE: 08/18/97 | DELIVERY:

08/21/97 14:16:45 ACD-14.

006044-G001

CBA003



08/21/97 14:18:21 ACD-14.

006044-G002

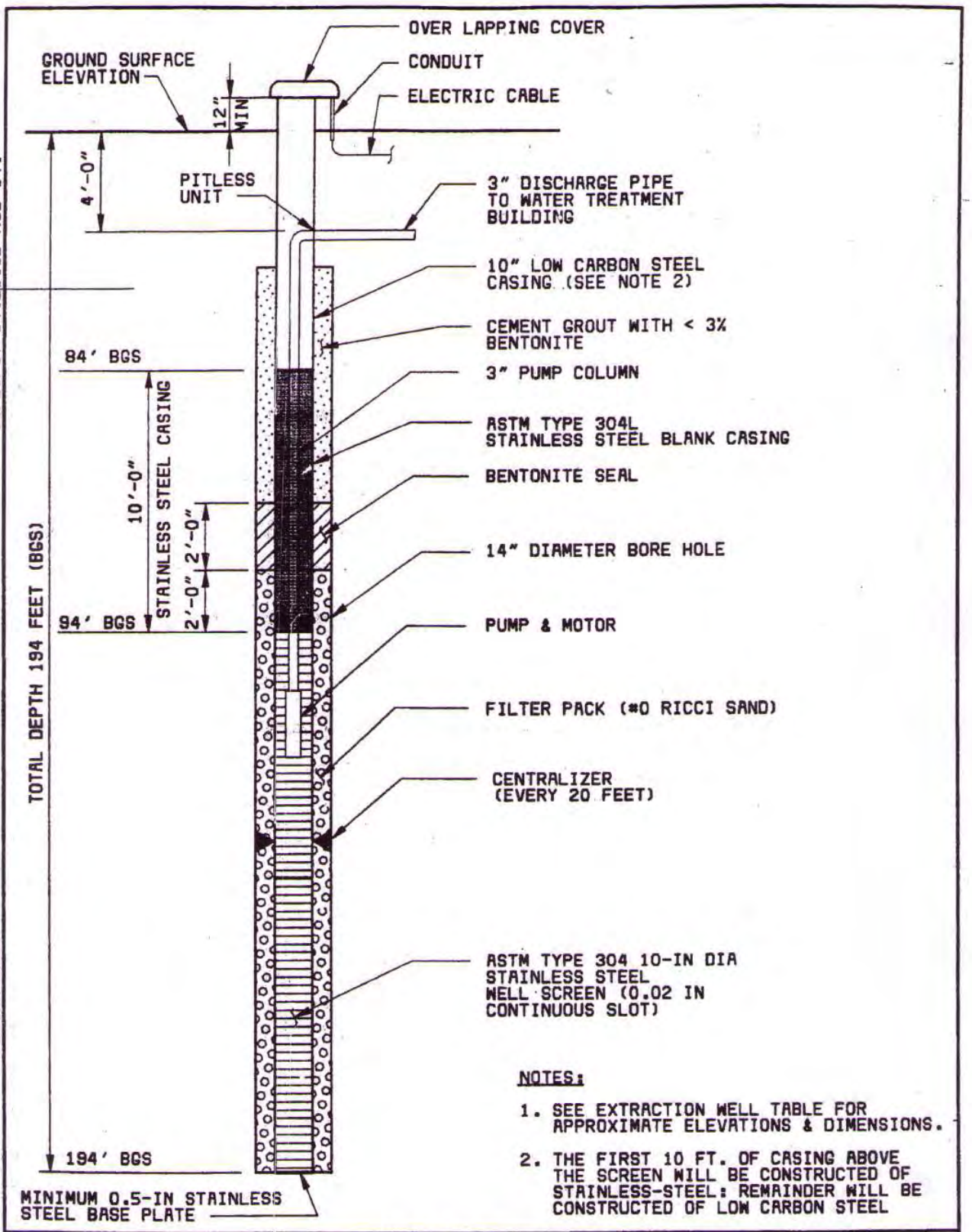
CBA003

RADIAN INTERNATIONAL LLC

"EX-2" EXTRACTION WELL CONSTRUCTION

FIGURE 3-2B

CLAREMONT POLYCHEMICAL	PROJECT NUMBER: 006044
SCALE: N.T.S.	DATE: 08/18/97
DELIVERY:	



NOTES:

1. SEE EXTRACTION WELL TABLE FOR APPROXIMATE ELEVATIONS & DIMENSIONS.
2. THE FIRST 10 FT. OF CASING ABOVE THE SCREEN WILL BE CONSTRUCTED OF STAINLESS-STEEL; REMAINDER WILL BE CONSTRUCTED OF LOW CARBON STEEL

RADIAN INTERNATIONAL LLC

"EX-3" EXTRACTION WELL CONSTRUCTION

FIGURE 3-2C

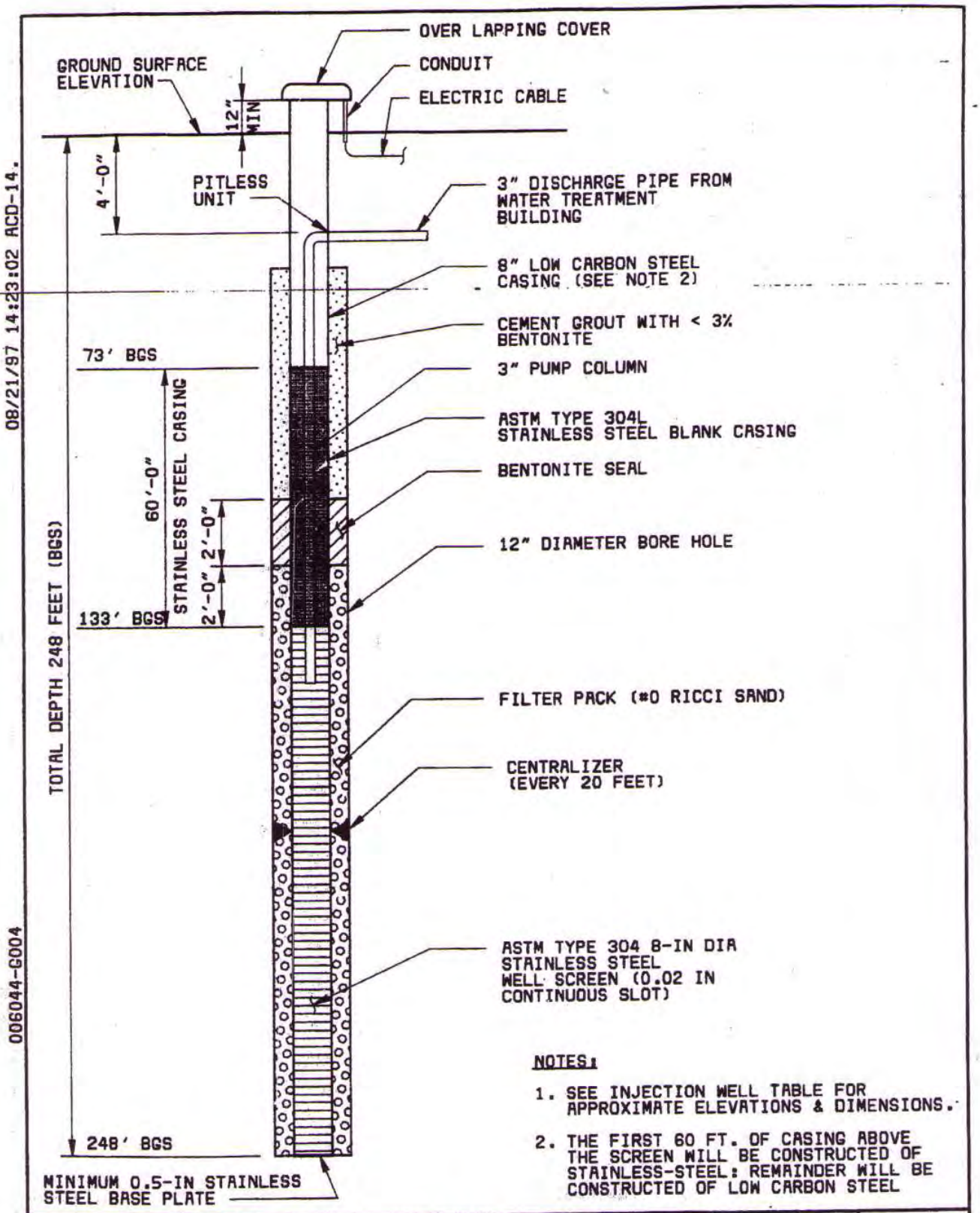
CLAREMONT POLYCHEMICAL | PROJECT NUMBER: 006044

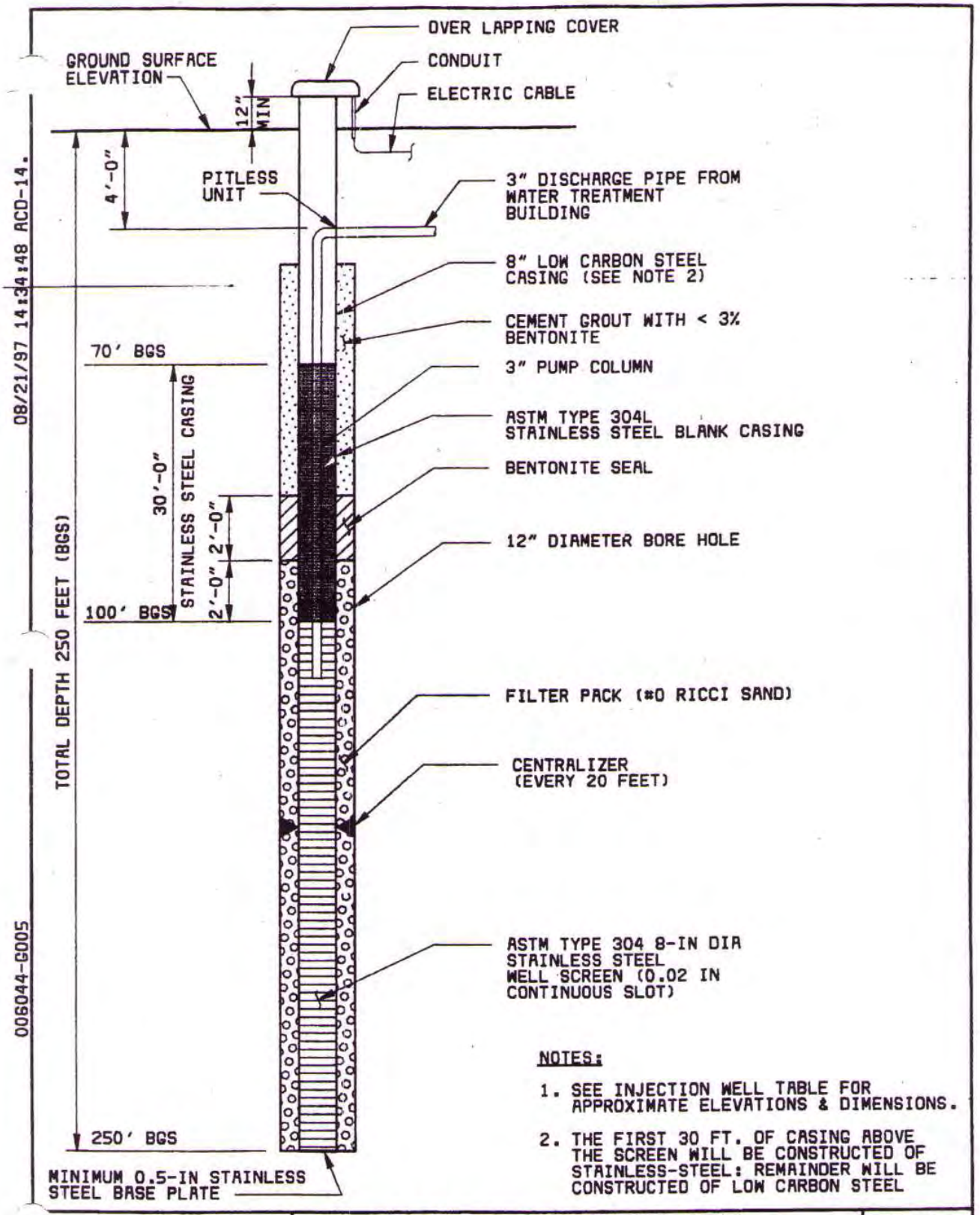
SCALE: N.T.S. | DATE: 08/18/97 | DELIVERY:

08/21/97 14:20:05 ACD-14.

006044-G003

CBR003





NOTES:

1. SEE INJECTION WELL TABLE FOR APPROXIMATE ELEVATIONS & DIMENSIONS.
2. THE FIRST 30 FT. OF CASING ABOVE THE SCREEN WILL BE CONSTRUCTED OF STAINLESS-STEEL; REMAINDER WILL BE CONSTRUCTED OF LOW CARBON STEEL

08/21/97 14:34:48 RCD-14.

006044-G005

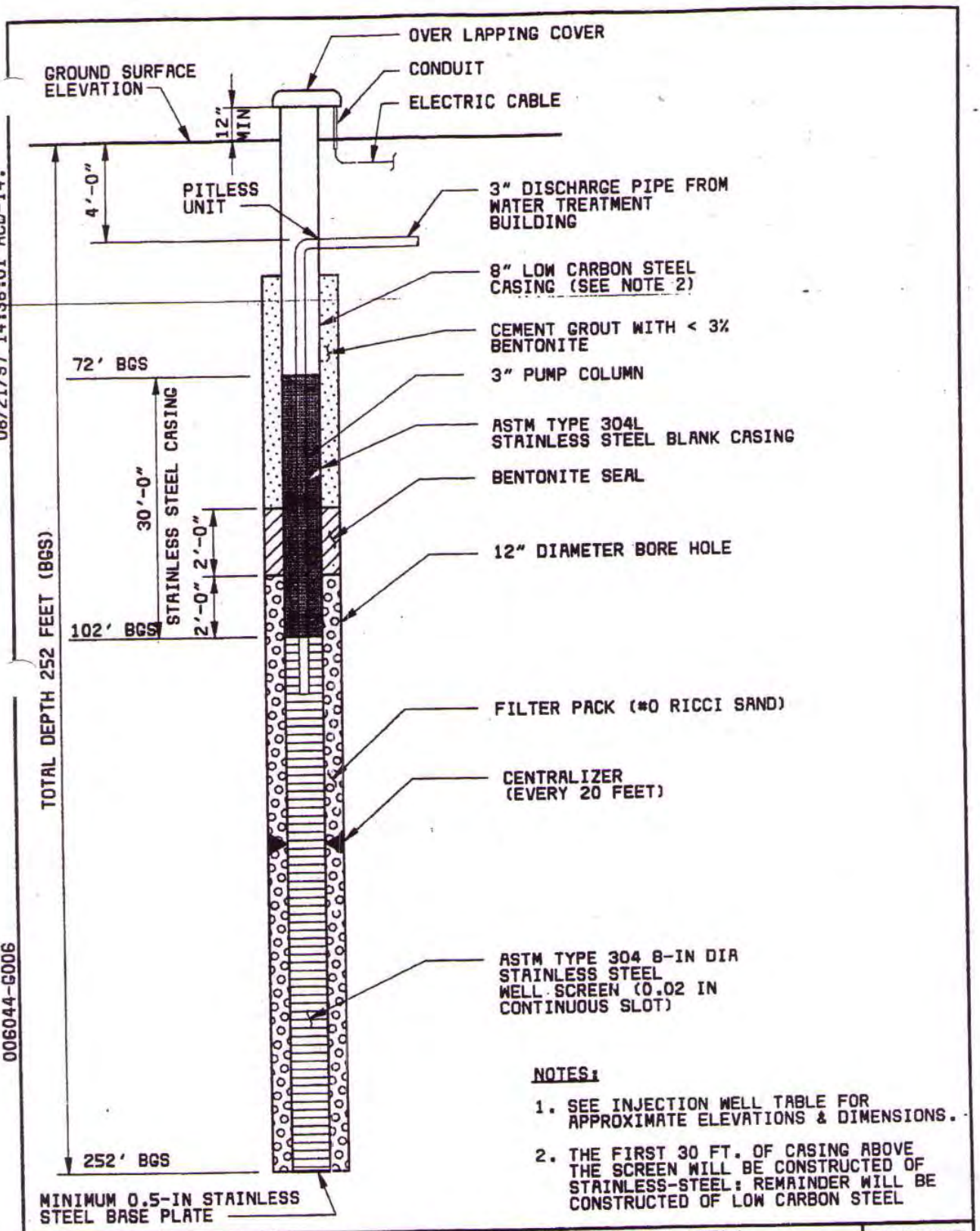
CBA003

RADIAN INTERNATIONAL LLC

"IN-2" INJECTION WELL CONSTRUCTION

FIGURE 3-2E

CLAREMONT POLYCHEMICAL	PROJECT NUMBER: 006044	
SCALE: N.T.S.	DATE: 08/11/97	DELIVERY:



NOTES:

1. SEE INJECTION WELL TABLE FOR APPROXIMATE ELEVATIONS & DIMENSIONS.
2. THE FIRST 30 FT. OF CASING ABOVE THE SCREEN WILL BE CONSTRUCTED OF STAINLESS-STEEL; REMAINDER WILL BE CONSTRUCTED OF LOW CARBON STEEL

RADIAN INTERNATIONAL LLC

"IN-3" INJECTION WELL CONSTRUCTION

FIGURE 3-2F

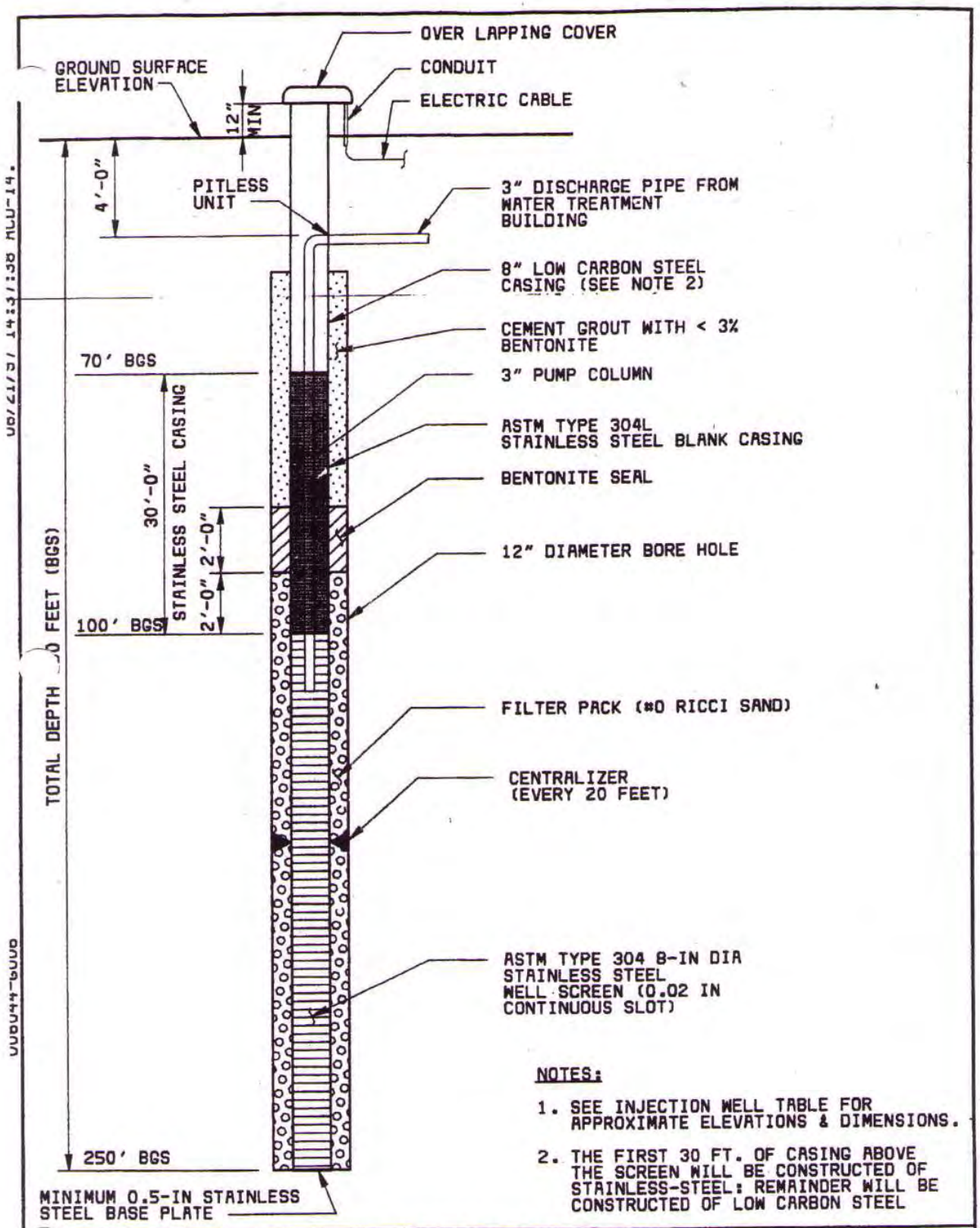
CLAREMONT POLYCHEMICAL | PROJECT NUMBER: 006044

SCALE: N.T.S. | DATE: 08/18/97 | DELIVERY:

08/21/97 14:36:01 ACD-14.

006044-G006

CBA002



NOTES:

1. SEE INJECTION WELL TABLE FOR APPROXIMATE ELEVATIONS & DIMENSIONS.
2. THE FIRST 30 FT. OF CASING ABOVE THE SCREEN WILL BE CONSTRUCTED OF STAINLESS-STEEL; REMAINDER WILL BE CONSTRUCTED OF LOW CARBON STEEL

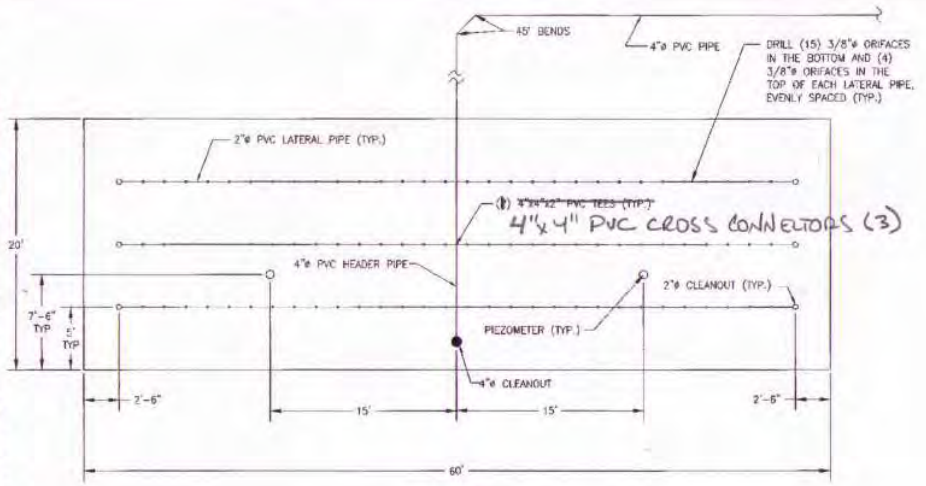
RADIAN INTERNATIONAL LLC

"IN-4" INJECTION WELL CONSTRUCTION

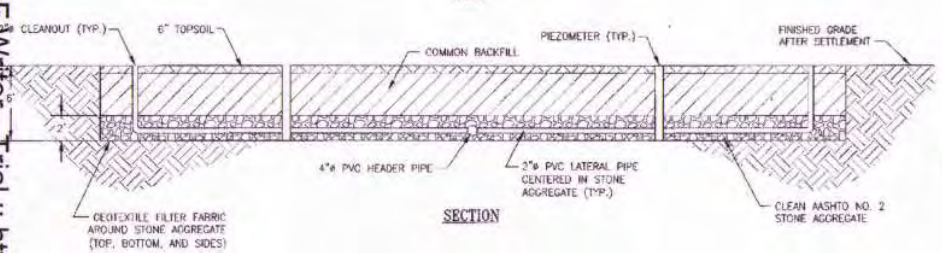
FIGURE 3-2G

CLAREMONT POLYCHEMICAL	PROJECT NUMBER: 006044
SCALE: N.T.S.	DATE: 08/18/97
DELIVERY:	

NOTES: "As Built" Features PET 10-14-09



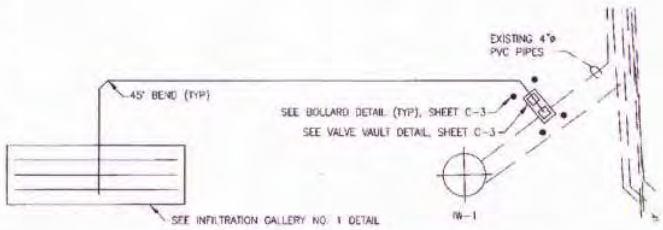
PLAN



SECTION

INFILTRATION GALLERY NO. 1 DETAIL

NOT TO SCALE

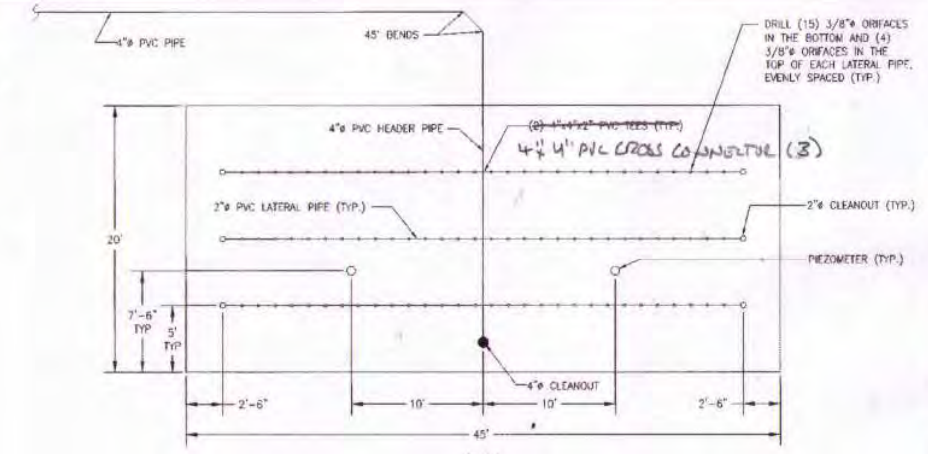


SITE PLAN ENLARGEMENT FOR INFILTRATION GALLERY NO. 1 (IG-1)

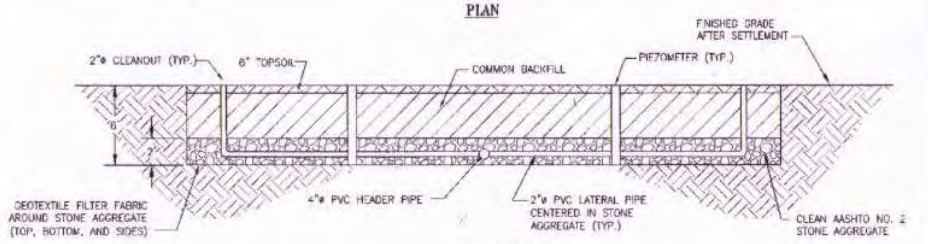
20' 0 20'
SCALE IN FEET

GENERAL NOTES

1. ALL PIPING SHALL BE GLUE FITTED SCHEDULE 40 PVC UNLESS OTHERWISE NOTED.
2. HEADER AND LATERAL PIPING SHALL BE INSTALLED LEVEL AT A ZERO PERCENT GRADE ACROSS THE LIMITS OF THE INFILTRATION BED.
3. GEOTEXTILE FILTER FABRIC SHALL BE 8.0 OZ./SY NONWOVEN POLYPROPYLENE MEETING THE REQUIREMENTS OF AASHTO CLASS 1 SPECIFICATIONS.
4. ALL DISTURBED AREAS AS A RESULT OF THIS PROJECT SHALL BE SEEDED AND MULCHED. SEEDING SHOULD BE PERENNIAL GRASSES (E.G. KENTUCKY BLUEGRASS, FESCUE, PERENNIAL RYE AT A RATE OF 5 POUNDS PER 1000 SQ. FEET) AND STRAW OR WOOD CHIP MULCH SHOULD BE APPLIED AT A RATE OF 3 TONS PER ACRE.



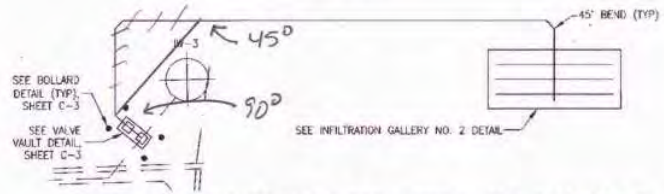
PLAN



SECTION

INFILTRATION GALLERY NO. 2 DETAIL

NOT TO SCALE



SITE PLAN ENLARGEMENT FOR INFILTRATION GALLERY NO. 2 (IG-3)

20' 0 20'
SCALE IN FEET

Verify Scale
bar is one inch on original drawing
0 1"
If not one inch on this sheet, adjust scales accordingly

Professional Seal

CLAREMONT POLYCHEMICAL SUPERFUND SI
TREATED GROUNDWATER INFILTRATION GALLERIES
OLD BETHPAGE, NASSAU COUNTY, NEW YORK

SITE PLAN ENLARGEMENTS AND DETAILS

drawn	scale	checked	approved	figure
RDK	08/12/09	date	date	C-
job no.				file no. 8509-C-5.dwg

revisions

no.	description	date	by	approved

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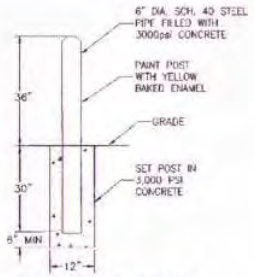
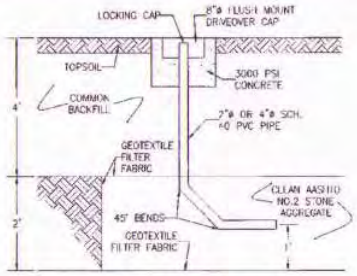
NOTES: "AS BUILT" FEATURES PET 10-14-09

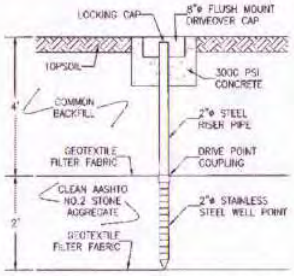
IG-1 INFILTRATION GALLERY AT INJECTION WELL 1 (IW-1)
IG-3 INFILTRATION GALLERY AT INJECTION WELL 3 (IW-3)



TYPICAL BOLLARD DETAIL
NOT TO SCALE

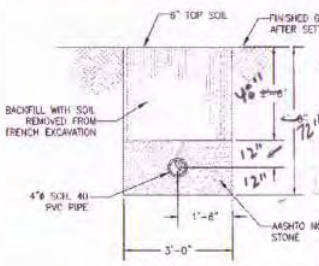


TYPICAL CLEANOUT DETAIL
NOT TO SCALE



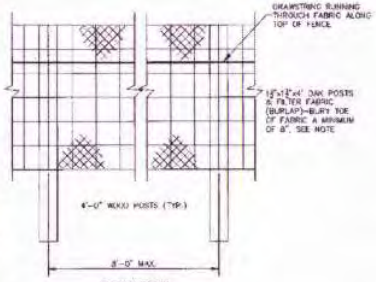
TYPICAL PIEZOMETER DETAIL
NOT TO SCALE

- 2 IN. FLUSH JOINT WITH 2 IN. FLUSH JOINT WELLSCREEN
- SLOT SIZE 0.020 IN. 24 IN. LONG

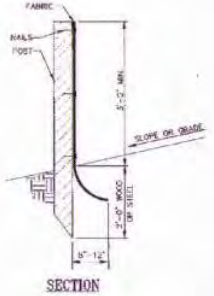


TYPICAL EFFLUENT PIPE TRENCH DETAIL
NOT TO SCALE

- INFLUENT PIPE ENTERS GALLERY MANIFOLD AT 60" BGS.
- MANIFOLD SITS ON 12 IN. AASHTO 2 STONE
- INFLUENT PIPE SITS ON 12 IN BEDDING SAND.

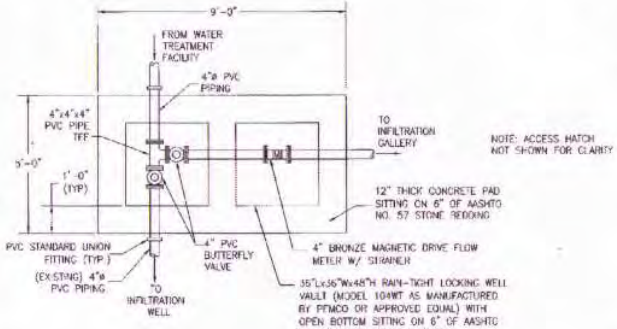


ELEVATION



SECTION

SILT FENCE DETAIL



VALVE VAULT DETAIL
NOT TO SCALE

- IG-1, INFLUENT PIPE 65 IN BGS AT VALVE BOX. RAISED TO 60 IN THROUGH PIPE RUN
- PIPE TRENCH 72 IN. DEEP x 36 IN WIDE
- INFLUENT PIPE'S BEDDED ON 12 IN SAND & COVERED BY 12 IN + PACKED SAND.
- IG-3 INFLUENT PIPE 48 IN. BGS AT VALVE BOX. PITCHED TO 60 IN AT GALLERY MANIFOLD.

GENERAL NOTES:

1. FLUSH MOUNT CONCRETE PADS 24"x24"x6"

- FLANGED VALVE & METER CONNECTIONS
- SPEARS 4" PVC GASKETLESS BUTTERFLY VALVE (2ea)
- PVC SOCKET COUPLING CONNECTIONS WHERE NECESSARY
- METER - SENSUS OMNI T2 METER (4")

IG-1 VAULTS ON 8" CINDER BLOCK BASE ON 8" CRUSHED CONCRETE ON PACKED FILL.
IG-3 VAULTS ON BASE OF 8" CRUSHED CONCRETE ON PACKED FILL
VAULTS - PENCO 104 WT 48" DEEP

STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER 8/7/09

Verify Scale
bar is one inch on original drawing
0 1"
if not one inch on this sheet, adjust scales accordingly

no.	description	date	by	approved
	revisions			

CLAREMONT POLYCHEMICAL SUPERFUND SITE
TREATED GROUNDWATER INFILTRATION GALLERIES
OLD BETHPAGE, NASSAU COUNTY, NEW YORK

DETAILS

design	DAR	checked	RTE	approved
date	06/13/09	scale	05/28/09	date 8/7/09
job no.				file no. 5500-C-3.dwg

figure no. C-3

SAIC From Science to Solutions
SAIC Engineering of NY, PC
A Subsidiary of Science Applications International Corporation

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Table 6-1
Groundwater Elevation and Well Construction Data
Claremont Polychemical Superfund Site
Old Bethpage, NY

							Elevation (NGVD29) to Top of				February 2002			April 2002			May 2002		
Well ID	Northing (NAD27)	Easting (NAD27)	Well Diameter (inches)	Depth of Screened Interval (ft bgs)	Elev.of Screened Interval (ft AMSL)	Well Depth (ft bgs)	Ground Surface (ft AMSL)	Steel Casing (ft AMSL)	PVC Casing (ft AMSL)	Pump Cap (ft AMSL)	Sample Date	Depth to Water Below Ref El[a]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[a]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)
Monitoring Wells																			
EW-1A	193873.779	2154019.942	4	65.17 to 75.00	53.34 to 63.17	76.50	128.34	130.09	130.02	130.00	14-Feb-02	69.58	60.44	5-Apr-02	70.20	59.82	16-May-02	70.60	59.40
EW-1B	193883.104	2154024.450	4	90.17 to 100.00	28.75 to 38.58	102.40	128.75	130.65	130.56	130.53	14-Feb-02	70.17	60.39	5-Apr-02	70.77	59.79	16-May-02	71.13	59.40
EW-1C	193876.735	2154013.250	4	115.17 to125.00	3.43 to 13.26	127.50	128.43	130.60	130.47	130.44	14-Feb-02	69.75	60.72	5-Apr-02	70.51	59.96	16-May-02	71.02	59.42
EW-2A	193955.252	2154621.992	4	92.17 to 102.00	65.19 to 55.36	108.50	157.36	157.54	157.14	157.36	12-Feb-02	97.67	59.47	5-Apr-02	98.35	58.79	17-May-02	98.89	58.47
EW-2B	193968.144	2154627.191	4	120.17 to 130.00	28.74 to 38.57	129.50	157.74	157.99	157.61	157.73	12-Feb-02	98.17	59.44	5-Apr-02	98.59	59.02	15-May-02	99.05	58.68
EW-2C	193965.658	2154619.710	4	140.17 to 150.00	7.60 to 17.43	149.50	157.60	157.93	157.54	157.66	12-Feb-02	98.33	59.21	5-Apr-02	98.60	58.94	15-May-02	99.19	58.47
EW-2D	194009.000	2154637.000	2.5	291.1 to 301.1	32.55 to -142.5	301.40	158.55	158.58	NA	158.24	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-3A	192803.360	2155737.476	4	95.17 to 105.00	52.28 to 62.11	106.00	157.28	159.24	158.92	158.95	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-3B	192823.359	2155736.476	4	125.17 to 135.00	22.32 to 32.15	136.86	157.32	159.36	159.06	159.09	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-3C	192822.360	2155742.476	4	154.17 to 164.00	2.99 to -6.84	165.85	157.16	159.25	158.92	158.95	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-4A	194255.578	2154569.281	4	100.17 to 115	44.86 to 59.69	116.60	159.86	161.81	161.89	161.78	13-Feb-02	102.58	59.31	5-Apr-02	101.68	60.21	16-May-02	102.90	58.88
EW-4B	194249.291	2154569.137	4	120.17 to 130.00	29.8 to 39.63	131.72	159.80	161.91	161.67	161.80	13-Feb-02	101.42	60.25	5-Apr-02	101.72	59.95	16-May-02	102.17	59.63
EW-4C	194242.950	2154569.108	4	145.17 to 155.00	4.59 to 14.42	157.00	159.59	161.68	161.41	161.54	13-Feb-02	101.17	60.24	5-Apr-02	101.47	59.94	16-May-02	101.91	59.63
EW-4D	194268.565	2154585.597	2.5	285 to 295	25.26 to -135.2	295.00	159.74	162.24	NA	161.77	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-5	194051.026	2154443.232	4	165.17 to 175.00	31.16 to -40.99	178.87	134.01	135.81	135.55	136.98	11-Feb-02	77.08	58.47	5-Apr-02	75.43	60.12	15-May-02	78.36	58.62
EW-6A	194695.522	2154111.047	4	63.17 to 73.00	57.66 to 67.49	75.00	130.72	130.76	130.32	/d	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-6B	Abandoned		4	110.17 to 120.00	10.79 to 20.62	NA	NA	130.86	130.61	NA	abandoned			abandoned			abandoned		
EW-6C	194691.623	2154118.917	4	160.67 to 170.50	29.60 to -39.43	168.00	130.79	131.53	130.40	/d	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-7C	194676.000	2154489.000	2.5	189.00 to 199.00	37.47 to -47.47	199.50	151.53	154.14	NA	153.79	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-7D	194677.613	2154479.434	2.5	273.00 to 283.00	21.47 to -131.4	283.50	151.53	153.92	NA	153.71	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-8D	194519.683	2153954.990	2.5	232.00 to 242.00	02.49 to -112.4	242.50	129.51	131.98	NA	131.54	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-9D	194596.601	2154263.993	2.5	244.00 to 254.00	108.6 to -118.6	254.50	135.40	138.07	NA	137.53	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-10C	194593.000	2154734.000	2.5	139.5 to 149.5	19.11 to 9.11	150.00	158.61	161.23	NA	160.94	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-11D	193993.198	2155316.978	2.5	270 to 280	06.75 to -116.7	280.00	163.25	165.75	NA	165.33	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-12D	194110.000	2154849.000	2.5	209.5 to 219.5	47.33 to -57.33	220.00	162.17	164.58	NA	164.42	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-13D	194557.000	2154979.000	2.5	340 to 350	77.28 to -187.2	350.30	162.72	165.01	NA	164.73	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-14D	191632.016	2156477.193	2.5	185 to 195	85.27 to -95.27	195.00	99.73	102.25	NA	102.13	NM	NM	NM	NM	NM	NM	NM	NM	NM
SW-2	194051.190	2154448.258	4	63 to 73	65.10 to 75.10	73.11			136.93	/d		dry			dry			dry	
DW-2	194063.355	2154430.872	4	95 to 100	37.35 to 42.35	100.79			137.61	136.42	11-Feb-02	86.00	51.61	5-Apr-02	77.45	60.16	15-May-02	78.24	58.18
SW-1	194071.311	2154123.654	4	65 to 70	61.50 to 66.50	70.99			131.31	131.49	11-Feb-07	70.67	60.64	5-Apr-02	70.99	60.32		dry	
DW-1	194070.541	2154132.146	4	93.5 to 98.5	32.89 to 38.39	99.10			131.19	131.38	11-Feb-02	70.67	60.52	5-Apr-02	71.16	60.03	16-May-02	71.72	59.66
LF-02	193617.347	2153592.477	6	110 to 115	3 to 8	102.00		NA	118.70	NA	18-Feb-02	57.75	60.95	NM	NM	NM	NM	NM	NM
PPW-1	194341.106	2154124.530	12/10	300 to 330	66.15 to -196.1	330	133.85	NA	136.74	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
WT-01	194312.475	2154959.015	4	95.4 to 105.4	56.98 to 66.98	107.20	162.94	164.77	164.57	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-6D	192831.355	2154128.481	4	185 to 190	-26.1 to -31.1	190.00	158.90	NA	160.39	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-8A	193670.718	2154228.598	4	85 to 90	48.5 to 53.5	90.00	132.80	133.57	133.18	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-8B	193723.370	2154266.420	4	155 to 160	-22.2 to -27.2	160.00	132.80	NA	134.24	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-8C	193723.373	2154266.424	4	245 to 250	110.7 to -115.7	250.00	134.30	136.26	135.72	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-10B	193334.083	2155374.785	4	173 to 178	-13 to -18	178.00	160.00	162.24	161.12	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-10C	193355.184	2155308.330	4	273 to 278	113.1 to -118.1	278.00	159.90	161.16	160.27	NA	18-Feb-02	101.85	58.42	NM	NM	NM	NM	NM	NM
MW-10D	193341.537	2155310.126	4	346 to 351	186.2 to -191.2	351.00	159.80	161.85	161.17	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
BP-3A	190227.267	2155064.492	4	54 to 74	51 to 71	74.00			124.54	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
BP-3B	190244.367	2155068.492	4	215 to 235	-91 to -111	235.00			123.57	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
BP-3C	190276.367	2155078.492	4	280 to 300	-156 to -176	300.00			123.68	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM
RW-01	194259.860	2154065.580	Abandoned			157 - 170	NA	Abandoned			NM	NM	NM	NM	NM	NM	NM	NM	NM
Extraction Wells																			
EX-1	193746.762	2154315.864	10	5 to110, 125 to 175		175		134.31	NA	NA	Feb-02	77.94	56.37	NM	NM	NM	29-May-02	80.00	54.31
EX-2	193853.944	2154407.808	10	95 -120, 135 -190		190		146.25	NA	NA	Feb-02	88.27	57.98	NM	NM	NM	29-May-02	NM	NM
EX-3	193997.321	2154530.799	10	94 -194		194		160.69	NA	NA	Feb-02	102.88	57.81	NM	NM	NM	29-May-02	105.00	55.69
Injection Wells																			
IW-1	194419.137	2155036.895	8	133 to 248	29.92 to -85.08	248	162.92	164.88	NA	NA	NM	NM	NM	4-Apr-02	16.40	148.48	15-May-02	4.90	159.98
IW-2	194434.129	2155148.931	8	100 to 250	63.64 to -86.36	250	163.64	165.61	NA	NA	NM	NM	NM	4-Apr-02	19.20	146.41	15-May-02	10.40	155.21
IW-3	194438.720	2155249.932	8	102 to 252	62.25 to -87.75	252	164.25	166.26	NA	NA	NM	NM	NM	4-Apr-02	3.50	162.76	15-May-02	24.10	142.16
IW-4	194315.518	2155244.734	8	100 to 250	63.84 to -86.16	250	163.84	166.09	NA	NA	NM	NM	NM	4-Apr-02	18.10	147.99	15-May-02	16.10	149.99
IG-1[j]	194391.807	2154916.695	2			5.7													
IG-3[j]	194455.720	2155354.682	2			5.7													

Well Transducer Reading at time of depth to water readings

Notes:
a)
b)
c)
d) Pump not installed
e) Unable to measure depth to water due to low conductivity
f)
g) Measured while pump was off
h) Reference elevation data not available
i) No access to well
j) location of 4" cleanout

Key:
ft bgs - feet below ground surface
ft AMSL - feet above mean sea level
Ref El - reference elevation
NM - not measured
NA - not applicable

Table 6-1
Groundwater Elevation and Well Construction Data
Claremont Polychemical Superfund Site
Old Bethpage, NY

	August 2002			October 2002			November 2002			January 2003			April 2003			July 2003			October 2003		
Well ID	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)
EW-1A	6-Aug-02	72.00	58.00	21-Oct-02	72.76	57.24	21-Nov-02	76.62	53.38	22-Jan-03	71.24	58.76	16-Apr-03	69.68	60.32	28-Jul-03	68.94	61.06	22-Oct-03	67.99	62.01
EW-1B	6-Aug-02	73.13	57.40	21-Oct-02	73.99	56.54	21-Nov-02	73.10	57.43	22-Jan-03	71.20	59.33	16-Apr-03	70.15	60.38	28-Jul-03	68.45	62.08	22-Oct-03	69.31	61.22
EW-1C	6-Aug-02	72.52	57.92	21-Oct-02	73.07	57.37	21-Nov-02	72.80	57.64	22-Jan-03	71.54	58.90	16-Apr-03	69.80	60.64	28-Jul-03	68.50	61.94	22-Oct-03	68.11	62.33
EW-2A	7-Aug-02	101.17	56.19		dry		21-Nov-02	100.20	57.16	21-Jan-03	dry			dry			dry		23-Oct-03	95.93	61.43
EW-2B	7-Aug-02	100.42	57.31	23-Oct-02	100.80	56.93	21-Nov-02	100.35	57.38	21-Jan-03	99.38	58.35	15-Apr-03	97.85	59.88	28-Jul-03	96.12	61.61	21-Oct-03	96.15	61.58
EW-2C	7-Aug-02	100.25	57.41	23-Oct-02	100.74	56.92	21-Nov-02	100.30	57.36	21-Jan-03	99.20	58.46	15-Apr-03	97.60	60.06	28-Jul-03	95.90	61.76	21-Oct-03	95.92	61.74
EW-2D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-3A	NM	NM	NM		dry		22-Nov-02	103.90	55.02	NM	NM	NM		dry			dry			dry	
EW-3B	NM	NM	NM	24-Oct-02	104.09	55.00	22-Nov-02	103.96	55.13	NM	NM	NM	15-Apr-03	101.49	57.60	28-Jul-03	98.80	60.29	21-Oct-03	99.33	59.76
EW-3C	NM	NM	NM	24-Oct-02	104.02	54.93	22-Nov-02	103.85	55.10	NM	NM	NM	15-Apr-03	101.15	57.80	28-Jul-03	98.69	60.26	21-Oct-03	98.99	59.96
EW-4A	6-Aug-02	103.49	58.29	23-Oct-02	104.12	57.66	21-Nov-02	103.66	58.12	22-Jan-03	102.52	59.26	16-Apr-03	100.92	60.86	28-Jul-03	99.25	62.53	20-Oct-03	99.45	62.33
EW-4B	6-Aug-02	103.55	58.25	23-Oct-02	104.07	57.73	21-Nov-02	103.70	58.10	22-Jan-03	102.72	59.08	16-Apr-03	100.00	61.80	28-Jul-03	99.29	62.51	20-Oct-03	99.45	62.35
EW-4C	6-Aug-02	103.48	58.06	23-Oct-02	103.92	57.62	21-Nov-02	103.43	58.11	22-Jan-03	102.28	59.26	16-Apr-03	100.65	60.89	28-Jul-03	98.95	62.59	20-Oct-03	99.24	62.30
EW-4D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-5	5-Aug-02	78.75	58.23	22-Oct-02	79.16	57.82	22-Nov-02	78.64	58.34	21-Jan-03	77.43	59.55	15-Apr-03	76.26	60.72	28-Jul-03	74.23	62.75	22-Oct-03	82.70	54.28
EW-6A	NM	NM	NM		dry			dry		NM	NM	NM	16-Apr-03	67.66	62.66	NM	NM	NM		dry	
EW-6B		abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned	
EW-6C	NM	NM	NM	23-Oct-02	71 (+/-) 1	59.4 (+/-) 1	22-Nov-02	/e	/e	NM	NM	NM	16-Apr-03	68.50	61.90	28-Jul-03	66.90	63.50	23-Oct-03	65.64	64.76
EW-7C	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-7D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-8D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-9D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-10C	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-11D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-12D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-13D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-14D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
SW-2		dry			dry			dry			dry			dry			dry			dry	
DW-2	5-Aug-02	79.50	56.92	22-Oct-02	80.11	56.31	22-Nov-02	79.59	56.83	21-Jan-03	78.58	57.84	15-Apr-03	76.76	59.66	28-Jul-03	75.26	61.16	22-Oct-03	76.49	59.93
SW-1		dry			dry			dry			dry			dry			dry			dry	
DW-1	5-Aug-02	73.12	58.26	22-Oct-02	73.78	57.60	22-Nov-02	73.60	57.78	21-Jan-03	72.40	58.98	17-Apr-03	70.76	60.62	28-Jul-03	69.00	62.38	21-Oct-03	68.97	62.41
LF-02	NM	NM	NM	21-Oct-02	61.01	57.69	19-Nov-02	60.82	57.88	NM	NM	NM	15-Apr-03	57.94	60.76	28-Jul-03	56.18	62.52	23-Oct-03	56.12	62.58
PPW-1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	23-Oct-03	71.15	62.70
WT-01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	17-Apr-03	103.19	61.38	28-Jul-03	101.12	63.45	22-Oct-03	100.45	64.12
MW-6D	NM	NM	NM	24-Oct-02	104.20	56.19	NM	NM	NM	NM	NM	NM	16-Apr-03	101.12	59.27	31-Jul-03	99.59	60.80	22-Oct-03	99.39	61.00
MW-8A	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-8B	NM	NM	NM	21-Oct-02	77.49	56.75	NM	NM	NM	NM	NM	NM	16-Apr-03	74.77	59.47	NM	NM	NM	22-Oct-03	72.88	61.36
MW-8C	NM	NM	NM	23-Oct-02	68.55	67.17	NM	NM	NM	NM	NM	NM	16-Apr-03	75.08	60.64	29-Jul-03	73.58	62.14	22-Oct-03	73.55	62.17
MW-10B	NM	NM	NM	24-Oct-02	105.02	56.10	NM	NM	NM	NM	NM	NM	15-Apr-03	102.08	59.04	31-Jul-03	100.82	60.30	22-Oct-03	101.38	59.74
MW-10C	NM	NM	NM	24-Oct-02	104.20	56.07	NM	NM	NM	NM	NM	NM	15-Apr-03	101.20	59.07	30-Jul-03	99.96	60.31	21-Oct-03	99.28	60.99
MW-10D	NM	NM	NM	24-Oct-02	95.00	66.17	NM	NM	NM	NM	NM	NM	15-Apr-03	102.03	59.14	30-Jul-03	100.98	60.19	21-Oct-03	99.34	61.83
BP-3A	NM	NM	NM	21-Oct-02	73.83	50.71	NM	NM	NM	NM	NM	NM	14-Apr-03	70.45	54.09	30-Jul-03	65.48	59.06	NM	NM	NM
BP-3B	NM	NM	NM	25-Oct-02	72.94	50.63	NM	NM	NM	NM	NM	NM	14-Apr-03	69.81	53.76	29-Jul-03	67.29	56.28	20-Oct-03	68.27	55.30
BP-3C	NM	NM	NM	25-Oct-02	73.17	50.51	NM	NM	NM	NM	NM	NM	14-Apr-03	70.02	53.66	29-Jul-03	67.55	56.13	20-Oct-03	68.52	55.16
RW-01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	17-Apr-03	73.80	/h	24-Jul-03	72.20	/h		abandoned	
EX-1	NM	NM	NM	Oct-02	77.12	57.19	NM	NM	NM	28-Jan-03	76.04	58.27	Apr-03	75.28	59.03	28-Jul-03	73.48	60.83	7-Oct-03	73.30	61.01
EX-2	NM	NM	NM	Oct-02	88.64	57.61	NM	NM	NM	28-Jan-03	88.12	58.13	Apr-03	86.82	59.43	28-Jul-03	85.23	61.02	7-Oct-03	85.12	61.13
EX-3	NM	NM	NM	Oct-02	102.98	57.71	NM	NM	NM	28-Jan-03	102.12	58.57	Apr-03	101.34	59.35	28-Jul-03	99.25	61.44	7-Oct-03	99.01	61.68
IW-1	8-Aug-02	7.21	157.67	28-Oct-02	13.00	151.88	19-Nov-02	7.10	157.78	23-Jan-03	10.72	154.16	Apr-03[g]	91.99	72.89	28-Jul-03	25.00	139.88	16-Oct-03	2.44	162.44
IW-2	8-Aug-02	15.61	150.00	28-Oct-02	17.93	147.68	19-Nov-02	12.59	153.02	23-Jan-03	22.30	143.31	Apr-03[g]	101.30	64.31	28-Jul-03	23.30	142.31	16-Oct-03	5.75	159.86
IW-3	8-Aug-02	14.62	151.64	28-Oct-02	2.53	163.73	19-Nov-02	6.10	160.16	23-Jan-03	14.20	152.06	Apr-03[g]	102.40	63.86	28-Jul-03	88.30	77.96	16-Oct-03	0.00	166.26
IW-4	8-Aug-02	28.78	137.31	28-Oct-02	40.32	125.77	19-Nov-02	56.00	110.09	23-Jan-03	46.31	119.78	Apr-03[g]	103.30	62.79	28-Jul-03	54.25	111.84	16-Oct-03	29.70	136.39
IG-1[i]																					
IG-3[i]																					

Well Transducer Reading at time of depth to water readings

Table 6-1
Groundwater Elevation and Well Construction Data
Claremont Polychemical Superfund Site
Old Bethpage, NY

	January 2004			April 2004			July 2004			October 2004			January 2005			April 2005			June 2005		
Well ID	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)
EW-1A	19-Jan-04	67.25	62.75	19-Apr-04	67.10	62.90	19-Jul-04	67.11	62.89	18-Oct-04	67.25	62.75	20-Jan-05	66.50	63.50	6-Apr-05	66.13	63.87	9-Jun-05	65.20	64.80
EW-1B	19-Jan-04	67.80	62.73	19-Apr-04	67.53	63.00	19-Jul-04	67.67	62.86	18-Oct-04	67.79	62.74	20-Jan-05	67.10	63.43	6-Apr-05	66.65	63.88	9-Jun-05	65.67	64.86
EW-1C	19-Jan-04	67.70	62.74	19-Apr-04	67.13	63.31	19-Jul-04	67.68	62.76	18-Oct-04	67.65	62.79	20-Jan-05	66.89	63.55	6-Apr-05	66.50	63.94	9-Jun-05	65.74	64.70
EW-2A	19-Jan-04	97.60	59.76	19-Apr-04	95.05	62.31	19-Jul-04	95.20	62.16	18-Oct-04	95.21	62.15	20-Jan-05	94.60	62.76	6-Apr-05	94.54	62.82	9-Jun-05	93.30	64.06
EW-2B	19-Jan-04	95.50	62.23	19-Apr-04	95.20	62.53	19-Jul-04	95.52	62.21	18-Oct-04	95.57	62.16	20-Jan-05	94.74	62.99	6-Apr-05	94.60	63.13	9-Jun-05	93.50	64.23
EW-2C	19-Jan-04	95.30	62.36	19-Apr-04	95.00	62.66	19-Jul-04	95.62	62.04	18-Oct-04	95.62	62.04	20-Jan-05	94.52	63.14	6-Apr-05	94.77	62.89	9-Jun-05	93.45	64.21
EW-2D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-3A	20-Jan-04	98.98	59.94	19-Apr-07	106.00	52.92	19-Jul-04	98.50	60.45	18-Oct-04	98.35	60.60	20-Jan-05	97.50	61.45	6-Apr-05	97.58	61.37	9-Jun-05	96.50	62.45
EW-3B	19-Jan-04	107.90	51.19	19-Apr-04	98.90	60.19	19-Jul-04	98.70	60.39	18-Oct-04	98.48	60.61	20-Jan-05	97.51	61.58	6-Apr-05	97.61	61.48	9-Jun-05	96.56	62.53
EW-3C	19-Jan-04	99.10	59.85	19-Apr-04	98.80	60.15	19-Jul-04	98.60	60.35	18-Oct-04	98.35	60.60	20-Jan-05	97.40	61.55	6-Apr-05	97.50	61.45	9-Jun-05	96.60	62.35
EW-4A	19-Jan-04	98.63	63.15	19-Apr-04	98.50	63.28	19-Jul-04	98.63	63.15	18-Oct-04	98.62	63.16	20-Jan-05	97.90	63.88	6-Apr-05	97.62	64.16	9-Jun-05	96.67	65.11
EW-4B	19-Jan-04	98.63	63.17	19-Apr-04	98.52	63.28	19-Jul-04	98.67	63.13	18-Oct-04	98.64	63.16	20-Jan-05	97.93	63.87	6-Apr-05	97.68	64.12	9-Jun-05	96.71	65.09
EW-4C	19-Jan-04	98.38	63.16	19-Apr-07	93.32	68.22	19-Jul-04	98.38	63.16	18-Oct-04	98.41	63.13	20-Jan-05	97.70	63.84	6-Apr-05	97.43	64.11	9-Jun-05	96.51	65.03
EW-4D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-5	19-Jan-04	74.56	62.42	19-Apr-04	73.70	63.28	19-Jul-04	73.90	63.08	18-Oct-04	74.70	62.28	20-Jan-05	73.89	63.09	6-Apr-05	73.40	63.58	9-Jun-05	72.66	64.32
EW-6A	22-Jan-04	65.49	64.83	19-Apr-07	65.20	65.12	19-Jul-04	65.45	64.87	18-Oct-04	65.37	64.95	20-Jan-05	65.00	65.32	6-Apr-05	64.40	65.92	9-Jun-05	63.33	66.99
EW-6B	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EW-6C	19-Jan-04	66.66	63.74	19-Apr-07	65.68	64.72	19-Jul-04	66.13	64.27	18-Oct-04	65.95	64.45	20-Jan-05	65.20	65.20	6-Apr-05	64.82	65.58	9-Jun-05	63.80	66.60
EW-7C	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	20-Jan-05	88.61	65.18	6-Apr-05	88.36	65.43	9-Jun-05	87.68	66.11
EW-7D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	20-Jan-05	88.60	65.11	6-Apr-05	88.35	65.36	9-Jun-05	87.70	66.01
EW-8D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	20-Jan-05	66.56	64.98	6-Apr-05	66.26	65.28	9-Jun-05	71.57	59.97
EW-9D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	20-Jan-05	72.45	65.08	6-Apr-05	72.24	65.29	9-Jun-05	65.69	71.84
EW-10C	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-11D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-12D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-13D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EW-14D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
SW-2	dry			dry			dry			dry			dry			dry			dry		
DW-2	19-Jan-04	73.60	62.82	19-Apr-07	68.20	68.22	19-Jul-04	74.51	61.91	18-Oct-04	73.80	62.62	20-Jan-05	74.50	61.92	6-Apr-05	73.72	62.70	9-Jun-05	66.31	70.11
SW-1	19-Jan-04	68.40	63.09	19-Apr-04	68.20	63.29	19-Jul-04	68.32	63.17	18-Oct-04	68.36	63.13	20-Jan-05	67.72	63.77	6-Apr-05	67.30	64.19	NM	NM	NM
DW-1	19-Jan-04	68.35	63.03	19-Apr-07	74.49	56.89	19-Jul-04	68.25	63.13	18-Oct-04	68.31	63.07	20-Jan-05	67.64	63.74	6-Apr-05	67.23	64.15	9-Jun-05	66.21	65.17
LF-02	22-Jan-04	55.60	63.10	19-Apr-04	55.25	63.45	19-Jul-04	55.55	63.15	18-Oct-04	55.59	63.11	20-Jan-05	54.69	64.01	6-Apr-05	54.29	64.41	10-Jun-05	53.55	65.15
PPW-1	21-Jan-04	69.57	64.28	21-Apr-04	70.33	63.52	20-Jul-04	70.77	63.08	20-Oct-04	70.30	63.55	20-Jan-05	72.32	64.42	6-Apr-05	71.90	64.84	9-Jun-05	71.5	65.24
WT-01	21-Jan-04	100.99	63.58	20-Apr-04	100.68	63.89	20-Jul-04	100.68	63.89	20-Oct-04	100.37	64.20	20-Jan-05	99.65	64.92	6-Apr-05	99.58	64.99	9-Jun-05	98.61	65.96
MW-6D	26-Jan-04	99.31	61.08	19-Apr-04	98.73	61.66	19-Jul-04	98.70	98.73	18-Oct-04	98.66	61.66	20-Jan-05	97.60	98.73	12-Apr-05	97.90	62.49	9-Jun-05	96.67	63.72
MW-8A	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-8B	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-8C	22-Jan-04	73.10	62.62	19-Apr-04	72.85	62.87	19-Jul-04	73.19	62.53	18-Oct-04	73.19	62.53	20-Jan-05	72.17	63.55	11-Apr-05	71.89	63.83	9-Jun-05	71.20	64.52
MW-10B	23-Jan-04	99.95	61.17	20-Apr-04	100.08	61.04	20-Jul-04	100.02	61.10	19-Oct-04	99.73	61.39	20-Jan-05	98.40	62.72	12-Apr-05	97.85	63.27	9-Jun-05	97.65	63.47
MW-10C	22-Jan-04	99.12	61.15	20-Apr-04	98.91	61.36	21-Jul-04	99.02	61.25	20-Oct-04	98.55	61.72	20-Jan-05	97.70	62.57	14-Apr-05	97.12	63.15	9-Jun-05	96.84	63.43
MW-10D	23-Jan-04	100.07	61.10	20-Apr-04	99.65	61.52	21-Jul-04	100.11	61.06	20-Oct-04	99.33	61.84	20-Jan-05	98.68	62.49	14-Apr-05	98.30	62.87	9-Jun-05	97.98	63.19
BP-3A	NM	NM	NM	21-Apr-04	67.32	57.22	21-Jul-04	65.87	58.67	21-Oct-04	65.48	59.06	20-Jan-05	NM[i]	NM	14-Apr-05	64.60	59.94	NM	NM	NM
BP-3B	NM	NM	NM	21-Apr-04	67.77	55.80	21-Jul-04	67.97	55.60	21-Oct-04	66.87	56.70	20-Jan-05	NM[i]	NM	14-Apr-05	65.92	57.65	NM	NM	NM
BP-3C	NM	NM	NM	21-Apr-04	67.97	55.71	21-Jul-04	67.71	55.97	21-Oct-04	67.09	56.59	20-Jan-05	NM[i]	NM	14-Apr-05	66.12	57.56	NM	NM	NM
RW-01	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EX-1	NM	NM	NM	28-Apr-04	79.78	54.53	26-Jul-04	80.15	54.16	26-Oct-04[g]	74.30	60.01	18-Jan-05	79.05	55.26	6-Apr-05	79.79	54.52	9-Jun-05	78.65	55.66
EX-2	NM	NM	NM	28-Apr-04	91.46	54.79	26-Jul-04	99.11	47.14	26-Oct-04	90.37	55.88	18-Jan-05	90.23	56.02	6-Apr-05	89.85	56.40	9-Jun-05	89.07	57.18
EX-3	27-Jan-04	66.40	94.29	28-Apr-04	105.25	55.44	26-Jul-04	105.95	54.74	26-Oct-04	106.01	54.68	18-Jan-05	106.00	54.69	6-Apr-05	97.50	63.19	9-Jun-05	104.68	56.01
IW-1	16-Jan-04	11.30	153.58	19-Apr-04	5.65	159.23	23-Jul-04	100.50	64.38	18-Oct-04	61.88	103.00	20-Jan-05	32.88	132.00	6-Apr-05	29.88	135.00	9-Jun-05	32.88	132.00
IW-2	16-Jan-04	23.97	141.64	19-Apr-04	12.32	153.29	23-Jul-04	40.10	125.51	18-Oct-04	15.61	150.00	20-Jan-05	10.61	155.00	6-Apr-05	18.61	147.00	9-Jun-05	11.61	154.00
IW-3	16-Jan-04	30.00	136.26	19-Apr-04	2.53	163.73	23-Jul-04	100.10	66.16	18-Oct-04	18.26	148.00	20-Jan-05	10.26	156.00	6-Apr-05	13.26	153.00	9-Jun-05	13.26	153.00
IW-4	16-Jan-04	61.62	104.47	19-Apr-04	21.90	144.19	23-Jul-04	81.20	84.89	18-Oct-04	42.09	124.00	20-Jan-05	26.09	140.00	6-Apr-05	16.09	150.00	9-Jun-05	19.09	147.00
IG-1[j]																					
IG-3[j]																					

Well Transducer Reading at time of depth to water readings

Table 6-1
Groundwater Elevation and Well Construction Data
Claremont Polychemical Superfund Site
Old Bethpage, NY

	July 2005			September 2005			January 2006			March 2006			April 2006			May 2006			July 2006		
Well ID	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)
EW-1A	15-Jul-05	65.40	64.60	27-Sep-05	67.10	62.90	26-Jan-06	63.88	66.12	27-Mar-06	62.94	67.06	5-Apr-06	62.87	67.13	22-May-06	63.00	67.00	18-Jul-06	62.98	67.02
EW-1B	15-Jul-05	65.89	64.64	27-Sep-05	67.65	62.88	26-Jan-06	64.40	66.13	27-Mar-06	63.43	67.10	5-Apr-06	63.37	67.16	22-May-06	63.52	67.01	18-Jul-06	62.54	67.99
EW-1C	15-Jul-05	65.91	64.53	27-Sep-05	67.85	62.59	26-Jan-06	64.00	66.44	27-Mar-06	63.53	66.91	5-Apr-06	63.07	67.37	22-May-06	63.61	66.83	18-Jul-06	63.26	67.18
EW-2A	15-Jul-05	93.55	63.81	27-Sep-05	95.54	61.82	26-Jan-06	91.84	65.52	27-Mar-06	91.11	66.25	5-Apr-06	90.97	66.39	22-May-06	91.15	66.21	18-Jul-06	91.11	66.25
EW-2B	15-Jul-05	93.79	63.94	27-Sep-05	95.71	62.02	26-Jan-06	92.08	65.65	27-Mar-06	91.44	66.29	5-Apr-06	91.25	66.48	22-May-06	91.51	66.22	18-Jul-06	91.59	66.14
EW-2C	15-Jul-05	93.91	63.75	27-Sep-05	97.74	59.92	26-Jan-06	92.34	65.32	27-Mar-06	91.65	66.01	5-Apr-06	91.53	66.13	22-May-06	91.73	65.93	18-Jul-06	91.77	65.89
EW-2D	NM	NM	NM	NM	NM	NM	26-Jan-06	92.34	65.90	27-Mar-06	91.44	66.80	5-Apr-06	91.25	66.99	22-May-06	91.38	66.86	18-Jul-06	91.58	66.66
EW-3A	15-Jul-05	96.74	62.21	27-Sep-05	98.58	60.37	26-Jan-06	95.28	63.67	27-Mar-06	94.36	64.59	5-Apr-06	94.40	64.55	22-May-06	94.41	64.54	18-Jul-06	94.45	64.50
EW-3B	15-Jul-05	96.98	62.11	27-Sep-05	98.90	60.19	26-Jan-06	95.32	63.77	27-Mar-06	94.60	64.49	5-Apr-06	94.54	64.55	22-May-06	94.59	64.50	18-Jul-06	94.64	64.45
EW-3C	15-Jul-05	96.89	62.06	27-Sep-05	98.82	60.13	26-Jan-06	95.20	63.75	27-Mar-06	94.50	64.45	5-Apr-06	94.44	64.51	22-May-06	94.48	64.47	18-Jul-06	94.58	64.37
EW-4A	15-Jul-05	96.97	64.81	27-Sep-05	98.74	63.04	26-Jan-06	95.35	66.43	27-Mar-06	94.46	67.32	5-Apr-06	94.41	67.37	22-May-06	94.44	67.34	18-Jul-06	94.50	67.28
EW-4B	15-Jul-05	97.00	64.80	27-Sep-05	98.80	63.00	26-Jan-06	95.38	66.42	27-Mar-06	94.58	67.22	5-Apr-06	94.45	67.35	22-May-06	94.50	67.30	18-Jul-06	94.54	67.26
EW-4C	15-Jul-05	96.78	64.76	27-Sep-05	98.50	63.04	26-Jan-06	95.16	66.38	27-Mar-06	94.33	67.21	5-Apr-06	94.25	67.29	22-May-06	94.19	67.35	18-Jul-06	94.33	67.21
EW-4D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	18-Jul-06	94.44	67.33
EW-5	15-Jul-05	72.20	64.78	27-Sep-05	73.62	63.36	26-Jan-06	70.15	66.83	27-Mar-06	69.75	67.23	5-Apr-06	69.80	67.18	22-May-06	69.39	67.59	18-Jul-06	69.75	67.23
EW-6A	15-Jul-05	63.80	66.52	27-Sep-05	65.00	65.32	26-Jan-06	62.50	67.82	27-Mar-06	61.40	68.92	5-Apr-06	61.40	68.92	22-May-06	61.14	69.18	18-Jul-06	61.00	69.32
EW-6B	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EW-6C	15-Jul-05	64.20	66.20	27-Sep-05	65.49	64.91	26-Jan-06	62.28	68.12	27-Mar-06	61.49	68.91	5-Apr-06	61.81	68.59	22-May-06	61.19	69.21	18-Jul-06	61.80	68.60
EW-7C	15-Jul-05	88.10	65.69	27-Sep-05	89.61	64.18	26-Jan-06	86.18	67.61	27-Mar-06	85.40	68.39	5-Apr-06	85.43	68.36	22-May-06	85.28	68.51	18-Jul-06	85.50	68.29
EW-7D	15-Jul-05	88.10	65.61	27-Sep-05	89.87	63.84	26-Jan-06	86.18	67.53	27-Mar-06	85.40	68.31	5-Apr-06	85.44	68.27	22-May-06	85.30	68.41	18-Jul-06	85.50	68.21
EW-8D	15-Jul-05	66.05	65.49	27-Sep-05	67.80	63.74	26-Jan-06	64.10	67.44	27-Mar-06	63.30	68.24	5-Apr-06	63.32	68.22	22-May-06	63.39	68.15	18-Jul-06	63.52	68.02
EW-9D	15-Jul-05	71.94	65.59	3-Oct-05	73.49	64.04	26-Jan-06	70.03	67.50	27-Mar-06	69.25	68.28	5-Apr-06	69.30	68.23	22-May-06	69.20	68.33	18-Jul-06	69.40	68.13
EW-10C	NM	NM	NM	NM	NM	NM	26-Jan-06	93.44	67.50	27-Mar-06	92.60	68.34	5-Apr-06	92.57	68.37	22-May-06	92.35	68.59	18-Jul-06	92.62	68.32
EW-11D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	22-May-06	98.33	67.00	18-Jul-06	98.65	66.68
EW-12D	NM	NM	NM	NM	NM	NM	26-Jan-06	98.03	66.39	27-Mar-06	97.21	67.21	5-Apr-06	97.16	67.26	22-May-06	97.30	67.12	18-Jul-06	97.30	67.12
EW-13D	NM	NM	NM	NM	NM	NM	26-Jan-06	98.16	66.57	27-Mar-06	97.41	67.32	5-Apr-06	97.37	67.36	22-May-06	NM	NM	18-Jul-06	97.50	67.23
EW-14D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	22-May-06	39.49	62.64	18-Jul-06	39.53	62.60
SW-2	dry			dry			dry			dry			dry			dry			dry		
DW-2	15-Jul-05	72.80	63.62	27-Sep-05	75.61	60.81	26-Jan-06	71.25	65.17	27-Mar-06	70.43	65.99	5-Apr-06	70.50	65.92	22-May-06	70.34	66.08	18-Jul-06	70.55	65.87
SW-1	15-Jul-05	66.60	64.89	27-Sep-05	68.35	63.14	26-Jan-06	65.10	66.39	27-Mar-06	64.13	67.36	5-Apr-06	64.10	67.39	22-May-06	64.18	67.31	18-Jul-06	64.20	67.29
DW-1	15-Jul-05	66.52	64.86	27-Sep-05	68.29	63.09	26-Jan-06	65.00	66.38	27-Mar-06	64.04	67.34	5-Apr-06	64.02	67.36	22-May-06	64.03	67.35	18-Jul-06	64.10	67.28
LF-02	15-Jul-05	53.81	64.89	28-Sep-05	55.46	63.24	26-Jan-06	52.20	66.50	27-Mar-06	51.35	67.35	5-Apr-06	51.59	67.11	22-May-06	51.41	67.29	18-Jul-06	51.50	67.20
PPW-1	15-Jul-05	71.87	64.87	27-Sep-05	73.50	63.24	26-Jan-06	69.70	67.04	27-Mar-06	69.06	67.68	5-Apr-06	69.06	67.68	22-May-06	69.03	67.71	18-Jul-06	69.37	67.37
WT-01	15-Jul-05	99.06	65.51	27-Sep-05	100.70	63.87	26-Jan-06	97.45	67.12	27-Mar-06	96.50	68.07	5-Apr-06	96.40	68.17	22-May-06	96.48	68.09	18-Jul-06	96.60	67.97
MW-6D	15-Jul-05	96.93	63.46	27-Sep-05	98.64	61.75	26-Jan-06	95.31	65.08	27-Mar-06	94.44	65.95	5-Apr-06	94.42	65.97	22-May-06	94.58	65.81	18-Jul-06	94.72	65.67
MW-8A	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-8B	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	22-May-06	NM	NM	18-Jul-06	NM	NM
MW-8C	15-Jul-05	71.56	64.16	27-Sep-05	73.30	62.42	26-Jan-06	69.53	66.19	27-Mar-06	68.94	66.78	5-Apr-06	68.75	66.97	22-May-06	69.00	66.72	18-Jul-06	69.00	66.72
MW-10B	15-Jul-05	97.99	63.13	27-Sep-05	99.85	61.27	26-Jan-06	95.20	65.92	27-Mar-06	95.60	65.52	5-Apr-06	95.51	65.61	22-May-06	95.60	65.52	18-Jul-06	95.70	65.42
MW-10C	15-Jul-05	97.23	63.04	27-Sep-05	99.02	61.25	26-Jan-06	95.50	64.77	27-Mar-06	95.20	65.07	5-Apr-06	94.65	65.62	22-May-06	94.69	65.58	18-Jul-06	94.80	65.47
MW-10D	15-Jul-05	97.30	63.87	27-Sep-05	100.15	61.02	26-Jan-06	96.10	65.07	27-Mar-06	95.68	65.49	5-Apr-06	95.62	65.55	22-May-06	95.60	65.57	18-Jul-06	95.90	65.27
BP-3A	21-Jul-05	63.08	61.46	6-Oct-05	65.50	59.04	2-Feb-06	62.20	62.34	NM	NM	NM	13-Apr-06	61.45	63.09	22-May-06	NM	NM	27-Jul-06	60.99	63.55
BP-3B	21-Jul-05	66.04	57.53	6-Oct-05	68.18	55.39	NM	NM	NM	NM	NM	NM	13-Apr-06	63.89	59.68	22-May-06	NM	NM	27-Jul-06	NM	NM
BP-3C	21-Jul-05	66.29	57.39	6-Oct-05	68.42	55.26	NM	NM	NM	NM	NM	NM	13-Apr-06	64.10	59.58	22-May-06	NM	NM	27-Jul-06	NM	NM
RW-01	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EX-1	13-Jul-05	79.30	55.01	27-Sep-05	81.31	53.00	26-Jan-06	69.15	65.16	27-Mar-06	77.70	56.61	5-Apr-06	76.70	57.61	22-May-06	68.31	66.00	18-Jul-06	68.38	65.93
EX-2	21-Jul-05	89.61	56.64	27-Sep-05	91.90	54.35	26-Jan-06	81.23	65.02	27-Mar-06	87.93	58.32	5-Apr-06	87.90	58.35	22-May-06	80.35	65.90	18-Jul-06	87.95	58.30
EX-3	15-Jul-05	105.15	55.54	27-Sep-05	107.20	53.49	26-Jan-06	95.13	65.56	27-Mar-06	103.34	57.35	5-Apr-06	103.50	57.19	22-May-06	94.34	66.35	18-Jul-06	103.82	56.87
IW-1	15-Jul-05	34.88	130.00	27-Sep-05	29.88	135.00	26-Jan-06	20.88	144.00	27-Mar-06	33.88	131.00	5-Apr-06	18.88	146.00	22-May-06	19.88	145.00	18-Jul-06	22.88	142.00
IW-2	15-Jul-05	10.61	155.00	27-Sep-05	8.61	157.00	26-Jan-06	13.61	152.00	27-Mar-06	21.61	144.00	5-Apr-06	31.61	134.00	22-May-06	24.61	141.00	18-Jul-06	18.88	146.00
IW-3	15-Jul-05	12.26	154.00	27-Sep-05	14.26	152.00	26-Jan-06	11.26	155.00	27-Mar-06	17.26	149.00	5-Apr-06	26.26	140.00	22-May-06	21.26	145.00	18-Jul-06	13.88	151.00
IW-4	15-Jul-05	17.09	149.00	27-Sep-05	19.09	147.00	26-Jan-06	13.09	153.00	27-Mar-06	25.09	141.00	5-Apr-06	16.09	150.00	22-May-06	13.09	153.00	18-Jul-06	10.88	154.00
IG-1[l]																					
IG-3[l]																					

Well Transducer Reading at time of depth to water readings

Table 6-1
Groundwater Elevation and Well Construction Data
Claremont Polychemical Superfund Site
Old Bethpage, NY

	October 2006			January 2007			May 2007			July 2007			October 2007			January 2008			April 2008		
Well ID	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)
EW-1A	07-Oct-06	63.98	66.02	4-Jan-07	63.55	66.45	11-May-07	62.21	67.79	5-Jul-07	62.49	67.51	5-Oct-07	62.54	67.46	8-Jan-08	62.95	67.05	10-Apr-08	62.49	67.51
EW-1B	07-Oct-06	64.51	66.02	4-Jan-07	64.03	66.50	11-May-07	62.71	67.82	5-Jul-07	63.01	67.52	5-Oct-07	63.03	67.50	8-Jan-08	63.90	66.63	10-Apr-08	63.00	67.53
EW-1C	07-Oct-06	64.69	65.75	4-Jan-07	63.99	66.45	11-May-07	62.51	67.93	5-Jul-07	63.14	67.30	5-Oct-07	62.72	67.72	8-Jan-08	63.69	66.75	10-Apr-08	62.71	67.73
EW-2A	07-Oct-06	92.40	64.96	4-Jan-07	91.79	65.57	11-May-07	90.25	67.11	5-Jul-07	90.67	66.69	5-Oct-07	90.71	66.65	8-Jan-08	91.35	66.01	10-Apr-08	90.72	66.64
EW-2B	07-Oct-06	92.54	65.19	4-Jan-07	92.10	65.63	11-May-07	90.44	67.29	5-Jul-07	91.19	66.54	5-Oct-07	90.82	66.91	8-Jan-08	91.54	66.19	10-Apr-08	90.98	66.75
EW-2C	07-Oct-06	92.75	64.91	4-Jan-07	92.29	65.37	11-May-07	90.35	67.31	5-Jul-07	91.32	66.34	5-Oct-07	90.64	67.02	8-Jan-08	91.82	65.84	10-Apr-08	91.25	66.41
EW-2D	07-Oct-06	92.54	65.70	4-Jan-07	91.81	66.43	11-May-07	90.75	67.49	5-Jul-07	91.00	67.24	5-Oct-07	90.91	67.33	8-Jan-08	91.40	66.84	10-Apr-08	90.85	67.39
EW-3A	07-Oct-06	95.70	63.25	4-Jan-07	95.21	63.74	11-May-07	94.12	64.83	5-Jul-07	94.00	64.95	5-Oct-07	94.35	64.60	8-Jan-08	94.89	64.06	10-Apr-08	94.21	64.74
EW-3B	07-Oct-06	95.84	63.25	4-Jan-07	95.33	63.76	11-May-07	94.22	64.87	5-Jul-07	94.30	64.79	5-Oct-07	94.58	64.51	8-Jan-08	95.09	64.00	10-Apr-08	94.32	64.77
EW-3C	07-Oct-06	95.72	63.23	4-Jan-07	95.22	63.73	11-May-07	94.09	64.86	5-Jul-07	94.22	64.73	5-Oct-07	94.48	64.47	8-Jan-08	95.01	63.94	10-Apr-08	94.21	64.74
EW-4A	07-Oct-06	95.40	66.38	4-Jan-07	95.03	66.75	11-May-07	93.80	67.98	5-Jul-07	94.02	67.76	5-Oct-07	94.18	67.60	8-Jan-08	94.98	66.80	10-Apr-08	94.10	67.68
EW-4B	07-Oct-06	95.44	66.36	4-Jan-07	95.08	66.72	11-May-07	93.81	67.99	5-Jul-07	94.08	67.72	5-Oct-07	94.22	67.58	8-Jan-08	95.52	66.28	10-Apr-08	94.12	67.68
EW-4C	07-Oct-06	95.15	66.39	4-Jan-07	94.75	66.79	11-May-07	93.62	67.92	5-Jul-07	93.80	67.74	5-Oct-07	93.95	67.59	8-Jan-08	94.61	66.93	10-Apr-08	93.82	67.72
EW-4D	07-Oct-06	95.22	66.55	4-Jan-07	94.56	67.21	11-May-07	93.95	67.82	5-Jul-07	93.82	67.95	5-Oct-07	94.02	67.75	8-Jan-08	94.59	67.18	10-Apr-08	93.82	67.95
EW-5	07-Oct-06	70.57	66.41	4-Jan-07	69.83	67.15	11-May-07	69.24	67.74	5-Jul-07	68.83	68.15	5-Oct-07	69.04	67.94	8-Jan-08	70.00	66.98	10-Apr-08	69.03	67.95
EW-6A	07-Oct-06	61.75	68.57	4-Jan-07	61.72	68.60	11-May-07	60.43	69.89	5-Jul-07	60.80	69.52	5-Oct-07	61.01	69.31	8-Jan-08	61.69	68.63	10-Apr-08	61.28	69.04
EW-6B	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EW-6C	07-Oct-06	62.75	67.65	4-Jan-07	62.28	68.12	11-May-07	61.00	69.40	5-Jul-07	61.80	68.60	5-Oct-07	61.30	69.10	8-Jan-08	62.00	68.40	10-Apr-08	61.30	69.10
EW-7C	07-Oct-06	86.34	67.45	4-Jan-07	85.68	68.11	11-May-07	84.96	68.83	5-Jul-07	85.02	68.77	5-Oct-07	85.11	68.68	8-Jan-08	85.58	68.21	10-Apr-08	85.20	68.59
EW-7D	07-Oct-06	86.35	67.36	4-Jan-07	85.68	68.03	11-May-07	84.75	68.96	5-Jul-07	85.03	68.68	5-Oct-07	85.14	68.57	8-Jan-08	85.52	68.19	10-Apr-08	85.10	68.61
EW-8D	07-Oct-06	64.38	67.16	4-Jan-07	63.64	67.90	11-May-07	62.66	68.88	5-Jul-07	62.95	68.59	5-Oct-07	63.02	68.52	8-Jan-08	63.42	68.12	10-Apr-08	62.95	68.59
EW-9D	07-Oct-06	70.25	67.28	4-Jan-07	69.62	67.91	11-May-07	68.70	68.83	5-Jul-07	68.90	68.63	5-Oct-07	69.00	68.53	8-Jan-08	69.49	68.04	10-Apr-08	68.80	68.73
EW-10C	07-Oct-06	93.49	67.45	4-Jan-07	93.00	67.94	11-May-07	92.22	68.72	5-Jul-07	92.00	68.94	5-Oct-07	92.26	68.68	8-Jan-08	92.88	68.06	10-Apr-08	92.33	68.61
EW-11D	07-Oct-06	99.62	65.71	4-Jan-07	98.88	66.45	11-May-07	98.35	66.98	5-Jul-07	98.22	67.11	5-Oct-07	98.30	67.03	8-Jan-08	98.95	66.38	10-Apr-08	96.25	69.08
EW-12D	07-Oct-06	98.27	66.15	4-Jan-07	97.77	66.65	11-May-07	97.10	67.32	5-Jul-07	96.87	67.55	5-Oct-07	97.10	67.32	8-Jan-08	97.54	66.88	10-Apr-08	97.10	67.32
EW-13D	07-Oct-06	98.48	66.25	4-Jan-07	97.49	67.24	11-May-07	96.76	67.97	5-Jul-07	97.01	67.72	5-Oct-07	97.10	67.63	8-Jan-08	97.54	67.19	10-Apr-08	97.86	66.87
EW-14D	07-Oct-06	41.02	61.11	4-Jan-07	43.50	58.63	15-May-06	39.09	63.04	5-Jul-07	39.50	62.63	gate locked			8-Jan-08	40.47	61.66	10-Apr-08	39.31	62.82
SW-2	dry			dry			dry			dry			dry			dry			dry		
DW-2	07-Oct-06	71.44	64.98	4-Jan-07	79.90	56.52	11-May-07	69.65	66.77	5-Jul-07	69.80	66.62	5-Oct-07	70.01	66.41	8-Jan-08	71.68	64.74	10-Apr-08	69.99	66.43
SW-1	07-Oct-06	65.03	66.46	4-Jan-07	64.73	66.76	11-May-07	63.40	68.09	5-Jul-07	63.70	67.79	5-Oct-07	63.80	67.69	8-Jan-08	64.59	66.90	10-Apr-08	63.74	67.75
DW-1	07-Oct-06	64.95	66.43	4-Jan-07	64.62	66.76	11-May-07	63.30	68.08	5-Jul-07	63.57	67.81	5-Oct-07	64.01	67.37	8-Jan-08	64.10	67.28	10-Apr-08	63.64	67.74
LF-02	11-Oct-06	40.02	78.68	4-Jan-07	51.65	67.05	11-May-07	50.89	67.81	5-Jul-07	50.80	67.90	5-Oct-07	50.70	68.00	8-Jan-08	51.20	67.50	10-Apr-08	50.70	68.00
PPW-1	07-Oct-06	70.23	66.51	4-Jan-07	69.34	67.40	11-May-07	68.66	68.08	5-Jul-07	68.20	68.54	5-Oct-07	68.88	67.86	8-Jan-08	69.14	67.60	10-Apr-08	68.62	68.12
WT-01	07-Oct-06	97.54	67.03	4-Jan-07	97.58	66.99	11-May-07	96.35	68.22	5-Jul-07	96.50	68.07	5-Oct-07	96.01	68.56	8-Jan-08	96.60	67.97	10-Apr-08	96.13	68.44
MW-6D	07-Oct-06	95.95	64.44	4-Jan-07	94.80	65.59	11-May-07	94.00	66.39	5-Jul-07	93.90	66.49	10-Oct-07	93.80	66.59	8-Jan-08	94.40	65.99	10-Apr-08	93.88	66.51
MW-8A	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	10-Apr-08	68.40	64.78
MW-8B	07-Oct-06	NM	NM	4-Jan-07	NM	NM	11-May-07	NM	NM	5-Jul-07	NM	NM	10-Oct-07	67.64	NM	8-Jan-08	67.41	56.27	10-Apr-08	67.80	66.44
MW-8C	07-Oct-06	70.20	65.52	4-Jan-07	69.38	66.34	11-May-07	68.20	67.52	5-Jul-07	68.65	67.07	10-Oct-07	68.53	67.19	8-Jan-08	69.19	66.53	10-Apr-08	68.50	67.22
MW-10B	07-Oct-06	96.79	64.33	4-Jan-07	96.20	64.92	11-May-07	95.20	65.92	5-Jul-07	95.25	65.87	10-Oct-07	95.52	65.60	8-Jan-08	95.84	65.28	10-Apr-08	95.28	65.84
MW-10C	07-Oct-06	95.56	64.71	4-Jan-07	95.23	65.04	11-May-07	95.10	65.17	5-Jul-07	94.30	65.97	10-Oct-07	94.48	65.79	8-Jan-08	94.90	65.37	10-Apr-08	94.32	65.95
MW-10D	07-Oct-06	97.05	64.12	4-Jan-07	96.00	65.17	11-May-07	94.22	66.95	5-Jul-07	95.40	65.77	10-Oct-07	95.52	65.65	8-Jan-08	95.78	65.39	10-Apr-08	95.18	65.99
BP-3A	12-Oct-06	62.27	62.27	18-Jan-07	62.87	61.67	16-May-07	61.47	63.07	12-Jul-07	61.29	63.25	5-Oct-07	61.15	63.39	8-Jan-08	62.91	61.63	10-Apr-08	62.18	62.36
BP-3B	12-Oct-06	65.27	58.30	18-Jan-07	64.57	59.00	16-May-07	63.35	NM	12-Jul-07	63.84	59.73	5-Oct-07	NM	NM	8-Jan-08	64.61	58.96	10-Apr-08	NM	NM
BP-3C	12-Oct-06	65.50	58.18	18-Jan-07	62.92	60.76	16-May-07	63.56	NM	12-Jul-07	NM	NM	5-Oct-07	NM	NM	8-Jan-08	64.83	58.85	10-Apr-08	nm	NM
RW-01	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EX-1	07-Oct-06	79.75	54.56	4-Jan-07	72.27	62.04	10-May-07	NM	NM	5-Jul-07	NM	NM	5-Oct-07	NM	NM	NM	NM	NM	NM	NM	NM
EX-2	07-Oct-06	89.35	56.90	4-Jan-07	88.86	57.39	11-May-07	87.90	58.35	5-Jul-07	80.30	65.95	5-Oct-07	88.31	57.94	NM	NM	NM	NM	NM	NM
EX-3	07-Oct-06	102.96	57.73	4-Jan-07	104.88	55.81	11-May-07	85.57	75.12	5-Jul-07	93.91	66.78	5-Oct-07	94.01	66.68	NM	NM	NM	NM	NM	NM
IW-1	7-Oct-06	24.88	140.00	4-Jan-07	21.88	143.00	22-May-06	19.88	145.00	5-Jul-07	21.88	143.00	5-Oct-07	6.88	158.00	8-Jan-08	5.68	161.00	10-Apr-08	-2.42	167.30
IW-2	7-Oct-06	21.88	143.00	4-Jan-07	22.61	143.00	22-May-06	24.61	141.00	5-Jul-07	21.88	143.00	5-Oct-07	8.88	156.00	8-Jan-08	6.51	162.30	10-Apr-08	-5.22	170.10
IW-3	7-Oct-06	10.88	154.00	4-Jan-07	11.26	155.00	22-May-06	21.26	145.00	5-Jul-07	14.88	150.00	5-Oct-07	9.88	155.00	8-Jan-08	9.96	161.20	10-Apr-08	-4.72	169.60
IW-4	7-Oct-06	11.88	153.00	4-Jan-07	13.09	153.00	22-May-06	13.09	153.00	5-Jul-07	13.88	151.00	5-Oct-07	6.88	158.00	8-Jan-08	10.49	157.80	10-Apr-08	6.48	158.40
IG-1[j]																					
IG-3[j]																					

Well Transducer Reading at time of depth to water readings

Table 6-1
Groundwater Elevation and Well Construction Data
Claremont Polychemical Superfund Site
Old Bethpage, NY

	July 2008			October 2008			January 2009			April 2009			July 2009			October 2009			Jan-10		
Well ID	Sample Date	Depth to Water Below Ref El[b]	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)
EW-1A	14-Jul-08	62.97	67.03	7-Oct-08	63.58	66.42	12-Jan-09	63.22	66.78	6-Apr-09	62.54	67.46	13-Jul-09	62.85	67.15	19-Oct-09	64.00	66.00	14-Jan-10	64.85	65.15
EW-1B	14-Jul-08	63.86	66.67	7-Oct-08	64.38	66.15	12-Jan-09	63.82	66.71	6-Apr-09	63.22	67.31	13-Jul-09	63.63	66.90	19-Oct-09	64.50	66.03	14-Jan-10	64.50	66.03
EW-1C	14-Jul-08	63.72	66.72	7-Oct-08	64.30	66.14	12-Jan-09	63.84	66.60	6-Apr-09	63.07	67.37	13-Jul-09	63.79	66.65	19-Oct-09	64.90	65.54	14-Jan-10	64.20	66.24
EW-2A	16-Jul-08	91.53	65.83	9-Oct-08	91.59	65.77	12-Jan-09	91.90	65.46	7-Apr-09	90.45	66.91	13-Jul-09	90.93	66.43	20-Oct-09	92.41	64.95	14-Jan-10	92.65	64.71
EW-2B	14-Jul-08	91.80	65.93	10-Oct-08	92.65	65.08	12-Jan-09	91.40	66.33	7-Apr-09	11.38	146.36	13-Jul-09	91.56	66.17	20-Oct-09	92.56	65.17	14-Jan-10	92.65	65.08
EW-2C	14-Jul-08	91.35	66.31	9-Oct-08	92.40	65.26	12-Jan-09	91.79	65.87	7-Apr-09	91.20	66.46	14-Jul-09	91.73	65.93	21-Oct-09	92.57	65.09	14-Jan-10	93.12	64.54
EW-2D	16-Jul-08	91.79	66.45	7-Oct-08	92.18	66.06	13-Jan-09	91.62	66.62	7-Apr-09	91.28	66.96	14-Jul-09	91.81	66.43	20-Oct-09	92.64	65.60	19-Jan-10	92.33	65.91
EW-3A	14-Jul-08	94.64	64.31	8-Oct-08	95.15	63.80	13-Jan-09	94.83	64.12	8-Apr-09	94.60	64.35	14-Jul-09	94.78	64.17	19-Oct-09	95.65	63.30	15-Jan-10	95.50	63.45
EW-3B	14-Jul-08	94.96	64.13	8-Oct-08	95.48	63.61	13-Jan-09	94.75	64.34	8-Apr-09	94.93	64.16	14-Jul-09	94.93	64.16	19-Oct-09	95.96	63.13	15-Jan-10	95.86	63.23
EW-3C	17-Jul-08	94.85	64.10	8-Oct-08	95.24	63.71	13-Jan-09	94.69	64.26	7-Apr-09	94.84	64.11	14-Jul-09	94.75	64.20	19-Oct-09	95.83	63.12	15-Jan-10	96.75	62.20
EW-4A	15-Jul-08	95.20	66.58	7-Oct-08	95.50	66.28	13-Jan-09	94.90	66.88	6-Apr-09	94.68	67.10	14-Jul-09	95.10	66.68	20-Oct-09	97.20	64.58	15-Jan-10	95.64	66.14
EW-4B	15-Jul-08	94.76	67.04	7-Oct-08	95.68	66.12	13-Jan-09	95.00	66.80	7-Apr-09	94.62	67.18	14-Jul-09	95.32	66.48	20-Oct-09	97.00	64.80	15-Jan-10	96.35	65.45
EW-4C	16-Jul-08	94.77	66.77	7-Oct-08	95.15	66.39	13-Jan-09	94.20	67.34	7-Apr-09	94.25	67.29	14-Jul-09	94.57	66.97	20-Oct-09	95.92	65.62	15-Jan-10	96.10	65.44
EW-4D	14-Jul-08	94.85	66.92	6-Oct-08	95.33	66.44	12-Jan-09	94.48	67.29	6-Apr-09	94.20	67.57	13-Jul-09	94.56	67.21	19-Oct-09	95.65	66.12	18-Jan-10	95.42	66.35
EW-5	15-Jul-08	70.50	66.48	8-Oct-08	70.55	66.43	14-Jan-09	69.63	67.35	8-Apr-09	69.65	67.33	15-Jul-09	69.50	67.48	21-Oct-09	72.32	64.66	19-Jan-10	71.70	65.28
EW-6A	17-Jul-08	61.84	68.48	7-Oct-08	62.31	68.01	14-Jan-09	61.55	68.77	7-Apr-09	61.28	69.04	14-Jul-09	61.51	68.81	20-Oct-09	62.62	67.70	19-Jan-10	61.77	68.55
EW-6B	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EW-6C	17-Jul-08	62.30	68.10	7-Oct-08	62.80	67.60	13-Jan-09	61.89	68.51	7-Apr-09	61.94	68.46	14-Jul-09	62.10	68.30	20-Oct-09	63.18	67.22	19-Jan-10	62.56	67.84
EW-7C	14-Jul-08	85.83	67.96	6-Oct-08	86.39	67.40	12-Jan-09	85.69	68.10	6-Apr-09	97.43	56.36	13-Jul-09	85.68	68.11	19-Oct-09	86.80	66.99	18-Jan-10	86.17	67.62
EW-7D	14-Jul-08	85.85	67.86	6-Oct-08	86.35	67.36	12-Jan-09	85.53	68.18	6-Apr-09	97.35	56.36	13-Jul-09	85.64	68.07	19-Oct-09	86.86	66.85	18-Jan-10	86.24	67.47
EW-8D	14-Jul-08	63.68	67.86	6-Oct-08	64.24	67.30	12-Jan-09	63.49	68.05	6-Apr-09	63.13	68.41	13-Jul-09	63.51	68.03	19-Oct-09	64.70	66.84	18-Jan-10	64.08	67.46
EW-9D	14-Jul-08	69.58	67.95	6-Oct-08	70.15	67.38	12-Jan-09	69.40	68.13	6-Apr-09	69.27	68.26	13-Jul-09	69.62	67.91	19-Oct-09	70.68	66.85	18-Jan-10	70.21	67.32
EW-10C	14-Jul-08	92.93	68.01	7-Oct-08	93.59	67.35	13-Jan-09	92.84	68.10	6-Apr-09	92.62	68.32	13-Jul-09	92.93	68.01	19-Oct-09	94.03	66.91	18-Jan-10	93.26	67.68
EW-11D	14-Jul-08	99.07	66.26	6-Oct-08	99.52	65.81	13-Jan-09	98.72	66.61	6-Apr-09	98.63	66.70	13-Jul-09	98.93	66.40	19-Oct-09	100.06	65.27	18-Jan-10	99.65	65.68
EW-12D	14-Jul-08	97.86	66.56	6-Oct-08	98.35	66.07	13-Jan-09	97.73	66.69	6-Apr-09	97.35	67.07	13-Jul-09	97.85	66.57	19-Oct-09	98.91	65.51	18-Jan-10	98.36	66.06
EW-13D	14-Jul-08	97.94	66.79	6-Oct-08	98.25	66.48	12-Jan-09	97.38	67.35	6-Apr-09	97.30	67.43	13-Jul-09	97.70	67.03	19-Oct-09	98.72	66.01	18-Jan-10	98.10	66.63
EW-14D	14-Jul-08	40.17	61.96	7-Oct-08	40.34	61.79	13-Jan-09	39.68	62.45	7-Apr-09	40.02	62.11	14-Jul-09	39.75	62.38	20-Oct-09	41.18	60.95	19-Jan-10	40.95	61.18
SW-2	dry			dry			dry			dry			dry			dry			dry		
DW-2	15-Jul-08	70.60	65.82	8-Oct-08	70.96	65.46	14-Jan-09	70.80	65.62	6-Apr-09	69.95	66.47	13-Jul-09	70.17	66.25	21-Oct-09	71.85	64.57	19-Jan-10	70.20	66.22
SW-1	15-Jul-08	64.50	66.99	8-Oct-08	64.05	67.44	14-Jan-09	64.65	66.84	7-Apr-09	64.00	67.49	15-Jul-09	64.34	67.15	21-Oct-09	65.40	66.09	19-Jan-10	65.15	66.34
DW-1	15-Jul-08	64.20	67.18	8-Oct-08	64.64	66.74	14-Jan-09	64.20	67.18	7-Apr-09	63.37	68.01	15-Jul-09	64.00	67.38	21-Oct-09	65.23	66.15	19-Jan-10	65.81	65.57
LF-02	16-Jul-08	52.54	66.16	8-Oct-08	51.94	66.76	14-Jan-09	51.60	67.10	8-Apr-09	51.20	67.50	15-Jul-09	51.50	67.20	22-Oct-09	52.35	66.35	19-Jan-10	52.53	66.17
PPW-1	16-Jul-08	69.65	67.09	9-Oct-08	69.79	66.95	Permanently closed Oct. 2008			Permanently closed Oct. 2008			Permanently closed Oct. 2008			Permanently closed Oct. 2008			Permanently closed Oct. 2008		
WT-01	16-Jul-08	96.65	67.92	9-Oct-08	97.29	67.28	14-Jan-09	96.63	67.94	7-Apr-09	96.52	68.05	14-Jul-09	96.71	67.86	21-Oct-09	97.59	66.98	20-Jan-10	96.42	68.15
MW-6D	16-Jul-08	94.82	65.57	8-Oct-08	94.99	65.40	14-Jan-09	94.80	65.59	8-Apr-09	94.35	66.04	15-Jul-09	94.71	65.68	21-Oct-09	95.74	64.65	20-Jan-10	95.73	64.66
MW-8A	17-Jul-08	68.40	64.78	8-Oct-08	69.25	63.93	14-Jan-09	68.91	64.27	9-Apr-09	68.44	64.74	16-Jul-09	68.55	64.63	22-Oct-09	69.92	63.26	21-Jan-10	68.76	64.42
MW-8B	15-Jul-08	68.48	NM	8-Oct-08	70.14	64.10	15-Jan-09	68.40	65.84	9-Apr-09	67.58	66.66	16-Jul-09	65.70	68.54	22-Oct-09	69.55	64.69	21-Jan-10	69.44	64.80
MW-8C	16-Jul-08	69.21	66.51	8-Oct-08	70.30	65.42	14-Jan-09	68.90	66.82	9-Apr-09	69.00	66.72	16-Jul-09	69.00	66.72	22-Oct-09	70.26	65.46	21-Jan-10	70.08	65.64
MW-10B	15-Jul-08	95.66	65.46	8-Oct-08	96.30	64.82	14-Jan-09	95.82	65.30	8-Apr-09	95.72	65.40	15-Jul-09	95.81	65.31	21-Oct-09	96.84	64.28	20-Jan-10	96.68	64.44
MW-10C	15-Jul-08	95.95	64.32	9-Oct-08	95.34	64.93	15-Jan-09	94.80	65.47	8-Apr-09	94.74	65.53	15-Jul-09	94.99	65.28	21-Oct-09	95.83	64.44	20-Jan-10	95.75	64.52
MW-10D	15-Jul-08	96.12	65.05	9-Oct-08	96.15	65.02	15-Jan-09	95.47	65.70	8-Apr-09	95.70	65.47	15-Jul-09	95.93	65.24	21-Oct-09	95.73	65.44	20-Jan-10	96.46	64.71
BP-3A	16-Jul-08	62.08	62.46	8-Oct-08	62.35	62.19	14-Jan-09	62.50	62.04	9-Apr-09	64.45	60.09	13-Jul-09	61.80	62.74	22-Oct-09	62.65	61.89	20-Jan-10	63.53	61.01
BP-3B	17-Jul-08	64.43	NM	9-Oct-08	64.51	59.06			123.57	9-Apr-09	64.45	59.12	16-Jul-09	63.90	59.67	22-Oct-09	65.34	58.23	21-Jan-10	65.25	58.32
BP-3C	17-Jul-08	84.71	NM	9-Oct-08	64.76	58.92	15-Jan-09	64.78	58.90	9-Apr-09	64.64	59.04	16-Jul-09	64.10	59.58	26-Oct-09	65.79	57.89	20-Jan-10	63.30	60.38
RW-01	abandoned			abandoned			abandoned			abandoned			abandoned			abandoned			abandoned		
EX-1	NM	NM	NM	16-Oct-08	80.70	53.61	20-Jan-09	80.40	53.91	14-Apr-09	80.52	53.79	20-Jul-09	68.30	66.01	13-Oct-09	69.29	65.02	11-Jan-10	82.68	51.63
EX-2	NM	NM	NM	16-Oct-08	87.98	58.27	20-Jan-09	86.90	59.35	14-Apr-09	87.45	58.80	20-Jul-09	87.50	58.75	13-Oct-09	85.62	60.63	11-Jan-10	89.40	56.85
EX-3	NM	NM	NM	16-Oct-08	104.60	56.09	20-Jan-09	84.96	75.73	14-Apr-09	**	#VALUE!	20-Jul-09	91.00	69.69	13-Oct-09	107.10	53.59	11-Jan-10	95.20	65.49
IW-1	25-Sep-08	1.60	163.28	17-Oct-08	6.05	158.83	20-Jan-09	0.00	164.88	1-Apr-09	15.00	149.88	21-Jul-09	0.46	164.42	28-Oct-09	2.57	162.31	22-Jan-10	4.44	160.44
IW-2	25-Sep-08	3.85	161.76	17-Oct-08	6.80	158.81	20-Jan-09	16.10	149.51	1-Apr-09	18.30	147.31	21-Jul-09	17.70	147.91	28-Oct-09	18.30	147.31	22-Jan-10	16.40	149.21
IW-3	25-Sep-08	1.62	164.64	17-Oct-08	10.55	155.71	20-Jan-09	4.70	161.56	1-Apr-09	10.77	155.49	21-Jul-09	9.20	157.06	28-Oct-09	4.70	161.56	22-Jan-10	104.50	61.76
IW-4	25-Sep-08	11.80	154.29	17-Oct-08	10.55	155.54	20-Jan-09	7.50	158.59	1-Apr-09	18.20	147.89	21-Jul-09	19.90	146.19	28-Oct-09	17.53	148.56	22-Jan-10	5.10	160.99
IG-1[f]																					
IG-3[f]																					
Well Transducer Reading at time of depth to water readings																					
IW-1				17-Oct-08		162.3	20-Jan-09		169.5	1-Apr-09		152.9	21-Jul-09		168.1	28-Oct-09		167.1	22-Jan-10		162.9
IW-2				17-Oct-08		164.9	20-Jan-09		147.8	1-Apr-09		154.7	21-Jul-09		152.1	28-Oct-09		145.7	22-Jan-10		143.4
IW-3				17-Oct-08		159.5	20-Jan-09		165.2	1-Apr-09		159.2	21-Jul-09		160.8	28-Oct-09		165.9	22-Jan-10		61.5
IW-4				17-Oct-08		158.5	20-Jan-09		161.8	1-Apr-09		151.3	21-Jul-09		150.3	28-Oct-09		152.6	22-Jan-10		163

** 4/14/09 problems with DTW reading on Ext-3 (95.5 feet)

Table 6-1
Groundwater Elevation and Well Construction Data
Claremont Polychemical Superfund Site
Old Bethpage, NY

	Apr-10			Jul-10			Oct-10		
Well ID	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)
EW-1A	1-Apr-10	63.30	66.70	8-Jul-10	62.00	68.00	12-Oct-10	63.10	66.90
EW-1B	1-Apr-10	63.87	66.66	8-Jul-10	61.90	68.63	12-Oct-10	63.00	67.53
EW-1C	1-Apr-10	63.73	66.71	8-Jul-10	61.75	68.69	12-Oct-10	63.48	66.96
EW-2A	1-Apr-10	91.28	66.08	8-Jul-10	90.20	67.16	12-Oct-10	91.52	65.84
EW-2B	1-Apr-10	91.58	66.15	13-Jul-10	90.20	67.53	12-Oct-10	91.70	66.03
EW-2C	1-Apr-10	91.50	66.16	14-Jul-10	90.05	67.61	12-Oct-10	91.85	65.81
EW-2D	6-Apr-10	90.65	67.59	13-Jul-10	89.91	68.33	12-Oct-10	91.74	66.50
EW-3A	5-Apr-10	94.28	64.67	9-Jul-10	92.68	66.27	12-Oct-10	94.61	64.34
EW-3B	5-Apr-10	94.13	64.96	9-Jul-10	93.03	66.06	12-Oct-10	94.84	64.25
EW-3C	5-Apr-10	94.10	64.85	9-Jul-10	93.00	65.95	12-Oct-10	94.81	64.14
EW-4A	5-Apr-10	94.55	67.23	9-Jul-10	93.40	68.38	12-Oct-10	94.78	67.00
EW-4B	5-Apr-10	94.84	66.96	9-Jul-10	93.63	68.17	12-Oct-10	94.83	66.97
EW-4C	5-Apr-10	94.12	67.42	9-Jul-10	92.95	68.59	12-Oct-10	94.61	66.93
EW-4D	5-Apr-10	94.07	67.70	12-Jul-10	93.01	68.76	12-Oct-10	94.93	66.84
EW-5	6-Apr-10	69.19	67.79	13-Jul-10	69.32	67.66	12-Oct-10	69.06	67.92
EW-6A	7-Apr-10	60.95	69.37	13-Jul-10	59.93	70.39	12-Oct-10	61.92	68.40
EW-6B	abandoned			abandoned			abandoned		
EW-6C	7-Apr-10	61.30	69.10	13-Jul-10	60.48	69.92	12-Oct-10	62.00	68.40
EW-7C	5-Apr-10	84.98	68.81	12-Jul-10	84.13	69.66	12-Oct-10	85.93	67.86
EW-7D	5-Apr-10	85.05	68.66	12-Jul-10	84.10	69.61	12-Oct-10	85.83	67.88
EW-8D	5-Apr-10	62.92	68.62	12-Jul-10	61.83	69.71	12-Oct-10	60.73	70.81
EW-9D	5-Apr-10	68.99	68.54	12-Jul-10	67.89	69.64	12-Oct-10	60.73	76.80
EW-10C	5-Apr-10	92.00	68.94	13-Jul-10	93.82	67.12	12-Oct-10	97.71	63.23
EW-11D	5-Apr-10	97.92	67.41	12-Jul-10	97.24	68.09	12-Oct-10	99.01	66.32
EW-12D	5-Apr-10	96.93	67.49	12-Jul-10	96.03	68.39	12-Oct-10	97.72	66.70
EW-13D	5-Apr-10	96.57	68.16	12-Jul-10	96.27	68.46	12-Oct-10	92.71	72.02
EW-14D	5-Apr-10	38.08	64.05	12-Jul-10	38.25	63.88	17-Nov-10	40.81	61.32
SW-2	dry			dry			dry		
DW-2	6-Apr-10	70.32	66.10	13-Jul-10	69.07	67.35	12-Oct-10	70.71	65.71
SW-1	6-Apr-10	64.31	67.18	8-Jul-10	62.69	68.80	12-Oct-10	64.47	67.02
DW-1	6-Apr-10	63.85	67.53	8-Jul-10	62.28	69.10	12-Oct-10	63.83	67.55
LF-02	7-Apr-10	51.10	67.60	12-Jul-10	46.64	72.06	12-Oct-10	51.60	67.10
PPW-1	Permanently closed Oct. 2008			Permanently closed Oct. 2008			Permanently closed Oct. 2008		
WT-01	8-Apr-10	95.38	69.19	14-Jul-10	92.42	72.15	12-Oct-10	97.15	67.42
MW-6D	6-Apr-10	94.20	66.19	14-Jul-10	92.59	67.80	12-Oct-10	94.70	65.69
MW-8A	7-Apr-10	68.70	64.48	14-Jul-10	66.86	66.32	17-Nov-10	70.50	62.68
MW-8B	7-Apr-10	67.05	67.19	14-Jul-10	66.10	68.14	17-Nov-10	68.98	65.26
MW-8C	7-Apr-10	68.40	67.32	15-Jul-10	67.43	68.29	12-Oct-10	65.92	69.80
MW-10B	6-Apr-10	95.07	66.05	13-Jul-10	90.95	70.17	12-Oct-10	95.88	65.24
MW-10C	6-Apr-10	94.00	66.27	14-Jul-10	92.93	67.34	12-Oct-10	95.30	64.97
MW-10D	6-Apr-10	94.35	66.82	14-Jul-10	94.20	66.97	12-Oct-10	96.10	65.07
BP-3A	7-Apr-10	61.24	63.30	12-Jul-10	59.35	65.19	3-Nov-10	62.03	62.51
BP-3B	8-Apr-10	nr	#VALUE!	15-Jul-10	62.21	61.36	3-Nov-10	64.90	58.67
BP-3C	7-Apr-10	62.03	61.65	12-Jul-10	62.30	61.38	3-Nov-10	65.05	58.63
RW-01	abandoned			abandoned			abandoned		
EX-1	12-Apr-10	81.56	52.75	26-Jul-10	79.20	55.11	12-Oct-10	80.15	54.16
EX-2	12-Apr-10	87.90	58.35	20-Jul-10	87.10	59.15	12-Oct-10	88.30	57.95
EX-3	12-Apr-10	87.30	73.39	20-Jul-10	107.22	53.47	12-Oct-10	107.90	52.79
IW-1	24-Mar-10	5.25	159.63	24-Jun-10	5.20	159.68	14-Oct-10	5.40	159.48
IW-2	24-Mar-10	11.98	153.63	24-Jun-10	11.98	153.63	14-Oct-10	13.78	151.83
IW-3	24-Mar-10	5.30	160.96	24-Jun-10	5.30	160.96	14-Oct-10	5.40	160.86
IW-4	24-Mar-10	8.98	157.11	24-Jun-10	8.98	157.11	14-Oct-10	12.83	153.26
IG-1[j]									
IG-3[j]									
Well Transducer Reading at time of depth to water readings	24-Mar-10		162.4	24-Jun-10		162.5	14-Oct-10		161.2
	24-Mar-10		153.8	24-Jun-10		147.0	14-Oct-10		124.4
	24-Mar-10		154.5	24-Jun-10		154.8	14-Oct-10		163.6
	24-Mar-10		157.7	24-Jun-10		155.2	14-Oct-10		154.1

ATTACHMENT 15

Lubrication Schedule

Lubrication Schedule

Tag Number	Equipment Name	Lubrication Freq.	Grease/Oil Type
M I-10-1	Floc Tank#1 Mixer Motor	Annual	Shell Alvania EP2 or Eq.
M 1-10-1	Floc Tank #1 Mixer Gearbox	6 mo.	Shell EP-100 or E q.
M 1-10-2	Floc Tank #2 Mixer Motor	Annualy	Shell Alvania EP2 or Eq.
M 1-10-2	Floc Tank #2 Mixer Gearbox	6 mo.	Shell EP-100 or E q.
P 1-11-1	Rec cle Sludge Pum #1	As Needed	Shell Tellus T w/ISO 15
P 1-11-2	Transfer Sludge Pum #2	As Needed	Shell Tellus T w/ISO 15
P I-12-1	Recycle Sludge Pum #2	As Needed	Shell Tellus T w/ISO 15
P 1-12-2	Transfer Sludge Pump#1	As Needed	Shell Tellus T w/ISO 15
M 1-3-1	Flow Equal Tank Mixer Motor	Annualy	Shell Alvania EP2 or Eq.
M 1-3-1	Flow Equal Tank Mixer Gearbox	6 mo.	Shell EP-100 or Eq.
P 1-4-1	Influent Pump #1 Motor	3 years	Shell Dolium-R or E q.
P 1-4-1	Influent Pump #1	N/A	N/A
P 1-4-2	Influent Pump #2 Motor	3 years	Shell Dolium-R or Eq.
P 1-4-2	Influent Pump #2	N/A	N/A
P 1-4-3	Influent Pump #3 Motor	3 years	Shell Dolium-R or Eq.
P 1-4-3	Influent Pump 43	N/A	N/A
M 1-8-1	Reaction Tank #I Mixer Motor	Annualy	Shell Alvania EP2 or Eq.
M 1-8-I	Reaction Tank #l Mixer Gearbox	6 mo.	Shell EP-100 or Eq.
M I-8-2	Reaction Tank #2 Mixer Motor	3 ears	Shell Dolium-R or Eq.
M 1-8-2	Reaction Tank #2 Mixer Gearbox	6 mo.	Shell EP-100 or E q.
M I-9-1	Flash Mix Tank #1 Mixer Motor	Annualy	Shell Alvania EP2 or Eq.
M 1-9-1	Flash Mix Tank #1 Mixer Gearbox	6 Mo.	Shell EP-100 or E q.
M I-9-2	Flash Mix Tank #2 Mixer Motor	Annualy	Shell Alvania EP2 or Eq.
M 1-9-2	Flash Mix Tank #2 Mixer Gearbox	6 mo.	Shell EP-100 or Eq.
P 2-12-1	Injection Pump#I Motor	3 years	Shell Dolium-R or Eq.
P 2-12-1	Injection Pump#I	N/A	N/A
P 2-12-2	Injection Pump #2 Motor	3 years	Shell Dolium-R or Eq.
P 2-12-2	In Pump #2	N/A	N/A
P 2-3-I	Air Striper Feed Pump # I Motor	3 years	Shell Dolium-R or Eq.
P 2-3-1	Air Stripper Feed Pump # I	N/A	N/A
P 2-3-2	Air Stripper Feed Pump #2 Motor	3 years	Shell Dolium-R or Eq.
P 2-3-2	Air Stripper Feed Pump #2	N/A	N/A
P 2-3-3	Air Stripper Feed Pump #3 Motor	3 years	Shell Dolium-R or Eq.
P 2-3-3	Air Stripper Feed Pump #3	N/A	N/A
M 2-6-I	Air Stripper Blower Motor	I year	Shell Dolium-R or Eq.
M 2-6-1	Air Stripper Blower	6 mo.	Shell Dolium-R or Eq.
P 2-9-1	Carbon Adsorb Feed Pump #I Motor	3 years	Shell Dolium-R or Eq.
P 2-9-1	Carbon Adsorb Feed Pump # I	N/A	N/A
P 2-9-2	Carbon Adsorb Feed Pump #2 Motor	3 years	Shell Dolium-R or E q.
P 2-9-2	Carbon Adsorb Feed Pump #2	N/A	N/A
P 2-9-3	Carbon Adsorb Feed Pump #3 Motor	3 years	Shell Dolium-R or Eq.
P 2-9-3	Carbon Adsorb Feed Pump #3	N/A	N/A
P 3-2-1	Filter Press Feed Pump	As Needed	Shell Tellus T w/ISO 15
M 3-3-1	Filter Press	6 mo./Roller	Shell Dolium-R or Eq.
P 3-5-1	Recycle Pump #I Motor	3 years	Shell Dolium-R or Eq.
P 3-5-1	Recycle Pump #I	N/A	N/A
P 3-5-2	Recycle Pump #2 Motor	3 years	Shell Dolium-R or Eq.
P 3-5-2	Recycle Pump #2	N/A	N/A
M 4-2-1	Air Compressor #I Motor	6 mo.	Shell Dolium-R or Eq.
M 4-2-1	Air Compressor # 1	3 mo.	Champion Part#P08908A
M 4-2-2	Air Compressor #2 Motor	6 mo.	Shell Dolium-R or Eq.
M 4-2-2	Air Compressor #2	3 mo.	Champion Part#P08908A
	KMn04 Tank Mixer Motor	Annualy	Shell Alvania EP2 or Eq.

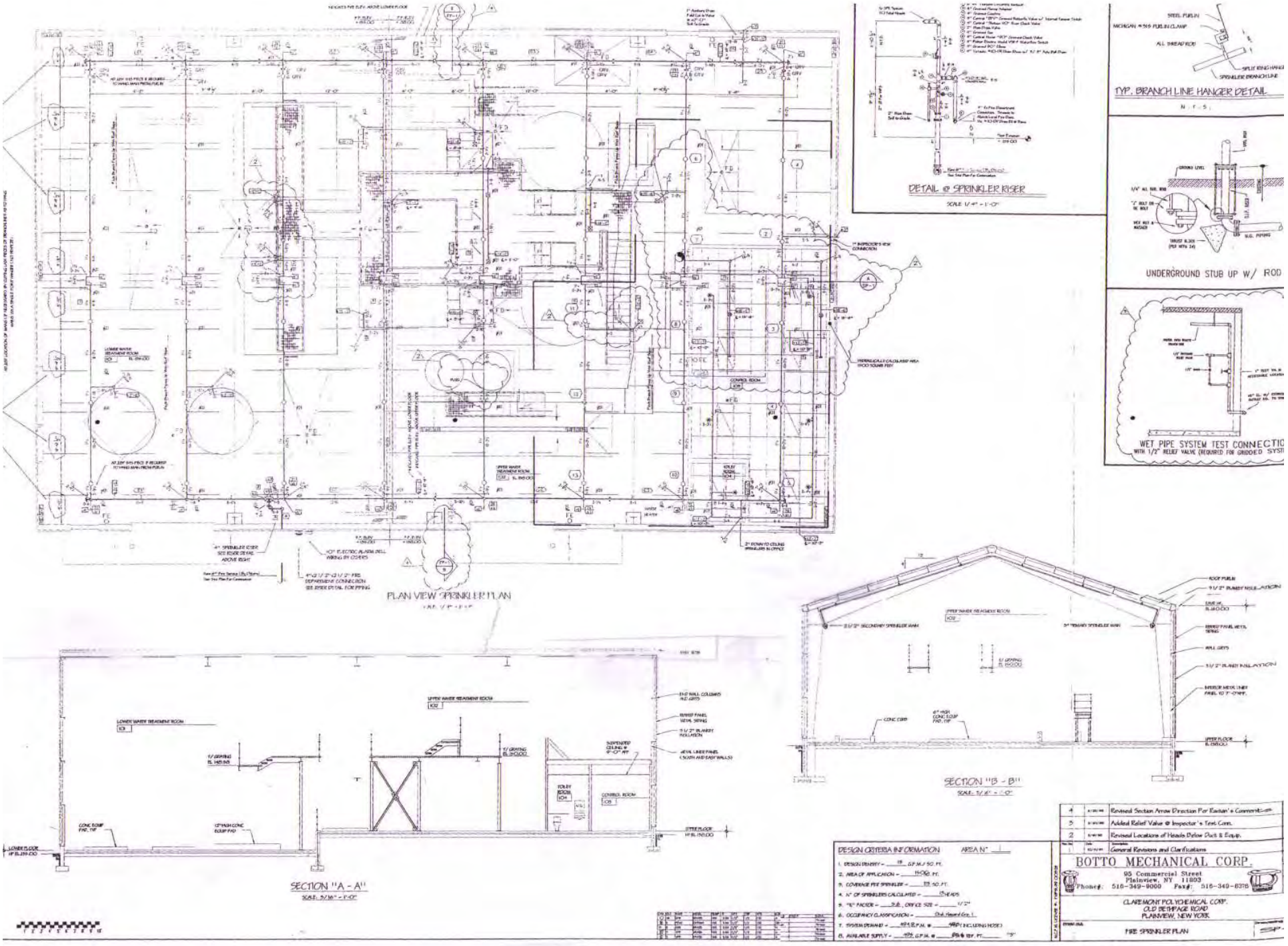
Lubrication Schedule

Tag	Number	Equipment Name	Lubrication Freq.	Grease/Oil Type
M	5-1-1	KMn04 Tank Mixer Gearbox	6 mo.	Shell EP-100 or E .
M	5-2-1	NiOH Tank Mixer Motor	Annualy	Shell Alvania EP2 or E q.
M	5-2-1	Na0H Tank Mixer Gearbox	6 mo.	Shell EP-100 or Eq.
M	5-3-1	HCI Tank Mixer Motor	Annual	Shell Alvania EP2 or E q.
M	5-3-1	HCI Tank Mixer Gearbox	6 mo.	Shell EP-100 or E q.
M	5-4-1	Polymer Tank #1 Mixer Motor	Annual	Shell Alvania EP2 or Eq.
M	5-4-1	Polymer Tank #1 Mixer Gearbox	6 mo.	Shell Omala 68
M	5-4-1	Polymer Feed Pump #I Motor	3 ears	Shell Dolium-R or Eq.
P	5-4-1	Polymer Feed Pump #1	As Needed	Silicone tube as req.
M	5-4-2	Polymer Tank #2 Mixer Motor	Annualy	Shell Alvania EP2 or Eq.
M	5-4-2	Polymer Tank #2 Mixer Gearbox	6 mo.	Shell Omala 68
M	5-4-2	Polymer Feed Pump #2 Motor	3 ears	Shell Dolium-R or E q.
P	5-4-2	Polymer Feed Pump #2	As Needed	Silicone tube as req.
M	5-4-3	Polymer Feed Pump #3 Motor	3 years	Shell Dolium-R or Eq.
P	5-4-3	Polymer Feed Pump #3	As Needed	Silicone tube as re g.

ATTACHMENT 16

Fire Sprinkler System Drawings

Botto Mechanical SP-1



ATTACHMENT 17

List of Critical Alarms

Attachment 17 LIST of CRITICAL ALARMS

ALARM MESSAGE	POSSIBLE PROBLEM	PROGRAM ACTION	OPERATOR ACTION
P-1-1-1 FAIL	Pump overloads, HOA in off or MCC in off position	Trip MCC switch Alarm – MCP, HMI	Check MCC for tripped switch., Check HOA switch on MCP, Check switch on HMI, check valve alignment
P-1-1-2 FAIL	Pump overloads, HOA in off or MCC in off position	Trip MCC switch Alarm – MCP, HMI	Check MCC for tripped switch., Check HOA switch on MCP, Check switch on HMI, check valve alignment
P-1-1-3 FAIL	Pump overloads, HOA in off or MCC in off position	Trip MCC switch Alarm – MCP, HMI	Check MCC for tripped switch., Check HOA switch on MCP, Check switch on HMI, check valve alignment
M-1-3-1 FAIL	Mixer overloads, HS in off or MCC in off position	Trip MCC switch Alarm MCP	Check MCC for tripped switch., Check HO switch on MCP, Check local “E” switch at tank
LAHH-1-3-1-2	High level in EQ tank, Influent pumps off, discharge flow rate too low, faulty level switch or LS HH-1-3-1 set too low	Shuts off Ext. Well pumps Alarm MCP, HMI	Check influent flow rates, check extraction well pumps, check level switch
LALL-1-3-1	Low level in EQ. Tank, Influent flow rate high, faulty level switch, LALL-1-3-1 set, too high, low flow from extraction wells	Restarts Ex. Well pumps Alarm HMI Shuts off inf. pumps	Check flow rate from extraction welts, check influent flow rates, check level switch
P-1-4-1 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI, MCP Trip MCC switch	Check MCC for tripped switch, Check HOA switch on MCP, Check switch On HMI, check pump valve alignment, check local disconnect and VFD
P-1-4-2 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI, MCP Trip MCC switch	Check MCC for tripped switch, Check HOA switch on MCP, Check switch On HMI, check pump valve alignment, check local disconnect and VFD
P-1 -4-3 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI, MCP Trip MCC switch	Check MCC for tripped switch, Check HOA switch on MCP, Check switch On HMI, check pump valve alignment, check local disconnect and VFD
M-1-8-1 FAIL	Mixer overloads, HS on MCP in off position	Alarm HMI Trip MCC switch	Check MCC for tripped switch, check MCP switch, check local ‘E’ switch and disconnect
M-1-8-2 FAIL	Mixer overloads, HS on MCP in off position	Alarm HMI Trip MCC switch	Check MCC for tripped switch, check MCP switch, check local ‘E’ switch and disconnect
AAHH-1-8-1	pH high, NaOH flow too high, faulty pH sensor, KMN04 Problem, NaOH concentration too high	Alarm HMI	Check flow rate from NAOH feed, check flow rate from KMN04 feed, check feed solution concentration, check pH sensor

ALARM MESSAGE	POSSIBLE PROBLEM	PROGRAM ACTION	OPERATOR ACTION
AALL-1-8-1	pH low, NaOH flow too low, faulty pH sensor, NaOH problem, NaOH concentration too low	Alarm HMI	Check flow rate from NAOH feed, check flow rate from KMN04 feed, check solution levels and concentrations, check pH sensor
AAHH-1-8-2	Reactor pH too high, NaOH flow too high, faulty pH problem, NaOH concentration too high	Alarm HMI	Check flow rate from NAOH feed, check flow rate from KMN04 feed, check feed solution concentration, check pH sensor
AALL-1-8-2	Reactor pH too low, NaOH flow too low, faulty pH problem, NaOH concentration too low	Alarm HMI	Check flow rate from NAOH feed, check flow rate from KMN04 feed, check solution levels and concentrations, check pH sensor
M-1-9-1-1 FAIL	Mixer overloads, HS on MCP in off or MCC in off position	Alarm HMI	Check MCC for tripped switch, check MCP for switch position, check local "E" stop and disconnects
M-1-9-1-2 FAIL	Mixer overloads, HS on MCP in off or MCC in off position	Alarm HMI	Check MCC for tripped switch, check MCP for switch position, check local "E" stop and disconnects
M-1-10-1-1 FAIL	Mixer overloads, HS on MCP in off or MCC in off position	Alarm HMI	Check MCC for tripped switch, check MCP for switch position, check local "E" stop, VFD, and disconnects
M-1-10-1-2 FAIL	Mixer overloads, HS on MCP in off or MCC in off position	Alarm HMI	Check MCC for tripped switch, check MCP for switch position, check local "E" stop, VFD, and disconnects
LAHH-2-1-1-2	Tank high level ASF pumps off, faulty level switch, LAHH-2-1-1-2 set too low	Alarm HMI Shuts off P-1-4-1, 2, 3	Check MCC for tripped switch, Check HOA switch on MCP, Check switch on HMI, check pump valve alignment, check VFD and local disconnect
LALL-2-1-1-2	Tank low level, Influent pump flow rate too low ,LALL-2-1-1-2 set too high MCP in Hand mode	Shuts off P-2-3-1, 2, 3 Alarm HMI	Check influent pump flow rate, check MCP HOA switch, check VFD
LAHH-2-1-2-2	Tank high level, ASF pumps off, faulty level switch, LAHH-2-1-1-2 set too low	Alarm HMI Shuts off P-1-4-1, 2, 3	Check MCC for tripped switch, Check HOA switch on MCP, Check switch on HMI, check pump valve alignment, check VFD and local disconnect
LALL-2-1-2-2	Tank low Level, Influent pump flow rate too low ,LALL-2-1-1-2 set too high MCP in Hand mode	Shuts off P-2-3-1, 2, 3 Alarm HMI	Check influent pump flow rate, check MCP HOA switch, check VFD
YA-6-1-1-1	Fire in Facility, faulty sensor	AutoDialer Phones Emer. Nos.	Check for fire, check sensor, call emergency personnel[as needed

ALARM MESSAGE	POSSIBLE PROBLEM	PROGRAM ACTION	OPERATOR ACTION
P-2-3-1 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm Only	Check MCC for tripped switch, Check HOA switch on MCP, Check switch on HMI, check pump valve alignment, check local "E" stop, VFD and disconnect
P-2-3-2 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm Only	Check MCC for tripped switch, Check HOA switch on MCP, Check switch on HMI, check pump valve alignment, check local "E" stop, VFD and disconnect
P-2-3-3 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check MCC for tripped switch, Check HOA switch on MCP, Check switch on HMI, check pump valve alignment, check local "E" stop, VFD and disconnect
AA-2-2-1-2	pH out of range in air stripper, faulty sensor, HCl feed problem	Alarm HMI, MCP	Check pH in air stripper, check pH of air stripper feed, check sensor, check HCl feed and concentration
AAHH-2-2-1	ASF pH too high, HCL flow too low, faulty pH sensor, concentration too low	Alarm HMI, MCP	Check flow rate from HCL feed, check level and concentration of feed solution, check pH sensor
AALL-2-2-1	ASF pH too low, HCL flow too high, faulty pH sensor, concentration too high	Alarm HMI, MCP	Check flow rate from HCL feed, check level and concentration of feed solution, check pH sensor
M-2-6-1 FAIL	Blower overloads, HOA on MCP in off or MCC in off position, ASF pumps off	Alarm HMI Trip MCC Switch	Check local control panel, check MCC for tripped switch, check local "E"-stop and disconnect
YL-2-6-1-2	High level in air stripper sump, faulty level switch, feed rate too high from air stripper feed tanks, valves blocked to carbon adsorber feed tanks	Alarm HMI, local Shuts P-2-3-1, 2, 3	Check feed rate to air stripper, check valve alignment of carbon adsorber feed tanks
LAHH-2-8-1	Tank level too high, Carbon adsorber feed pumps off, flow rate too high from air stripper, faulty level switch, LAHH-2-8-1 set too low, control valve problem, high back pressure in CA vessels	Alarm – HMI, MCP Shuts P-2-3-1, 2, 3	Check MCC for tripped switch, check switch on MCP and HMI. Check pumps and valves and VFD. Check pressures on CA vessels.
LALL-2-8-1	Tank level low, LALL-2-8-1 set too high, faulty level switch. Low flows from ASF	Shuts P-2-9-1, 2, 3 Alarm on HMI	Check flow from air stripper feed, check pumps, valves, and VFD
LAHH-2-8-2	Tank level high, Carbon adsorber feed pumps off, flow rate too high from air stripper, faulty level switch, LAHH-2-8-1 set too low, control valve problem, high back pressure in CA vessels	Alarm – HMI, MCP Shuts P-2-3-1, 2, 3	Check MCC for tripped switch, check switch on MCP and HMI. Check pumps and valves and VFD. Check pressures on CA vessels.
LALL-2-8-2	Tank level low, LALL-2-8-1 set too high, faulty level switch. Low flows from ASF	Shuts P-2-9-1, 2, 3 Alarm on HMI	Check flow from air stripper feed, check pumps, valves, and VFD
P-2-9-1 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check MCC for tripped switch, Check MCP switch, check HMI switch check pumps, valves, VFD and disconnects

ALARM MESSAGE	POSSIBLE PROBLEM	PROGRAM ACTION	OPERATOR ACTION
LALL-2-11-1	tank level low, low rate too low from carbon adsorbers,LALL-2-11-1 set too high, faulty level switch, injection well flow too high	Alarm HMI Shuts P-2-12-1, 2	Check GACF pumps and CA vessel pressure, check INJ pumps, flow and valves
P-2-9-2 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check MCC for tripped switch, Check MCP switch, check HMI switch check pumps, valves, VFD and disconnects
P-2-12-1 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check MCC for tripped switch, Check switch on MCP and HMI, check pumps, valve, local disconnects
P-2-12-2 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check MCC for tripped switch, Check switch on MCP and HMI, check pumps, valve, local disconnects
LAHH-2-15-1	well high level, feed rate too high to injection wells, faulty level switch	Alarm HMI	check feed rate to injection well sand throttling valves. check level switch settings
LAHH-2-15-2	well high level, feed rate too high to injection wells, faulty level switch	Alarm HMI	check feed rate to injection well sand throttling valves. check level switch settings
LAHH-2-15-3	well low level, feed rate too high to injection wells, faulty level switch	Alarm HMI	check feed rate to injection well sand throttling valves. check level switch settings
LAHH-2-15-4	well high level, eed rate too high to injection wells, faulty level switch	Alarm HMI	check feed rate to injection well sand throttling valves. check level switch settings
LAHH-3-1-1	faulty level setting on level transmitter. Floor drain pit pumping to Sludge tank. Sludge transfer pumps on.	Shuts P-1-12-1, 2 Alarm at HMI	check level in sludge storage tank, check level setting, check sludge transfer pump and sump pump
LALL-3-1-1	low level in sludge storage tank, faulty level setting on level transmitter	Alarm HMI	check level in sludge storage tank, check filter press pump and clarifier levels
P-3-5-1 FAIL	Pump overloads. HOA on MCP in off or HMI in off position	Alarm HMI	check MCC for tripped pump, Check switches on MCP and HMI, Check pump valves and disconnects.
P-2-9-3 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check MCC for tripped switch, Check MCP switch, check HMI switch check pumps, valves, VFD and disconnects

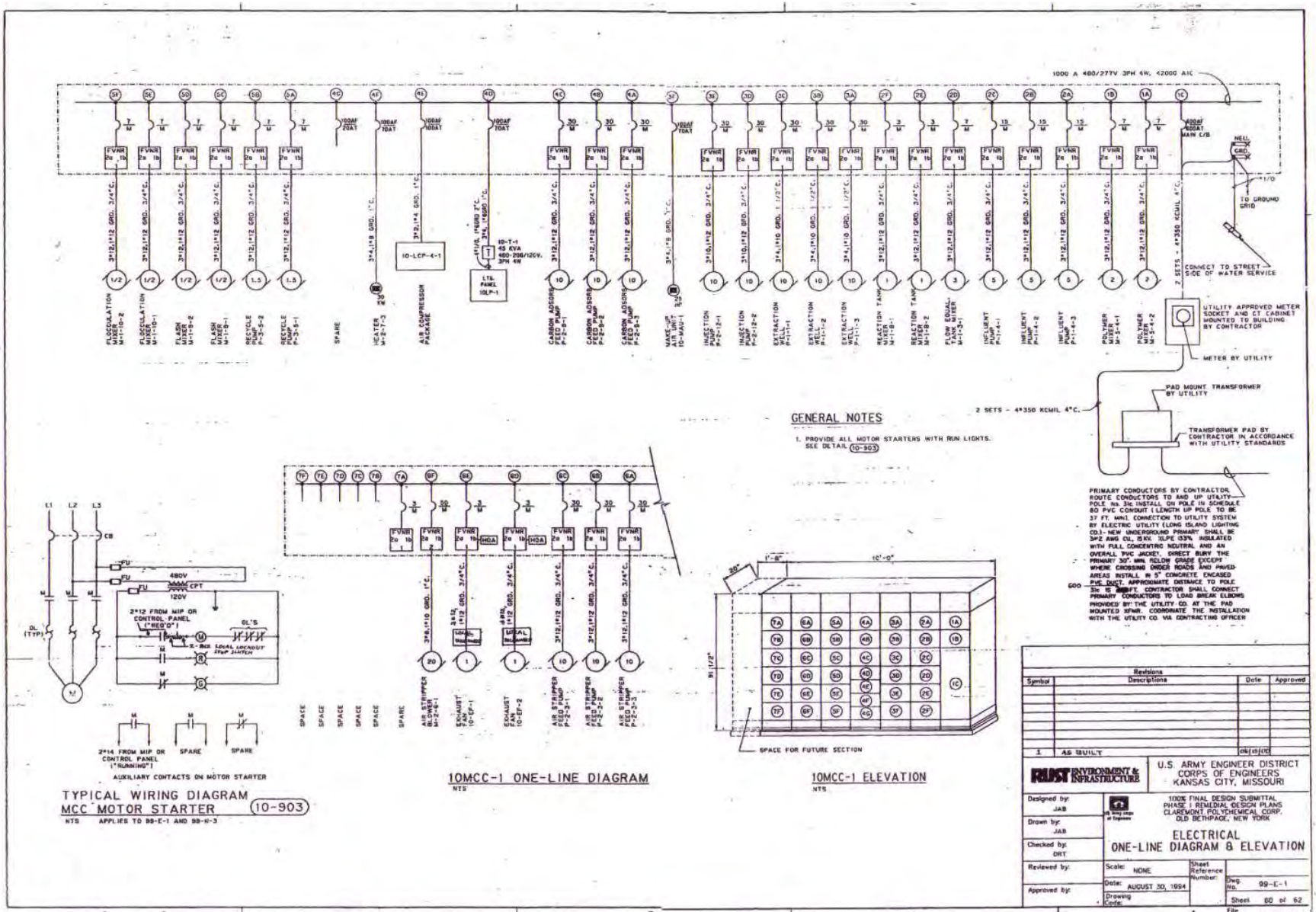
ALARM MESSAGE	POSSIBLE PROBLEM	PROGRAM ACTION	OPERATOR ACTION
LAHH-2-11-1	Tank level high, flow rate too high from carbon adsorbers, faulty level switch, LAHH-2-11-1 set too tow, injection pumps off	Shuts P-2-9-1, 2, 3 Alarm HMI, MCP	Check MCC for tripped switch, Check switch on MCP and HMI, check pump, valves and disconnects. Check tank valves
PALA-9-1	air compressors not running, pressure switch blocked out, faulty air pressure switch, setting too low, air consumption higher than normal	Alarm HMI	Check MCC for tripped switch, check switches on air compressor skid, check air pressure switch valving
YA-6-1-2-2	Fire in Air handler, faulty detector	Alarm fire alarm panel	Check for fire, check sensor, call emergency personnel as needed, follow SH-ERP manual as outlined
LAL-5-1-1	Solution level low, faulty level switch, feed rate too high	Alarm HMI	Check KMN04 solution level, check power to skid, check flow rate on pumps
LALL-5-4-1	Solution level low, faulty level switch, feed rate too high	Alarm HMI	Check Polymer solution level, check power to skid, check flow rate on pumps
LAHH-5-4-1	Solution level high, faulty level switch, faulty water fill valve	Alarm HMI	Check Polymer solution level, check power to skid, check flow rate on pumps, check water control valve
LALL-5-4-2	Solution level low, faulty level switch, feed rate too high	Alarm HMI	Check Polymer solution level, check power to skid, check flow rate on pumps
LAHH-5-4-2	Solution level high, faulty level switch, faulty water fill valve	Alarm HMI	Check Polymer solution level, check power to skid, check flow rate on pumps, check water control valve
P-5-4-1-1 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm Only	Check local control panel, Check switches on MCP and HMI, check pump, valves and disconnects.
LAHH-2-11-2	Tank level high, flow rate too high from carbon adsorbers, faulty level switch, LAHH-2-11-1 set too tow, injection pumps off	Shuts P-2-9-1, 2, 3 Alarm HMI, MCP	Check MCC for tripped switch, Check switch on MCP and HMI, check pump, valves and disconnects. Check tank valves
LALL-2-11-2	Tank level low, flow rate too low from carbon adsorbers,LALL-2-11-1 set too high, faulty level switch, injection well flow too high	Alarm HMI Shuts P-2-12-1, 2	Check GACF pumps and CA vessel pressure, check INJ pumps, flow and valves
P-3-5-2 FAIL	Pump overloads. HOA on MCP in off or HMI in off position	Alarm HMI	check MCC for tripped pump, Check switches on MCP and HMI, Check pump valves and disconnects.

ALARM MESSAGE	POSSIBLE PROBLEM	PROGRAM ACTION	OPERATOR ACTION
LAHH-3-4-1	Tank high level, pumps not running, level switch faulty, sandfilter overflow. High flow rate from sump or sludge tank decant.	Start p-3-5-1, 2 Alarm HMI	Check MCC for tripped switch, check switches on MCP and HMI, check pump, valves and local disconnects. Check level in sandfilters and sludge tank
LALL-3-4-1	Tank low level, Level switch faulty, MCP switch in hand mode	Shuts P-3-5-1, 2 Alarm HMI	Check HOA switch on MCP
YA-3-3-1	filter press failure, low air pressure to filter press, low hydraulic press, filter press power off	Alarm FP	check filter press operation, check air pressure, check hydraulic press and level
PLL-3-3-2	low hydraulic pressure at filter press	Alarm FP	check hydraulic pressure on filter press, check filter press feed pump, check air compressor and cycle timer
P-5-4-1-2 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check local control panel, Check switches on MCP and HMI, check pump, valves and disconnects.
P-5-4-1-3 FAIL	Pump overloads, HOA on MCP in off or HMI in off position	Alarm HMI	Check local control panel, Check switches on MCP and HMI, check pump, valves and disconnects.
LAL-5-2-1	Low solution level, faulty level switch, feed rate too high	Alarm HMI	Check NaOH solution level, check power to skid, start new fill cycle, check flow rate on pumps
LAL-5-3-1	Low solution level, faulty level switch, feed rate too high	Alarm HMI	Check HCL solution level, check power to skid, start new fill cycle, check rate on pumps flow

ATTACHMENT 18

Electrical Diagrams

Rust Drawings No. 99-E-1, No. 99-E-2, & No. 99-E-3



Revisions			
Symbol	Descriptions	Date	Approved
1	AS BUILT		

FOST ENVIRONMENT & INFRASTRUCTURE

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
KANSAS CITY, MISSOURI

Designed by: JAB
Drawn by: JAB
Checked by: DRT
Reviewed by:
Approved by:

100% FINAL DESIGN SUBMITTAL
PHASE I REMEDIAL DESIGN PLANS
CLAREMONT POLYCHEMICAL CORP.
OLD BETHPAGE, NEW YORK

ELECTRICAL
ONE-LINE DIAGRAM & ELEVATION

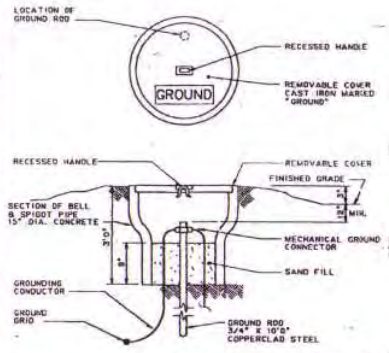
Scale: NONE
Date: AUGUST 30, 1994
Drawing Code:
Sheet Reference Number:
Dwg. No. 99-E-1
Sheet 60 of 62
File No. K-4-2590

SURFACE MOUNTED NEMA 1
120/208 V, 3 PHASE, 4 WIRE
RATING 10,000 A.I.C.

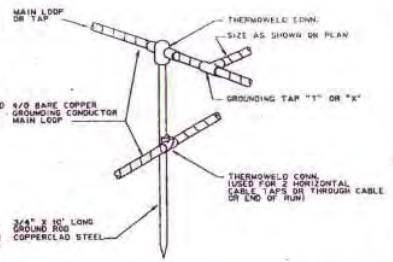
PANEL SCHEDULE 10LP1

150A MAIN BREAKER
225A MAIN BUS
100A GRD. BUS

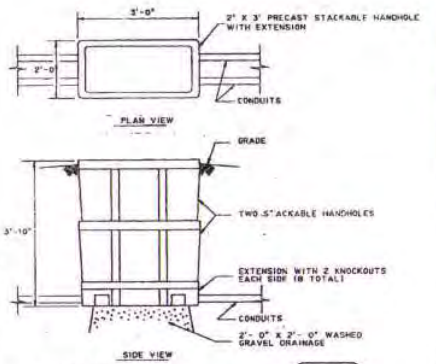
CKT NO.	TRIP/P	DESCRIPTION	PHASE A	PHASE B	PHASE C	DESCRIPTION	TRIP/P	CKT NO.
1	20/1	LIGHTING CONTROL RM	1200 900			LIGHTING EXTERIOR	20/1	2
3	30/1	LIGHTING TREATMENT RM		1800 1800		LIGHTING TREATMENT RM	30/1	4
5	30/1	LIGHTING TREATMENT RM			1800 800	RECEPTACLES	20/1	6
7	20/1	RECEPTACLES	800 800			RECEPTACLES	20/1	8
9	20/1	RECEPTACLES		800 800		RECEPTACLES	20/1	10
11	20/1	RECEPTACLES			800 800	RECEPTACLES	20/1	12
13	20/1	RECEPTACLES	800 800			RECEPTACLES	20/1	14
15	20/1	MIP		1000 1000		MIP	20/1	16
17	20/1	FE/FT-1-1-1, -2			500 750	FE/FT-1-1-1, -2, -3	20/1	18
19	20/1	FE/FT-2-14-1, -2, -3, -4	1000 2000			10-LCP-5-2	30/1	20
21	30/1	10-LCP-5-1		2000 500		AIT-1-8-1, -2	20/1	22
23	60/1	10-LCP-5-4			3500 1000	10-LCP-3-1	20/1	24
25	30/1	10-LCP-5-3	2000 500			AIT-2-2-1, -2	20/1	26
27	30/2	10-AHU-1		1000 1000		10-ACC-1	40/2	28
29					1500 1000			30
31	20/2	10-EBB-1	500 500			10-EF-3	20/1	32
33				500 1000		10-LCP-2-1	20/1	34
35	20/1	10-LCP-2-2			1500 1000	WATER HEATER	20/1	36
37	20/1	TCP	1000 800			10-SF-1	20/1	38
39	20/1	HEAT TRACING (FUTURE)	-			LSHH-2-15-1, -2, 3, -4	20/1	40
41	20/1	HEAT TRACING (FUTURE)		-		-	20/1	42
		TOTALS:	3400	4200	3950	41550		



GROUNDING TEST STATION DETAIL (10-455)
NTS DETAIL APPLIES TO 10-E-3



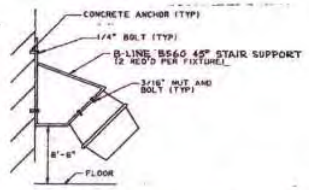
CONDUCTOR TO GROUND ROD CONNECTION DETAIL (10-451)
NTS DETAIL APPLIES TO 10-E-3



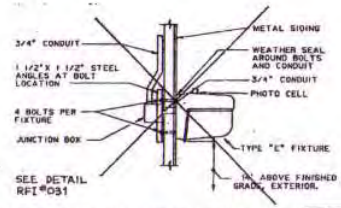
HANDHOLE DETAIL (10-230)
NTS DETAIL APPLIES TO 02-CE-1

LIGHTING FIXTURE SCHEDULE

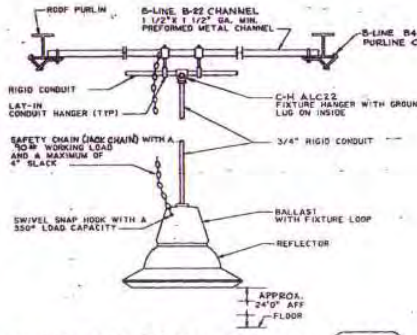
FIX. DES.	LAMPS NO.	LAMPS ORD. ABB.	DESCRIPTION/CATALOG NO.	FINISH	LENS	MOUNTING	CORP FIXTURE TYPE NO.
A	8	F40 RS	2X4 RECESSED LAY-IN TROFFER 3-LAMP FLUORESCENT FIXTURE. CRESENT 3A3P840A13-120V	BAKED WHITE ENAMEL	ACRYLIC	CEILING GRID MOUNTED	206-B-1
B	7	F40 RS	1X4 ENCLOSED GASKETED VAPORTIGHT 2-LAMP FLUORESCENT FIXTURE CRESENT VTS-240-120V	THERMOPLASTIC BODY	ACRYLIC	AS INDICATED ON FLOOR PLAN	232
C	24	250LU	250 WATT HIGH PRESSURE SODIUM HIGH BAY LITHONIA THR250SA16-120V	ANODIZED SPUN ALUMINUM	GLASS	SEE DETAIL (10-534)	301-B
D	9	70LU	70 WATT HIGH PRESSURE SODIUM WALL PACK WITH INTEGRAL PHOTOCELL LITHONIA TWH70R-150-PC	DARK BRONZE	GLASS	SEE DETAIL (10-521)	502-B
	8	W/UNIT	EMERGENCY BATTERY PACK WITH 2 UNIT MOUNTED LAMP HEADS LIGHTALARMS SPSI/L9M	-	-	MOUNTED 8'6" AFF	803
	5	W/UNIT	EXIT SIGN WITH FLUORESCENT LAMP LIGHTALARMS	POLYCARBONATE HOUSING	RED PLEXIGLASS/ ALUMINUM STENCIL	MOUNTED ABOVE DOORS	903-A-2



FIXTURE TYPE "B" MOUNTING DETAIL (10-551)
NTS DETAIL APPLIES TO 10-E-1



FIXTURE TYPE "D" MOUNTING DETAIL (10-521)
NTS DETAIL APPLIES TO 99-E-2



FIXTURE TYPE "C" MOUNTING DETAIL (10-534)
NTS DETAIL APPLIES TO 99-E-2

Revisions Symbol	Description	Date	Approved
1	AS BUILT	05/19/00	

RUST ENVIRONMENT & INFRASTRUCTURE

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
KANSAS CITY, MISSOURI

Designed by: JAB
Drawn by: JAB
Checked by: DRT
Reviewed by:
Approved by:

100% FINAL DESIGN SUBMITTAL
PHASE I REMEDIAL DESIGN PLANS
CLAREMONT POLYCHEMICAL CORP.
OLD BETHPAGE, NEW YORK

ELECTRICAL SCHEDULES AND DETAILS

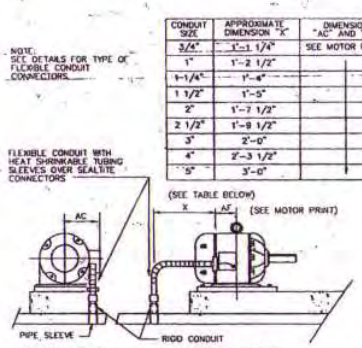
Scale: NONE
Date: AUGUST 33, 1994
Drawing Code:
Sheet Reference Number:
Dwg. No. 99-E-2
Sheet 51 of 62
File No. K-4-2591

5 4 3 2 1

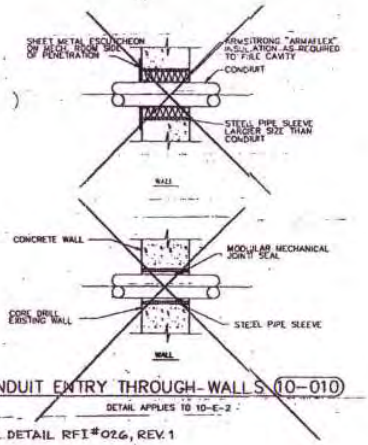
-13

CONDUIT SIZE	APPROXIMATE DIMENSION "X"	DIMENSION "AC" AND "AF"
3/4"	1'-1 1/4"	SEE MOTOR PRINT
1"	1'-2 1/2"	
1-1/4"	1'-4"	
1 1/2"	1'-5"	
2"	1'-7 1/2"	
2 1/2"	1'-9 1/2"	
3"	2'-0"	
4"	2'-3 1/2"	
5"	3'-0"	

NOTE:
SEE DETAILS FOR TYPE OF FLEXIBLE CONDUIT CONNECTIONS.

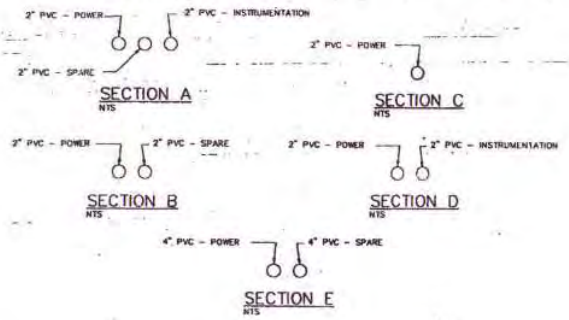


MOTOR FLEXIBLE CONNECTION – BOTTOM FEED (10-154)
NTS
DETAIL APPLIES TO 10-E-2

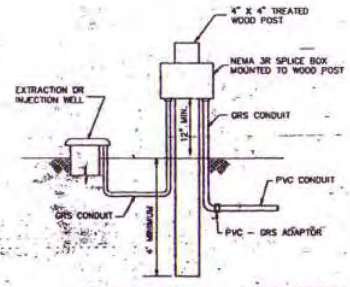


CONDUIT ENTRY THROUGH-WALLS (10-010)
NTS
DETAIL APPLIES TO 10-E-2

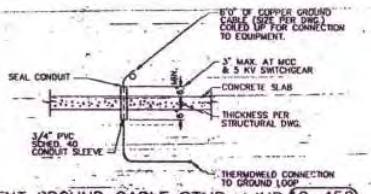
SEE DETAIL RFI #026, REV. 1



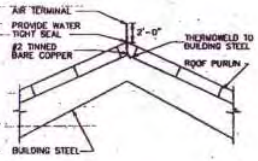
CONDUIT SECTIONS
SECTIONS APPLY TO 02-CE-1
NOTE: SEE TRENCH DETAIL (10-900)



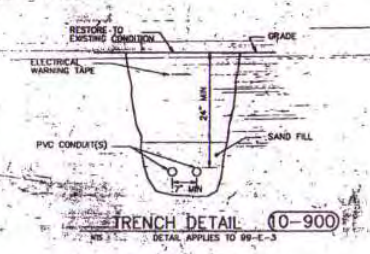
SPLICEBOX DETAIL (10-040)
NTS
DETAIL APPLIES TO 02-CE-1



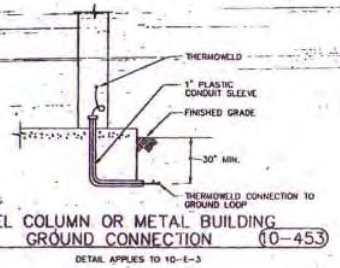
EQUIPMENT GROUND CABLE STUB – UP (10-452)
NTS
DETAIL APPLIES TO 10-E-3



AIR TERMINAL MOUNTING DETAIL (10-450)
NTS
DETAIL APPLIES TO 10-E-3



TRENCH DETAIL (10-900)
NTS
DETAIL APPLIES TO 99-E-3



STEEL COLUMN OR METAL BUILDING GROUND CONNECTION (10-453)
NTS
DETAIL APPLIES TO 10-E-3

Symbol	Revisions Descriptions	Date	Approved
1	AS BUILT	8/15/97	

RUST ENVIRONMENT & INFRASTRUCTURE

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
KANSAS CITY, MISSOURI

Designed by: JAB	100% FINAL DESIGN SUBMITTAL PHASE I REMEDIAL DESIGN PLANS CLAREMONT POLYCHEMICAL CORP. OLD BETHPAGE, NEW YORK
Drawn by: JAB	
Checked by: DRT	ELECTRICAL STANDARD DETAILS
Reviewed by:	Scale: NONE
Approved by:	Date: AUGUST 30, 1994
	Drawing Code:
	Sheet Reference Number:
	Dwg. No. 99-E-3
	Sheet 62 of 62
	File No. R-4-2592

11-5-98

ATTACHMENT 19

Emergency Response and Incident Reporting

Document ID No.	Document Description
CPS-HS-003	Emergency Response Procedures
CPS-HS-005	Accident & Incident Reporting
CPS-Form-020	Incident Report form

CPS – HS - 003

Title: **Emergency Response Procedures**

Purpose: These procedures are to be followed in the event of an emergency situation at the Claremont Polychemical Site. It is to ensure appropriate and complete response to the incident and it assigns responsibilities and authority.

Scope: These procedures are to be followed by those responding to an emergency situation at the Claremont Polychemical site. It applies to all incidents involving Claremont personnel and subcontractors, equipment and vehicles.

General: These procedures are designed to address any and all emergency situations which may be reasonably expected to occur at the Claremont site including fire, medical, natural disaster, hazardous materials, and confined space emergencies.

Procedure:

1. The SSHO (Site Safety and Health Officer) is to assume overall responsibility for the coordination of response activities. The SSHO has the authority to commit the resources and assign tasks to carry out the emergency response. The SSHO is to communicate with outside authorities and the appropriate SAIC officials.

2. Claremont staff have been trained in hazardous materials spill response, first aid/ CPR, and incipient fire suppression and will voluntarily assist in the response.

3. The SSHO is to determine the nature of the event (fire, medical, vehicular, hazardous material release, out of spec discharge, etc.). The extent of the event, whether it is ongoing or contained or poses a threat to responders or property. Whether to seek outside assistance.

4. The SSHO will keep current and post an emergency point of contact list.

5. Emergency equipment will be kept on-site. Staff will maintain, test, and keep it in "ready" condition. The equipment is to include, (but is not limited to): stocked first aid kits; emergency eye wash, showers and portable eyewash solution; portable fire extinguishers; and basic spill kit.

6. The responders are to take all reasonable measures to ensure that fires, explosions, and releases do not occur, recur, or spread. Operations will be shut down and/or evacuated if warranted.

7. The SSHO is to investigate the cause of event and complete the appropriate incident and accident reports.

8. The SSHO is to review the incident with the appropriate personnel. All participants in the emergency response will meet as soon as practical following the emergency to critique the activity and recommend any necessary procedural modifications.

Notes:

- The first priority of any emergency response is the protection of life and health. Following that, the order of priority must be established by the particular conditions present during the emergency. The appropriate consideration must be given to fire, explosion, chemical reactivity, environmental protection, and protection of company assets.

Related Documents:

OSHA (29 CFR 1910)
EPA Hazardous Waste (40 CFR 265)
NYS Hazardous Waste (6 NYCRR 373)
Release Handling and Reporting (40 CFR 116, 117, 300-313)
DOT Transport of Hazardous Materials (49 CFR 172)

CPS-HS-005	Incident reporting
CPS-Form-020	Incident Report Form
CPS-Form-021	SAIC Accident Report
CPS-Form-022	SAIC Incident Report Form

CPS – HS – 005

Subject: Accident and Incident Reporting

Scope: This procedure is to be followed by those reporting emergency events (fire, medical, weather, hazardous material releases, etc.) at the Claremont site. It applies to all incidents involving Claremont personnel and subcontractors, equipment, vehicles and property damage

Purpose: This procedure provides guidelines for reporting medical emergencies and hazardous incidents at the Claremont plant and grounds. It also assigns responsibility for gathering information and reporting the incident.

Procedures:

1. All accidents regardless of the apparent degree of severity are to be immediately (or as soon as practicable) reported to the responsible supervisor/ manager.
2. Initial reports may be communicated verbally or in writing but must be followed up with a written accident investigation report (in the case of personal injury) or a written incident report (in the case of physical damage to the site).
3. The site supervisor is to immediately report any work related injury, illness or death to the project manager and the project EH&S officer.
4. Using an incident report form, the SSHO is to gather relevant information of the incident.
5. The initial information gathered from the incident is to be used to determine the cause of the event and possible corrective actions.

Related documents:

CPS-HS-003	Emergency Response
CPS-Form-020	Incident Report Form
CPS-Form-021	SAIC Corp. Accident Report Form
CPS-Form-022	SAIC Corp. Incident Report Form

Definitions:

Accident: An action or event at the Claremont site and related grounds (or while on company business) during a SAIC managed activity that caused or reasonably could have caused personal injury or illness or damage to equipment or facilities.

Incident: An event at the Claremont site and grounds which adversely affects the Claremont operation, human life, or the environment.

SSHO Site Safety and Health Officer.

CPS-Form-020

Incident Report- This form is to be used when gathering information prior to reporting an incident or chemical spill in which the environment of human health may be affected.

Date and Time of Incident	
Description of Incident and location	
Personnel involved	
Description of injuries	
If chemical spill, material spilled and quantity (also see below)	
Suspected cause of incident	
Outside Agencies contacted	
Actions taken	
Follow up actions recommended	

Chemical Spill or Releases

Is the spill a Reportable Quantity (RQ)	
Disposition of material	
Is environment or human health threatened	

Reported By:

ATTACHMENT 20

Process Equipment Tag Lists

Note: Manufacturer's manuals and cut sheets for each tag list item are on file at the Claremont site

Air Stripper Feed System

Tag ID No.	Description	Specification
AE-2-2-1	Pump discharge line pH probe	J-Y FU-20-05-T2NPT
AIT-2-2-1	pH monitor	J-Y PH400-P-U-1-E*A/U/Q
LE/LT-2-1-1	Level transmitter tank 1	Rosemont 1151 Smart Pressure Transducer
LE/LT-2-1-2	Level transmitter tank 2	Rosemont 1151 Smart Pressure Transducer
LSHH-2-1-1	High level float switch Tank 1	SJ Electro Systems mercury switch 1002128
LSHH-2-1-2	High level float switch tank 2	SJ Electro Systems mercury switch 1002128
LSLL-2-1-1	Low level float switch tank 1	SJ Electro Systems mercury switch 1002125
LSLL-2-1- 2	Low level float switch tank 2	SJ Electro Systems mercury switch 1002125
M-2-4-1	In-line static mixer	EMI Inc. 6" PVC flanged P6-2F-P
P-2-3-1	ASF pump 1	Flow Serve D814 centrifugal
P-2-3-2	ASF pump 2	4 x 3 x 10 250 gpm at 85' tdh
P-2-3-3	ASF pump 3	10 hp, 1750 rpm, 460 v, 3 ph
	Variable frequency motor drive	Danfoss VLT 4011VT 380-460v, 60 hz, 3 ph
T-2-1-1	AS feed tank train 1	IHG, hdpe 1200 gallons 64"dia x 96"oah
T-2-1- 2	AS feed tank train 2	IHG, hdpe 1200 gallons 64"dia x 96"oah
VALVES		
BV-600 D	Tank 1 drain	Hayward 1" PVC TU
BV-601 D	Tank 2 drain	Hayward 1" PVC TU
BV-602 SA	Tank 1 transducer drain	Hayward 1" PVC TU
BV-603 SA	Tank 2 transducer drain	Hayward 1" PVC TU
BV-604 SA	Sample port post mixer	Hayward 1" PVC TU
BV-605 ASI	P1 pressure gage out	Nibco, 585-70-6C, 3/8" thd, 316ss
BV-606 ASI	P1 pressure gage in	Nibco, 585-70-6C, 3/8" thd, 316ss
BV-607 ASI	P3 pressure gage out	Nibco, 585-70-6C, 3/8" thd, 316ss
BV-608 ASI	P3 pressure gage in	Nibco, 585-70-6C, 3/8" thd, 316ss
BV-609 ASI	P2 pressure gage out	Nibco, 585-70-6C, 3/8" thd, 316ss
BV-610 ASI	P2 pressure gage in	Nibco, 585-70-6C, 3/8" thd, 316ss

BF-600 FE	Bypass to GAC 1	Crane 10" lug style w/ chain drive
BF-601 FE	Bypass to GAC 2	Crane 10" lug style w/ chain drive
BF-602 FE	Influent to tank 1	Crane 10" lug style w/ chain drive
BF-603 FE	Influent to tank 2	Crane 10" lug style w/ chain drive
BF-604 ASI	Tank 1 pump feed	Crane 6" lug style
BF-605 ASI	Tank 2 pump feed	Crane 6" lug style
BF-606 ASI	Pump feed manifold isolation	Crane 6" lug style
BF-607 ASI	Pump feed manifold isolation	Crane 6" lug style
BF-608 ASI	Pump1 suction side isolation	Crane 4" lug style
BF-609 ASI	Pump2 suction side isolation	Crane 4" lug style
BF-610 ASI	Pump3 suction side isolation	Crane 4" lug style
BF-611 ASI	Pump1 discharge side isolation	Crane 4" lug style
BF-612-ASI	Pump2 discharge side isolation	Crane 4" lug style
BF-613 ASI	Pump3 discharge side isolation	Crane 4" lug style
BF-614 ASI	Discharge line pre pH probe	Crane 6" lug style
BF-615 ASI	Discharge line post pH probe	Crane 6" lug style
BF-616 FE	Sand Filter 1 Discharge	10" bray lug style with a/a actuator
BF-617 Fe	Sand filter 2 discharge	10" bray lug style with a/a actuator
SC-600	Check valve pump 1	Golden Anderson 4" swing check
SC-601	Check valve pump 2	Golden Anderson 4" swing check
SC-602	Check valve pump 3	Golden Anderson 4" swing check
EP-600 SA	Tank 1 outlet	Eccentric 3" flanged
EP-604	Tank 2 outlet	Eccentric 3" flanged
EP-602	Tank 1 pre transducer	Eccentric 3" flanged
EP-603	Tank pre transducer	Eccentric 3" flanged
LCV-2-1-1	Flow control valve pump discharge manifold	Eccentric 4" flanged
Pressure gages		
PI-605	P1 discharge side	Winters -30-0-30 psi
PI-606	P1 suction side	Winters 0-60 psi
PI-607	P3 discharge side	Winters -30-0-30 psi
PI-608	P3 suction side	Winters 0-60 psi
PI-609	P2 discharge side	Winters -30-0-30 psi
PI-610	P2 discharge side	Winters 0-60 psi

Air Stripping System Tag list

Tag ID	Description	Specification
M-2-5-2	AS Tower	Carbonair OS 500 5' dia x 4' oah

M-2-6-1	AS Blower	NY Blower 194DH 3500cfm
M-2-7-1, 2	V-GAC Beds 1 & 2	Carbonair GPC-70
M-2-7-3	AS Heater	Indeeco 166 Finned tubular
BV-2-7-3-1-1	V-GAC sampling ports	¼" brass
BV-2-7-3-1-2	V-GAC sampling ports	¼" brass
BV-2-7-3-2 -1	V-GAC sampling ports (4)	¼" brass
BV-2-7-3-2-2	V-GAC sampling ports (4)	¼" brass
BV-2-7-3-1-1,2,3,4	V-GAC magnehelic valves	¼" Poly polypropylene
BV-2-7-3-2-1,2,3,4	V-GAC magnehelic valves	¼" Poly polypropylene
GV-2-7-1	Air duct isolation valve	18" PVC blast gate
GV-2-7-2	Air duct isolation valve	18" PVC blast gate
LSH-2-5-1	Level float switch	Gould A-29
PDI-2-7-1-1,2	Magnehelic ,VGAC-1	Dwyer 2010
PDI-2-7-2-1,2	Magnehelic, VGAC 2	Dwyer 2010C
PDI-2-5-1	Magnehelic #6 AS Tower	Dwyer 2010
PDI-2-6-2	Magnehelic #5 Blower	Dwyer 2010
PI-2-6-1	Press. gage - blower	McDanial – M
PSL-2-7-3	Pressure switch - blower	Dwyer 1950-5
TI-2-7-3-1	Temp gage air duct pre blower	Tel-Tru 0-200 deg F
TI-2-7-3-2	Temp gage air duct post blower	Tel-Tru 0-200 deg F
TI-2-7-3-3	Temp Gage tower sump	Weiss 0-150 deg F
TC-2-7-3	Temp controller - heater	Cal 3200
TE-2-7-3	Thermocouple - heater	Indeeco J-type

Carbon Adsorber System

Tag ID No.	Description	Specification
T-2-10-1	Carbon Adsorber Vessel 1	Oehler Ind. WRT-3 Pressure Vessel
T-2-10-2	Carbon Adsorber Vessel 2	Oehler Ind. WRT-3 Pressure Vessel
BF-800 CAI	GACF discharge to CA units	6" Centerline Lug style series 200
BF-801 CAI	GACF discharge to CA units	6" Centerline Lug style
BF-802 CAI	CA influent manifold	6" Centerline Lug style
BF-803 CAI	CA Vessel 1 influent	4" centerline Lug Style chain operated
BF-804 CAI	CA Vessel 2 influent	4" Centerline Lug Style chain operated
BF-805 CAE	CA Vessel 1 effluent	8" Centerline lug style
BF-806 CAE	CA Vessel 2 effluent	8" Centerline lug style
BF-811 CAE	CA effluent to TW Tank 2	8" Centerline Lug Style chain operated
BF-812 CAE	C A effluent to TW Tank 1	8" Centerline Lug Style chain operated
BF-987	Backwash waste to pit	8" Centerline lug style wheel operated

BF-898	CA Vessel 2 Backwash effluent	8" Centerline Lug Style chain operated
BF-899	CA Vessel 1 Backwash effluent	8" Centerline Lug Style chain operated
BF-1499	Backwash feed from INF pumps	8" Centerline Lug Style chain operated
EP-800 SA	CA Vessel 1 effluent sample port	¾" threaded Milliken millcentric series 603
EP-801 SA	CA Vessel 2 effluent sample port	¾" threaded Milliken millcentric
EP-802 SA	Backwash effluent sample port	Not plumbed
EP-803 SA	Backwash effluent sample port	1' thd Milliken millcentric
EP-804 D	CA Vessel 1 bottom drain	4" flanged Milliken eccentric
EP-805 D	CA Vessel 2 bottom drain	4" flanged Milliken eccentric
EP-806	CA vessel 1 overflow	4" flanged Milliken eccentric
EP-807	CA Vessel 2 overflow	4" flanged Milliken eccentric
BV-804 V	CA Vessel 1 top vent	½" Hayward TU PVC
BV-805 V	CA Vessel 2 top vent	½" Hayward TU PVC
BV-806 D	CA 1 bottom drain sample port	¾" Hayward TU PVC
BV-807 D	CA 1 bottom drain sample port	¾" Hayward TU pvc
BV-808 SA	CA Vessel 1 side port – top	½" Hayward TU pvc
BV-809 SA	CA vessel 1 side port – middle	½" Hayward TU pvc
BV-810 SA	CA vessel 1 side port – bottom	½" Hayward TU pvc
BV-811 SA	CA Vessel 2 side port, top	½" Hayward TU pvc
BV-812 SA	CA Vessel 2 side port –middle	½" Hayward TU pvc
BV-813 SA	CA Vessel 2 side port – bottom	½" Hayward TU pvc
BV-814 D	CA 2 bottom drain sample port	¾" Hayward TU pvc
BV-815 D	CA 2 bottom drain sample port	¾" Hayward TU pvc
BV-816	CA 1 overflow sample port	¾" Hayward TU pvc
BV-817	CA 2 overflow sample port	¾" Hayward TU pvc
BV-818	CA 1 top vent drain	1/2" Hayward TU pvc
BV-819	CA 2 top vent drain	1/2" Hayward TU pvc
BV-820	GACF#1 feed to CA sample port	½" Hayward TU pvc
BV-821	GACF#2 feed to CA sample port	½" Hayward TU pvc
GV-800	CA-1 influent gage isolation	¾" thd NibcoT-275 bronze
GV-801	CA-2 influent gage isolation	¾" thd NibcoT-275 bronze
GV-802	CA-2 effluent gage isolation	¾" thd NibcoT-275 bronze
GV-803	CA-1 effluent gage isolation	¾" thd NibcoT-275 bronze
PCV-2-10-1	CA Vessel 1 pressure control valve	Kunkle 091K-J 2 ½" flanged set at 65 psi
PCR-2-10-2	CA Vessel 2 pressure control valve	Kunkle 091K-J 2 ½" flanged set at 65 psi
PI-800	CA-1 influent	Winters 0-100 psi 4" x ¼" LF P644
PI-801	CA-2 influent	Winters 0-100 psi 4" x ¼" LF P644
PI-802	CA-2 effluent	Winters 0-100 psi 4" x ¼" LF P644
PI-804	CA-1 effluent	Winters 0-100 psi 4" x ¼" LF P644
VB-800	CA Backwash discharge vacuum breaker	Hayward thd PVC

Clarifier System

Tag ID No.	Description	Specification
Tanks		
T-1-9-1	Flash Mix Tank 1	3 x 3 x 5, 285 gal
T-1-9-2	Flash Mix Tank 2	3 x 3 x 5, 285 gal
T-1-10-1	Floc tank 1	5 x 5 x 7, 1000 gal
T-1-10-2	Floc tank 2	5 x 5 x 7, 1000 gal
CL-1-12-1	Clarifier 1	Lamella plate – 30-5x10 plates
CL-1-12-2	Clarifier 2	Lamella plate – 30-5x10 plates
Mixers		
M-1-9-1	Flash mix tank 1 mixer	Sharp G-050
M-1-9-2	Flash Mix Tank 2 mixer	350 rpm, 980 gpm
M-1-10-1	Floc Tank 1 mixer	Sharp 0.05E05-15VF
M-1-10-2	Floc Tank 2 mixer	30 rpm, 1100 gpm
VFD-10-1	Floc Tank 1 mixer variable frequency drive	Reliance Electric SP500AC drive
VFD-1-10-2	Floc Tank 2 Mixer variable frequency drive	1SU44001
Pumps		
P-1-11-1	Train 1 sludge recycle pump	Wilden M1
P-1-11-1	Train 2 sludge recycle pump	Wilden M1
P-1-12-1	Train 1 sludge transfer pump	Wilden M4
P-1-12-2	Train 2 sludge transfer pump	Wilden M4
Valves	**Ball Valves**	
BV-200 AHP	Air supply feed shut-off to M4	¾" Nibco
BV-201 AHP	M4 regulator isolation valve	¾" Nibco
BV-203 ALP	Air line isolation valve at M4	¾" Nibco
BV-204 AHP	Air supply feed shut off to M1	3/8" Nibco
BV-205 AHP	M1 regulator shut-off to M1	¼" Nibco
BV-207 ALP	Air line isolation valve at M1	¼" Nibco
BV-220 D	Flash tank sample port	½" Hayward TU
BV-221 D	Floc tank drain	1" Hayward TU
BV-222 PO	Flash tank drain	1" Hayward TU
	Butterfly Valves	
BF-200 FI	Clarifier to Sandfilter	10" chain-drive, centerline, lug
BF-210 FI	Clarifier bypass to sandfilter	8" chain drive, centerline, lug
	Globe Valves	
GV-208 CHS	M4 pressure gage isolation	¾" Nibco class 300
GV-209-CHS	M4 pressure gage isolation	¾" Nibco class 300

GV-210 RSD	M1 pressure gage isolation	¾" Nibco class 300
GV-211 RSD	M1 pressure gage isolation	¾" Nibco class 300
	Plug Valves	
EP-200 CHS	Sludge transfer shut-off	2" flanged
EP-201 CHS	Sludge transfer discharge	2" flanged
EP-202 RSD	Sludge recycle shut off	2" flanged
EP-203 RSD	Sludge recycle discharge	1" thd
EP-204 SA	Sludge hopper main drain	3" flanged
EP-205	Main drain sample port	¾" thd Millcentric
EP-212 SA	Cone sample port top	¾" thd Millcentric
EP-213 SA	Cone sample port middle	¾" thd Millcentric
EP-214 SA	Cone sample port bottom	¾" thd Millcentric
	Solenoid valves	
FV-1-11-1, 2	M1 pump control	3/8" ASCO 8316G54
FV-1-12-1, 2	M4 pump control	¾" ASCO 8316 G74
Other		
PI-201	M4 suction side	Winters 0-160
PI-202	M4 discharge	Winters 0-160
PI-203	M4 regulator	USG 0-200
PI-204	M1 suction side	Winters 0-160
PI-205	M1 discharge	Winters 0-160
PI-206	M1 regulator	USG 0-200
AF-200	M4 air supply line filter	3/4"
AF-201	M1 air supply line filter	1/4" speed air 6zc32a
Oiler-200	M4 air supply line	SpeedAir 2Z458B
Oiler-201	M1 air supply line	SpeedAir 6ZC30A
PCV 1-11-1, 2	M1 Regulator	
PCV-1-12-1, 2	M4 Regulator	

Equalization Tank System

Tag ID No.	Description	Specification
T-1-3-1	Equalization	tank
LT-1-3-1	Equalization	Tank level monitor
M-1-3-1	Equalization	Tank mixer
BF-1438	Main discharge shut-off	8" butterfly
BV-1415	Level monitor drain	1" Hayward TU
FB-1400	Basket strainer	8" Hayward Simplex
EP-1406	Tank main drain	4" flanged Plug
EP-1400	Level monitor isolation	3" flanged plug
EP-1401	Tank drain	3" flanged Plug
HS-1-3-1-1	Mixer switch at MCP	

HS-1-3-1-2	Mixer switch at tank	Keyed emergency stop

Extraction Well System

Tag ID No.	Description	Specification
FE/FT-1-1-1	well 1 flow monitor	Signet 8550-1 transmitter
FE/FT-1-1-2	well 2 flow monitor	Signet 515 paddle wheel flow element
FE/FT-1-1-3	Well 3 flow monitor	
P-1-1-1	Pump 1	Grunfos submersible turbine 160 gpm
P-1-1-2	Pump 2	10 hp, 3450 rpm
P-1-1-3	Pump 3	
	Sample hydrant isolation valve	¾" Mueller 300 p/n 25209
BF-1425 EW	Ext 1 effluent isolation valve	3" crane lug style
BF-1426 EW	Ext 2 effluent isolation valve	3" crane lug style
BF-1427EW	Ext 3 effluent isolation valve	3" crane lug style
BF-1433EW	Ext 1 effluent isolation valve	3" crane lug style
BF-1434EW	Ext 1 effluent isolation valve	3" crane lug style
BF-1435EW	Ext 3 effluent isolation valve	3" crane lug style
BV-1414 SA	Sample port on Ext 1 discharge	½" pvc thd Hershey
EP-1410	Sample port EQ influent	3/4" millcentric CS thd
BV-1422	Ext well discharge sample port	½" Hayward TU ball Valve

Filter Press System Tags

Tag ID No.	Description	Specification
AF-300	A/W separator on a/s at sludge pump	Speed Air 6zc32A
AO-300	A/S oiler at sludge pump	Speed Air 6zc30a
BC-400	Press blowdown check valve	½" Conbraco ss ball check
BF-300	Sludge tank cone drain valve to hose	2" Hayward pvc bf valve
BF-301	Sludge tank cone drain valve to pump	2" Hayward pvc bf valve
BV-305	A/S isolation valve at sludge pump	¾" Nibco thd brass
BV-306	A/S isolation valve at sludge pump	¾" Nibco thd brass
BV-307	Water flush valve at sludge pump	1" Hayward pvc tu
BV-405 V6	Press blow down air shut off	½" Durapipe cpvc TU
BV-406	A/S isolation valve at press	1" Nibco brass thd
BV-407 V7	A/S manifold valve at press	½" nibco thd brass
BV-408 V1H	A/S to hydraulic control cabinet	½" Apollo ss thd
BV-409 V2	Press discharge manifold valve	1.5" Asahi pvc TU
Bv-410 V3	Press discharge Manifold valve	1.5" Asahi pvc TU
BV-411 V1	Press influent valve	2" Asahi pvc TU

BV-412 V5	Press discharge manifold	1.5" Asahi pvc TU
BV-413 V4	Press discharge manifold	1.5" Asahi pvc TU
BV-414 V4H	Hydraulic oil reservoir isolation valve	½" Apollo thd brass
BV-415	Hydraulic oil reservoir isolation valve	½" Apollo thd brass
ETM-3-3-1	Filter Press CP cycle/event counter	Hours on-time
F-1	Hydraulic oil feed strainer	
FCV-300	A/S to sludge pump control valve	Parker 12R315P8 pilot regulator
FCV-400	A/S to hydraulic control cabinet	½" ASCO 302273
HS-3-3-1	Filter Press CP- Power Switch	On-Off
HS-3-3-2	Filter Press CP Start/Jog Feed Switch	Push On
HS-3-3-3	Filter Press CP Air Supply Switch	On-Off
HS-3-3-4 V3H	Filter Press Hydraulic Ram Mode Switch Extend-Retract	Comp Air 8M 502-254
HS-3-3-5	Filter Press CP Stop Feed/ Silence Switch	Push Off
KC-3-3-1	Feed Pump Pressure – 25psi Control Valve 1	Stacked MAC valve 35A-BAR-DAAB-1-ROA
KC-3-3-2	Feed Pump Pressure – 50 psi Control Valve 2	Stacked MAC valve 35A-BAR-DAAB-1-ROA
KC-3-3-3	Feed Pump Pressure – 75 Control valve 3	Stacked MAC valve 35A-BAR-DAAB-1-ROA
KC-3-3-4	Feed Pump Pressure – 100 Control Valve 4	Stacked MAC valve 35A-BAR-DAAB-1-ROA
M-3-3-1	Filter Press	Aquacare Sys – Filtration Systems Div EPG 630/32-20
P-3-3-1	HP hydraulic pump	Haskel M71
P-3-2-1	Sludge pump	Wilden M4
PAH-3-3-1	Filter Press CP high pressure alarm	
PCV-300	A/S regulator at sludge pump	¾" speed air 1z885c
PCV-400	A/S regulator at press blowdown	
PCV-401 V2H	A/S regulator to hydraulic controls	Wilkerson B28-04-FH00
PCV-402 V7H	A/S regulator to hydraulic pump	Norgren R08-200-RNMA
PCV-403 V6H	Press Ram Retract release valve	h-35035A04B
PCV-404	Pressure relief valve Hydraulic	

V5H	Manifold	
PI-3-3-1	Filter Press CP Blow Down air pressure	Noshok 0-160 psi
PI-3-3-2	Filter Press Hydraulic System pressure	Lenz WGRP-95-229
PI-3-3-3	Filter Press CP Feed Pump pressure	Noshok 0-160 psi
PI-3-3-4	Filter Press CP Air Supply Pressure	Noshok 0-160 psi
PI-3-3-5	Filter press hydraulic system air supply regulator	Wilkerson 0-160 psi
PI-3-3-6	Filter Press hydraulic pump air pressure	Noshok 0-160 psi
PLL-3-3-1	Filter Press CP Hydraulic Pressure Low – signal light	
PLH-3-3-1	Filter Press CP press full – signal light	
PSH-3-3-1	Filter Press pressure switch – hydraulic pressure - high	Static O Ring 3N3-K450P1 d4c
PSL-3-3-1	Filter Press pressure switch - Hydraulic Pressure– low	Static O Ring 3N3-K450P1 d4c
PSH-3-3-2	Sludge pump exhaust pressure switch	United Electric controls J400 m/n 553
T-3-3-1	Press Hydraulic Oil reservoir	
T-3-4-1	Recycle Water tank	
YL-3-3-1	Filter Press CP Cycle Over signal light	
YL-3-3-2	Filter Press CP press full – cycle over	
YA-3-3-1	Filter Press CP press full - alarm	

Floor Drain and Sump System

Tag ID No.	Equipment Description	Equipment Specification
T-3-7-1	Floor drain sump	1100 gallon steel open top, flat bottom
T-3-7-1B	Floor drain pre sump	190 gallon steel open top flat bottom
LSH-3-7-1	Floor sump HL switch	Pump Off - SJ Electro System 1002128 NC
LSHH-3-7-1	Floor sump HHL switch	Alarm - SJ Electro System 1002128 NC
LSLL-3-7-1	Floor sump LL switch	Pump On- SJ Electro System 1002125 NC

LAHH-3-7-1	Floor sump HL alarm	Ronin X19-GP-115-1
P-3-7-1	Sump pump	Gould submersible WE-0534HH
BV-1506	Sump discharge manifold	2" Hayward PVC ball valve
BV-1507	Sump discharge manifold	2" Hayward PVC ball valve

Carbon Adsorber Feed System

Tag ID No.	Description	Specification
T-2-8-1	GACF Tank 1	IMG, 1200 gal HDPE, 64" dia x 96"oah
T-2-8-2	GACF Tank 2	IMG, 1200 gal HDPE, 64" dia x 96"oah
LE/LT-2-8-1	GACF Level transmitter tank 1	Rosemont 1151 Smart Pressure Transducer
LE/LT-2-8-2	GACF Level transmitter tank 2	Rosemont 1151 Smart Pressure Transducer
LSHH-2-8-1	GACF Tank 1 High level float switch	SJ Electro Systems mercury switch 1002128
LSHH-2-8-2	GACF Tank 2 High level float switch	SJ Electro Systems mercury switch 1002128
LSLL-2-8-1	GACF Tank 1 Low level float switch	SJ Electro Systems mercury switch 1002125
LSLL-2-8-2	GACF Tank 2 Low level float switch	SJ Electro Systems mercury switch 1002125
P-2-9-1	GACF pump 1	Flow Serve D814 centrifugal
P-2-9-2	GACF pump 2	4 x 3 x 10 250 gpm at 85' tdh
P-2-9-3	GACF pump 3	10 hp, 1750 rpm, 460 v, 3 ph
	GACF Variable frequency motor drive	Danfoss VLT 4011VT 380-460v, 60 hz, 3 ph
VALVES		
BV-700 D	GACF Tank 1 drain	Hayward 1" PVC TU ball valve
BV-701 D	GACF Tank 2 drain	Hayward 1" PVC TU ball valve
BV-702 SA	GACF Tank 1 transducer drain	Hayward 1" PVC TU ball valve
BV-703 SA	GACF Tank 2 transducer drain	Hayward 1" PVC TU ball valve
BV-704 CAI	GACF P1 pressure gage in	Nibco ball Valve, 585-70-6C, 3/8" thd, 316ss
BV-705 CAI	GACF P1 pressure gage Out	Nibco ball Valve, 585-70-6C, 3/8" thd, 316ss
BV-706 CAI	GACF P3 pressure gage out	Nibco ball Valve, 585-70-6C, 3/8" thd, 316ss
BV-707 CAI	GACF P3 pressure gage in	Nibco ball Valve, 585-70-6C, 3/8" thd, 316ss
BV-708 CAI	GACF P2 pressure gage out	Nibco ball Valve, 585-70-6C, 3/8" thd, 316ss
BV-709 CAI	GACF P2 pressure gage in	Nibco ball Valve, 585-70-6C, 3/8" thd, 316ss

BF-600 FE	Sand filter direct to GACF Tank 1	Crane 10" lug style w/ chain drive
BF-601 FE	Sand filter direct to GACF Tank 2	Crane 10" lug style w/ chain drive
BF-700 ASE	Influent AST to GACF tank 1	Crane 10" lug style w/ chain drive
BF-701 ASE	Influent AST to GACF tank 2	Crane 10" lug style w/ chain drive
BF-702 CAI	GACF Tank 1 pump feed	Crane 6" lug style
BF-703 CAI	GACF Tank 2 pump feed	Crane 6" lug style
BF-704 CAI	GACF Pump feed manifold valve	Crane 6" lug style
BF-705 CAI	GACF Pump feed manifold valve	Crane 6" lug style
BF-706 CAI	GACF Pump 1 suction side valve	Crane 4" lug style
BF-707 CAI	GACF Pump 3 suction side valve	Crane 4" lug style
BF-708 CAI	GACF Pump 2 suction side valve	Crane 4" lug style
BF-709 CAI	GACF Pump 1 discharge side valve	Crane 4" lug style
BF-710 CAI	GACF Pump 3 discharge side valve	Crane 4" lug style
BF-711 CAI	GACF Pump 2 discharge side valve	Crane 4" lug style
BF-712 CAI	GACF Pump Discharge manifold valve	Crane 4" lug style
BF-713 CAI	GACF pump Discharge manifold valve	Crane 4" lug style
BF-800 CAI	GACF discharge manifold valve	Crane 6" lug style
BF-801 CAI	GACF discharge manifold valve	Crane 6" lug style
BF-807 BYP	ASF bypass isolation valve	Crane 6" lug style
BF-808 BYP	ASF bypass isolation valve	Crane 6" lug style
SC-700	Check valve pump 1	Golden Anderson 4" swing check
SC-701	Check valve pump 3	Golden Anderson 4" swing check
SC-702	Check valve pump 2	Golden Anderson 4" swing check
EP-700 SA	GACF Tank 1 pre transducer	Eccentric 3" flanged
EP-702 SA	GACF Tank 1 to transducer	Eccentric 3" flanged
EP-703 SA	GACF Tank 2 to transducer	Eccentric 3" flanged
EP-704 SA	GACF Tank 2 pre transducer	Eccentric 3" flanged
LCV-2-8-1	Flow control valve pump discharge manifold	Eccentric 4" flanged
LCV-2-8-2	Flow control valve pump discharge manifold	Eccentric 4" flanged
Pressure gages		
PI-704	P1 suction side	Winters 0-60 psi
PI-705	P1 discharge side	Winters -30-0-15 psi
PI-706	P3 discharge side	Winters 0-60 psi
PI-707	P3 suction side	Winters -30-0-15 psi
PI-708	P2 discharge side	Wika 0-60 psi
PI-709	P2 discharge side	Wika 0-60 psi

Hydrochloric Acid Feed System

Tag ID No.	Equipment Description	Equipment Specification
T-5-3-1	HCl make-up and feed tank	480 gal HDPE, DT, FB – IMG Tank
M-5-3-1	HCl mixer	Sharp G033
BV-1200	HCl tank Main drain valve	1" Hayward PVC TU Ball valve
BV-1201	HCl tank Water feed shutoff	½" Nibco brass thd Ball valve
BV-1202	HCl Tank feed to pumps	½" PVC Hayward soc TU Ball valve
BV-1203	HCl Branch feed to pump1	½" PVC Hayward soc TU Ball valve
BV-1204	HCl Branch feed to pump 2	½" PVC Hayward soc TU Ball valve
BV-1205	HCl Cal cylinder 1 shut off	½" PVC Hayward soc TU Ball valve
BV-1206	HCl Cal cylinder 2 shut off	½" PVC Hayward soc TU Ball valve
BV-1207	HCl Feed 1 drain	½" PVC Hayward soc TU Ball valve
BV-1208	HCl Feed 2 drain	½" PVC Hayward soc TU Ball valve
BV-1209	HCl Pump 1 discharge	½" PVC Hayward soc TU Ball valve
BV-1210	HCl Pump 2 discharge	½" PVC Hayward soc TU Ball valve
BV-1211	HCl Branch bypass	½" PVC Hayward soc TU Ball valve
BV-1212	HCl Discharge to AS Tower	½" PVC Hayward soc TU Ball valve
BV-1213	HCl Discharge to ASF	½" PVC Hayward soc TU Ball valve
LSH-5-3-1	HCl tank Level switch - high	Drexelbrook multi point II
LSL-5-3-1	HCl tank Level switch - low	Drexelbrook multi point II
LAL-5-3-1	HCl tank low level alarm	Drexelbrook multi point II
FCV-5-3-1	HCl water feed solenoid	½" brass ASCO
HS-5-3-5	HCl Mixer switch H-O-A	At 10-LCP-5-1
KC-5-3-1	HCl Mixer duration timer	At 10-LCP-5-1
HS-5-3-1-3	HCl Pump 1 switch SB/Run	At 10-LCP-5-1
HS-5-3-2-3	HCl Pump 2 switch SB/Run	At 10-LCP-5-1
HC-5-3-1	HCl Pump 1 speed control	At pump
HC-5-3-2	HCl Pump 2 speed control	At pump
YC-5-3-1	HCl Pump 1 stroke control	At pump
YC-5-3-2	HCl Pump 2 stroke control	At pump
P-5-3-1	HCl Pump 1	LMI A961
P-5-3-2	HCl Pump 2	LMI A961

High Pressure Air Distribution System

Tag ID No.	Equipment Description	Equipment Specification
Misc. Equipment		
AR-1300	Air Receiver/ Storage tank	Manchester tank c/n 38067 (1996) 200 gal, 200 psi
C-4-2-1	Compressor unit 1	Champion HPL25D-25 2-stage 123 cfm at

		100 psi Motor 25HP 460v 3ph 60 Hz 1750 rpm
C-4-2-2	Compressor unit 2	
AD-1300	Air Dryer	Atlas Copco FD40 CSA/UL 1" npt inlet/outlet, compressor 0.75 hp
AC-1300	After Cooler	AirTek 407Q w/ moisture separator 2" fpt inlet/outlet, 3960 cfm fan Motor 1/2hp 230/460V, 3 ph, 60Hz
CF-1300	Coalescing filter 1	AirTek JW 0200-c 1.5" fpt, 220 cfm, w/ element JE-0200, 0.3 micron
CF-1301	Coalescing filter 2	AirTek JW 0200-c 1.5" fpt, 220 cfm, w/ element JE-0200, 0.3 micron
Ball valves		Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1300	Tank discharge	Nibco T-585-70, 1.25" bronze, 2 piece, thd
BV-1301 D	Storage tank drain	Strainer ball valve MM-C 4389k37½" x ¼" thd brass
BV-1302	After-cooler bypass	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1303	After-cooler discharge	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1304	Influent to After-cooler AC-1300	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1305	Pre coalescing filter	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1306	Pre coalescing filter	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1307	Post coalescing filter	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1308	Post coalescing filter	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1309	Pre dryer	Nibco T-585-70, 1" bronze, 2 piece, thd
BV-1310	Dryer bypass	Nibco T-585-70, 2" bronze, 2 piece, thd
BV-1311	Post dryer	Nibco T-585-70, 1" bronze, 2 piece, thd
BV-1312 D	Dryer drain pre auto drain	Atlas Copco 1619 733600 ¼" bronze thd cock valve
BV-1315	A/S shut off at mezzanine	Milwaukee 1" thd bronze
BV-1316	A/S shut off at caustic tank	Nibco T-585-70 1" thd bronze
BV-1317	A/S shut off at filter press	B&K 23SP13 ½" thd brass
Globe valves		
GV-1300	Pre dryer pressure gauge	Nibco T-275, ¾" thd bronze globe valve
GV-1301	Post dryer pressure gauge	Nibco T-275, ¾" thd bronze globe valve
GV-1302	Pre dryer pressure switch	Nibco T-275, ¾" thd bronze globe valve
Solenoid Valves		
FCV-1300	Tank drain	Scales Valve controller 720 1006T4 ¼" bronze
FCV-1301	After cooler drain	Economatic Auto Drain 5702-1/4 ¼" bronze
FCV-1302	Dryer drain	Air System Products Posidrain m/n PD

		7020 ¼" bronze
Pressure indicators/ controls		
PI-1301	Pressure gage pre HP air dryer	Winters P647 4" liq. filled, ¼" mpt bottom port 0-300 psi, 304/316 ss
PI-1302	Pressure gage post HP Air dryer	USG 0-200 psi 2" dry w/ ¼" mptback port
PI-1303	C-4-2-1 oil pressure gauge	? 0-30 psi liq. filled 1.5" w/ ¼" mpt back port
PI-1304	C-4-2-2 oil pressure gauge	? 0-30 psi dry 1.5" w/ ¼" mpt back port
PI-1305	Pressure gauge HP air storage tank	Weiss Instruments 0-200 liq. Filled 2" w/ ¼" mpt bottom port
PI-1317	a/s regulator gauge at filter press	USG 0-200 plastic ¼" back
PCV-1317	a/s regulator at filter press	Speed air 4Xk90
PSL-4-9-1	Post dryer pressure switch	Barksdale Econotrol EIH-R250, ¼" mpt bottom port 15-250 psi, adjustable
PSL-4-9-2	Compressor 1 oil pressure switch	Kobold KHP-8022
PSL-4-9-3	Compressor 2 oil pressure switch	Kobold KHP-8022
PSL-4-9-4	C-4-2-1 pressure switch	Furnas 69MB9388A 140-175 psi ¼" mpt
PSL-4-9-5	C-4-2-2 pressure switch	Furnas B9388A 130-165 psi
Other Equip.		
	Flex connector tank discharge	1.25"

Influent System

Tag ID No.	Description	Specification
	Pumps	
P-1-4-1	Influent pump 1	FlowServe 4x3x6 250 gpm
P-1-4-2	Influent pump 2	FlowServe 4x3x6 250 gpm
P-1-4-3	Influent pump 3	FlowServe 4x3x6 250 gpm
	Flow Monitoring	
FE-1-6-1	Train-1 flow element	Brooks Mag 5000
FE-1-6-2	Train-2 flow element	m/n 500485TTF1ACBA
FT-1-6-1	Train-1 flow monitor	Brooks Mag 3580
FT-1-6-2	Train-2 flow monitor	m/n 358562B4D1
	Check Valves	
SC-1400	pump 1 check valve	Global Anderson swing check 250DS
SC-1401	pump 3 check valve	Global Anderson swing check 250DS
SC-1402	pump 2 check valve	Global Anderson swing check 250DS
	Ball Valves	

BV-1400	PI isolation valve P1 in	3/8" 316 ss Nibco
BV-1401	PI isolation valve P1 out	3/8" 316 ss Nibco
BV-1402	PI isolation valve P3 in	3/8" 316 ss Nibco
BV-1403	PI isolation valve P3 out	3/8" 316 ss Nibco
BV-1404	PI isolation valve P2 in	3/8" 316 ss Nibco
BV-1405	PI isolation valve P2 out	3/8" 316 ss Nibco
BV-14	Train 1 Isolation	4" Hayward TU
BV-14	Train 2 isolation	4" Hayward TU
	Butterfly Valves	
BF-1400	P1 suction side isolation	4" Crane lug style
BF-1401	P3 suction side isolation	4" Crane lug style
BF-1402	P2 suction side isolation	4" Crane lug style
BF-1403	P1 discharge side isolation	4" Crane lug style
BF-1404	P3 discharge side isolation	4" Crane lug style
BF-1405	P2 discharge side isolation	4" Crane lug style
BF-1416	Pump discharge diverter	4" Crane lug style
BF-1417	Pump discharge diverter	4" Crane lug style
	Plug Valves	
FCV-1-6-1	Treatment Train-1 flow control valve	3" flanged eccentric plug valve No longer auto air actuated
FCV-1-6-2	Treatment Train-2 flow control valve	3" flanged eccentric plug valve No longer auto air actuated
EP-1407	Sample port on pump feed manifold	¾" threaded millicentric
EP-1412	Sample port EQ to influent flow	¾" thd millicentric thd
	Pressure Gages	
PI-1400	P1 suction side	Winters -30-0-30
PI-1400	P1 suction side	Winters -30-0-30
PI-1400	P1 suction side	Winters -30-0-30
PI-1400	P1 suction side	Winters -30-0-30
PI-1400	P1 suction side	Winters -30-0-30
PI-1400	P1 suction side	Winters -30-0-30

Permanganate Feed System

Tag ID No.	Equipment Description	Equipment Specification
T-5-1-1	KMnO4 make-up and feed tank	480 gal HDPE, DT, FB – IMG Tank
BV-900	KMnO4 tank Main drain valve	1" Hayward PVC TU Ball valve
BV-901	KMnO4 tank Water feed shutoff	½" Nibco brass thd Ball valve
BV-902	KMnO4 Tank feed to pumps	½" PVC Hayward soc TU Ball valve
BV-903	KMnO4 Branch feed to pump1	½" PVC Hayward soc TU Ball valve

BV-904	KMnO4 Branch feed to pump 2	½" PVC Hayward soc TU Ball valve
BV-905	KMnO4 Cal cylinder 1 shut off	½" PVC Hayward soc TU Ball valve
BV-906	KMnO4 Cal cylinder 2 shut off	½" PVC Hayward soc TU Ball valve
BV-907	KMnO4 Feed 1 drain	½" PVC Hayward soc TU Ball valve
BV-908	KMnO4 Feed 2 drain	½" PVC Hayward soc TU Ball valve
BV-909	KMnO4 Pump 1 discharge	½" PVC Hayward soc TU Ball valve
BV-910	KMnO4 Pump 2 discharge	½" PVC Hayward soc TU Ball valve
BV-911	KMnO4 Branch bypass	½" PVC Hayward soc TU Ball valve
BV-912	KMnO4 Discharge to Rx tank 1	½" PVC Hayward soc TU Ball valve
BV-913	KMnO4 Discharge to Rx tank 2	½" PVC Hayward soc TU Ball valve
M-5-1-1	KMnO4 mixer	Sharp G033
LSH-5-1-1	KMnO4 tank Level switch - high	Drexelbrook multi point II
LSL-5-1-1	KMnO4 tank Level switch - low	Drexelbrook multi point II
LAL-5-1-1	KMnO4 tank low level alarm	Drexelbrook multi point II
FV-5-1-1	KMnO4 water feed solenoid	½" brass ASCO
HS-5-1-5	KMnO4 Mixer switch H-O-A	At 10-LCP-5-1
KC-5-1-1	KMnO4 Mixer duration timer	At 10-LCP-5-1
HS-5-1-3-1	KMnO4 Pump 1 switch SB/Run	At 10-LCP-5-1
HS-5-1-3-2	KMnO4 Pump 2 switch SB/Run	At 10-LCP-5-1
HC-5-1-1	KMnO4 Pump 1 speed control	At pump
HC-5-1-2	KMnO4 Pump 2 speed control	At pump
YC-5-1-1	KMnO4 Pump 1 stroke control	At pump
YC-5-1-2	KMnO4 Pump 2 stroke control	At pump

Sodium Hydroxide Feed System

Tag ID No.	Equipment Description	Equipment Specification
T-5-2-1	NaOH make-up and feed tank	380 gal HDPE, DT, FB – IMG Tank
M-5-2-1	KMnO4 mixer	Sharp G033
BV-1000	NaOH tank Main drain valve	1" Hayward PVC TU Ball valve
BV-1001	NaOH tank Water feed shutoff	½" Nibco brass thd Ball valve
BV-1002	NaOH Tank feed to pumps	½" PVC Hayward soc TU Ball valve
BV-1003	NaOH Branch feed to pump1	½" PVC Hayward soc TU Ball valve
BV-1004	NaOH Branch feed to pump 2	½" PVC Hayward soc TU Ball valve
BV-1005	NaOH Cal cylinder 1 shut off	½" PVC Hayward soc TU Ball valve
BV-1006	NaOH Cal cylinder 2 shut off	½" PVC Hayward soc TU Ball valve
BV-1007	NaOH Feed 1 drain	½" PVC Hayward soc TU Ball valve
BV-1008	NaOH Feed 2 drain	½" PVC Hayward soc TU Ball valve
BV-1009	NaOH Pump 1 discharge	½" PVC Hayward soc TU Ball valve
BV-1010	NaOH Pump 2 discharge	½" PVC Hayward soc TU Ball valve
BV-1011	NaOH Branch bypass	½" PVC Hayward soc TU Ball valve

BV-1012	NaOH Branch bypass	½" PVC Hayward soc TU Ball valve
BV-1013	NaOH Discharge to Rx tank 1	½" PVC Hayward soc TU Ball valve
BV-1014	NaOH Discharge to Rx tank 2	½" PVC Hayward soc TU Ball valve
BV-1015	NaOH Discharge to GACF tank-2	½" PVC Hayward soc TU Ball valve
BV-1016	NaOH Discharge to GACF tank-2	½" PVC Hayward soc TU Ball valve
LSH-5-2-1	KMnO4 tank Level switch - high	Drexelbrook multi point II
LSL-5-2-1	KMnO4 tank Level switch - low	Drexelbrook multi point II
LAL-5-2-1	KMnO4 tank low level alarm	Drexelbrook multi point II
FV-5-2-1	KMnO4 water feed solenoid	½" brass ASCO
HS-5-2-5	KMnO4 Mixer switch H-O-A	At 10-LCP-5-1
KC-5-2-1	KMnO4 Mixer duration timer	At 10-LCP-5-1
HS-5-2-3-1	KMnO4 Pump 1 switch SB/Run	At 10-LCP-5-1
HS-5-2-3-2	KMnO4 Pump 2 switch SB/Run	At 10-LCP-5-1
HC-5-2-1	KMnO4 Pump 1 speed control	At pump
HC-5-2-2	KMnO4 Pump 2 speed control	At pump
YC-5-2-1	KMnO4 Pump 1 stroke control	At pump
YC-5-2-2	KMnO4 Pump 2 stroke control	At pump
P-5-2-1	KmnO4 Pump 1	LMI A961
P-5-2-2	KMnO4 Pump 2	LMI A961

Polymer Feed System

Tag ID No.	Equipment Description	Equipment Specification
T-5-4-1 (T-1100)	Polymer tank 1	IMG 730 gal, hdpe, dt, fb
T-5-4-2 (T-1101)	Polymer tank 2	IMG 730 gal, hdpe, dt, fb
M-5-4-1	Polymer mixer 1	Sharp 2E5-30
M-5-4-2	Polymer mixer 2	Sharp-2E5-30
P-5-4-1	Polymer pump 1	Vector 2002 peristaltic
P-5-4-2	Polymer pump 2	Vector 2002 peristaltic
P-5-4-3	Polymer pump 3	Vector 2002 peristaltic
CC-1101	Polymer Calibration cylinder 1	Griffco 500 ml clear pvc sealed
cc-1102	Polymer Calibration cylinder 2	Griffco 500 ml clear pvc sealed
CC-1103	Polymer Calibration cylinder 3	Griffco 500 ml clear pvc sealed
PI-1100	Polymer water line pressure gauge	Winters 605 4" liq filled
PI-1101	Polymer Pump 1 pressure gauge	Winters 645 4" liq filled
PI-1102	Polymer Pump 2 pressure gauge	Winters 645 4" liq filled
PI-1103	Polymer Pump 2 pressure gauge	Winters 645 4" liq filled
PCV-1100	Polymer water fill pressure	Watts ½" thd series U5 adjustable

	regulator	
PRV-1101	Polymer pump 1 pressure relief valve	Hayward plastic relief valve 1" threaded adjustable
PRV-1102	Polymer pump 2 pressure relief valve	Hayward plastic relief valve 1" threaded adjustable
PRV-1103	Polymer pump 3 pressure relief valve	Hayward plastic relief valve 1" threaded adjustable
FU-1100	Polymer water supply filter	Ametek #20 Big Blue
FV-5-4-1	Polymer tank 1 water fill solenoid	ASCO ½" 2-way pilot solenoid 8210G4
FV-5-4-2	Polymer tank 2 water fill solenoid	ASCO ½" 2-way pilot solenoid 8210G4
BV-1100	Polymer tank 1 drain	1" Hayward TU ball valve
BV-1101	Polymer tank 2 drain	½" Hayward TU Ball valve
BV-1102	Polymer tank 1 feed	½" Hayward TU Ball valve
BV-1103	Polymer tank 2 feed	½" Hayward TU Ball valve
BV-1104	Polymer tank feed bypass	½" Hayward TU Ball valve
BV-1105	Polymer feed branch shutoff	½" Hayward TU Ball valve
BV-1106	Polymer feed branch shutoff	½" Hayward TU Ball valve
BV-1107	Polymer pump 1 isolation	½" Hayward TU Ball valve
BV-1108	Polymer pump 2 isolation	½" Hayward TU Ball valve
BV-1109	Polymer pump 3 isolation	½" Hayward TU Ball valve
BV-1110	Polymer pump 1 drain	½" Hayward TU Ball valve
BV-1111	Polymer pump 2 drain	½" Hayward TU Ball valve
BV-1112	Polymer pump 3 drain	½" Hayward TU Ball valve
BV-1113	Polymer pump 1 cal cylinder isolation	½" Hayward TU Ball valve
BV-1114	Polymer pump 2 cal cylinder isolation	½" Hayward TU Ball valve
BV-1115	Polymer pump 3 cal cylinder isolation	½" Hayward TU Ball valve
BV-1116	Polymer pump 1 pressure gauge isolation	½" Hayward TU Ball valve
BV-1117	Polymer pump 2 pressure gauge isolation	½" Hayward TU Ball valve
BV-1118	Polymer pump 3 pressure gauge isolation	½" Hayward TU Ball valve
BV-1119	Polymer pump 1 discharge isolation	½" Hayward TU Ball valve
BV-1120	Polymer pump 2 discharge isolation	½" Hayward TU Ball valve
BV-1121	Polymer pump 3 discharge isolation	½" Hayward TU Ball valve

BV-1122	Polymer pump discharge bypass	½" Hayward TU Ball valve
BV-1123	Polymer pump discharge bypass	½" Hayward TU Ball valve
BV-1124	Polymer Tank 1 water fill	½" nibco bronze thd ball valve T585-70-66
BV-1125	Polymer Tank 2 water fill	½" nibco bronze thd ball valve T585-70-66
BV-1126	Polymer water shut off - local	¾" nibco bronze thd t-585-70
BV-1127	Polymer water fill pressure gauge	½" nibco bronze thd ball valve T585-70-66
BV-1128	Polymer water main isolation	¾" Watts bronze thd 9813
LSH/LSL-5-4-1	Polymer Make-up Tank 1 – level switch high, low	Drexelbrook multipoint level control switch
LSH/LSL-5-4-2	Polymer Make-up Tank 2 – level switch high, low	Drexelbrook multipoint level control switch
BCV-1101	Polymer to Train 1 feed	½" Hayward TU Ball valve
BCV-1102	Polymer to Train 2 feed	½" Hayward TU Ball valve

Water Recycle System

Tag ID No.	Description	Specification
Tanks		
T-3-4-1	Recycle water tank	ING 1000 gallon HDPE, domed top, flat bottom
T-3-7-1	Floor drain sump	1200 gal steel open top, flat bottom tank
Ball valves		
BV-1500 D	RCY LE/LT drain	1" Hayward TU PVC
BV-1501 D	RCY Tank Drain	2" Hayward PVC TU
BV-1502 RCY	RCY Pump1 In Gauge	3/8" Nibco bronze w/316ss
BV-1503 RCY	RCY Pump1 Out Gauge	3/8" Nibco bronze w/316ss
BV-1504 RCY	RCY Pump2 In Gauge	3/8" Nibco bronze w/316ss
BV-1505 RCY	RCY Pump2 Out Gauge	3/8" Nibco bronze w/316ss
BV-1506 PIT	Pit Discharge manifold	2" Hayward TU PVC
BV-1507 PIT	Pit Discharge hose connector	2" Hayward TU PVC
BV-1508 PIT	Pit Discharge manifold	2" Hayward TU PVC
BV-1509 PIT	Pit discharge diverter	1.5" Colonial YU PVC
Butterfly Valves		
BF-1500 RCY	RCY Pump discharge manifold	4" Crane Lug style
BF-1501 PIT	Hose discharge manifold	2" Crane Lug style
BF-1502 PIT	Pit discharge diverter	3" Hammond lug style
Plug Valves		
EP-1500 RCY	RCY Pump 1 influent	4" flanged eccentric plug
EP-1501 RCY	RCY Pump 2 influent	4" flanged eccentric plug
EP-1502 RCY	RCY Pump 1 effluent	4" flanged eccentric plug

EP-1503 RCY	RCY Pump 2 effluent	4" flanged eccentric plug
EP-1504 SA	RCY discharge manifold sample port	1" Thd eccentric plug
EP-1505 D	RCY tank drain	3" flanged eccentric plug
EP-1506 SA	RCY pre LE/LT	3" flanged eccentric plug
EP-1507 SA	RCY discharge manifold	¾ " Thd eccentric plug
Check Valves		
SC-1500	RCY Pump 1 discharge	4" GA flanged swing check
SC-1501	RCY Pump 2 discharge	4" GA flanged swing check
LE/LT-3-4-1	RCY Level Monitor	Rosemont 1151 Smart Transducer
LSLL-3-4-1	RCY level switch - low	SJ Electro Sys 1002125 NO
LSHH-3-4-1	RCY level switch - high	SJ Electro Sys 1002128 NC
LAHH-3-7-1	Floor sump HHL alarm	SJ Electro Sys 1002128 NC
LSHH-3-7-1	Floor Sump HL switch	SJ Electro Sys 1002128 NC
LSLL-3-7-1	Floor sump LL switch	SJ Electro Sys 1002125 NO
PI-1502	RCY Pump 1 In	Winters -30 - 15
PI-1503	RCY Pump 1 Out	Winters 0 - 30
PI-1504	RCY Pump 2 In	WIKA 0 - 60
PI-1505	RCY Pump 2 Out	Winters 0 - 30

Reaction Tank System

Tag ID No.	Description	Specification
T-1-8-1	Reactor tank train 1	
T-1-8-2	Reactor tank train 2	
AIT-1-8-1	pH transmitter Reactor 1	Johnson Yokogawa pH400-p-o-1-e*a/u/q
AIT-1-8-2	pH transmitter reactor 2	
AE-1-8-1	pH probe reactor 1	Johnson Yokogawa FU-20-05-T2NPT
AE-1-8-2	pH probe reactor 2	
M-1-8-1, 2	Mixer	Sharp 1N22-37
HS-1-8-1(2)-1A	Hand switch at mixer	Local knife switch
HS-1-8-1(2)-1B	Handswitch at mixer	Keyed e-stop
HS-1-8-1(2)-2	Hand switch at MCP	Hand - Off
	Tank drain	4" flanged plug valve

Sand Filter System

Tag ID No.	Description	Specification
M-1-14-1	Sand-filter train 1	Volcano V-100 SQ
M-1-14-2	Sand-filter train 2	Continuous backwash filter

BF-200 FI	Sandfilter influent	10" chain actuated Crane, lug style
BF-210 FI	Sandfilter influent bypass	8" chain actuated, Crane, lug style
BF-600 FE	Discharge bypass to GACF tank 1	10" chain actuated Crane, lug style
BF-601 FE	Discharge bypass to GACF tank 1	10" chain actuated Crane, lug style
BF-602-FE	Discharge to ASF tank 1	10" chain actuated Crane, lug style
BF-603 FE	Discharge to ASF tank 2	10" chain actuated Crane, lug style
	L-GAC feed tank fill	10" chain actuated Crane, lug style
BF-616 FE	Sandfilter 1 discharge	10" a/a actuated, Bray, lug style
BF-617 FE	Sandfilter 2 discharge	10" a/a actuated, Bray, lug style
BV-240, 241, 242, 243	Filter 1 Cone drain (4)	1.5" Apollo, steel
BV-244, 245, 246, 247	Filter 2 Cone drain (4)	1.5" Apollo, steel
Air Filter	Air supply a/w separator	Wilkerson F30-08-000A-E02
Regulator	Air supply	R17 801 RGLA
Pressure gage	Regulator	1017081

Sludge System Equipment

Tag ID No.	Description	Specification
T-3-1-1	Sludge Storage tank	5000 gallon steel cone bottom tank on steel legs. Open top
LE/LT-3-1-1	Sludge Storage level monitor	Rosemont 1151 Smart Pressure Transducer
P-3-2-1	Filter Press feed Pump	Wilden M4 double diaphragm pump
FP-3-3-1	Filter Press	Durco Plate and frame – 6 ft^3
Ball Valves		
BV-300 SA	Sludge tank LE/LT drain	1" Hayward TU PVC Ball valve
EP-301 DCT	Sludge Tank Top manifold decant port	1.5" Spears PVC SU
EP-302 DCT	Sludge Tank Middle manifold decant port	1.5" Spears PVC SU
EP-303 DCT	Sludge Tank Bottom manifold decant port	1.5" Spears PVC SU
BV- 304 D	Sludge Tank bottom side decant port	2" Hayward TU PVC
BV-305 AHP	A/S to sludge pump	¾" Nibco t0585-70 bronze thd
BV-306 ALP	A/S to sludge pump	¾" Nibco t0585-70 bronze thd
BV-307 D	Water hook up to cone drain	¾" Hayward TU pvc
BV-405 ALP	A/S to press blowdown	1/2 " Durapipe TU CPVC
BV-406 AHP	A/S to filter press - main	1" Nibco brass thd
BV-407 AHP	A/S to press blowdown	½" Nibco thd brass

BV-408 AHP	A/S to filter press controls	½" Apollo ss thd
BV-409 F	Press discharge V-2	1.5" Asahi A Valve TU PVC
BV-410 F	Press discharge V-3	1.5" Asahi A Valve TU PVC
BV-411 F	Press Influent V-1	2" Asahi A Valve TU PVC
BV-412 F	Press discharge V-5	1.5" Asahi A Valve TU PVC
BV-413 F	Press discharge V-4	1.5" Asahi A Valve TU PVC
Butterfly Valves		
BF-300	Cone drain – to hose	2" Hayward PVC, lug, gasket
BF-301	Cone drain – to pump	2" Hayward PVC, lug, gasket
Check Valve		
BC-400 AHP	A/S to press blowdown	½" Conbraco ss ball check
Plug Valves		
EP-305 SA	Sludge tank side drain	3" Eccentric CI flanged
EP-306 SA Removed 11/09	Sludge tank cone drain to pump	2" eccentric CI fl (replaced by BF valves 11/09)
EP-307 D Removed 11/09	Sludge tank cone drain to hose	2" eccentric CI Fl (replaced by BF valve 11/09)
EP-308 SA	Sludge tank Pre LE/LT	3" Eccentric CI plug
Air Line Elements		
AO-300 AHP	Sludge pump oiler at sludge tank	¾" SpeedAir 6ZC30A
FCV-300 AHP	A/S to press pump	Parker Diaphragm control valve ½" 12R 315BP
PCV-300 AHP	A/S regulator at sludge tank	½" SpeedAir 1Z885C pressure regulator
PI-300	a/s regulator pressure gauge	¼" back, plastic 0-160 psi
AF-300 AHP	A/S air-water separator at sludge tank	¾" SpeedAir 8ZC32A air-water separator
PCV-400 AHP	A/S to press blowdown – pressure regulator	½" Wilkerson R28-04-F000
FCV-400 AHP	A/S to press controls	½" ASCO solenoid 302273

Treated Water Tags

Tag ID No.	Description	Specification
T-2-11-1	Treated Water Tank 1	TecTank 42000 gal.
T-2-11-2	Treated Water Tank 2	TecTank 42000 gal
Controls		
FE/FT 2-11-1	Plant Effluent monitor	Khrone mag meter
FE/FT 2-14-1	Inj. Well flow monitor	Signet
FE/FT 2-14-2	Inj. Well flow monitor	Signet
FE/FT 2-14-3	Inj. Well flow monitor	Signet

FE/FT 2-14-4	Inj. Well flow monitor	Signet
LE/LT-2-11-1	TWT-1 level monitor	rosemont
LE/LT-2-11-2	TWT-2 level monitor	
LSLL 2-11-1	Injection pump control interlock off	
LSHH 2-11-1	Injection pump control interlock on	
LSHH-2-12-1	GACF pump interlock	
LSHH-2-12-1	GACF pump interlock	
LSHH 2-15-1	IW-1 level monitor	
LSHH 2-15-1	IW-2 level monitor	
LSHH 2-15-1	IW-3 level monitor	
LSHH 2-15-1	IW-4 level monitor	
PI-1406	Inj. Pump-1 Influent gauge	winters
PI-1407	Inj. Pump-1 effluent gauge	winters
PI-1408	Inj. Pump-2 Influent gauge	winters
PI-1409	Inj. Pump-2 effluent gauge	winters
PI-1410	Inj. Pump-3 Influent gauge	Wika
PI-1411	Inj. Pump-3 effluent gauge	Wika
Ball Valves		
BV-1406 RGW	Inj pump 1 PG in	3/8" nibco ss
BV-1407 RGW	Inj pump 1 PG out	3/8" nibco ss
BV-1408 RGW	Inj pump 2 PG in	3/8" nibco ss
BV-1409 RGW	Inj pump 2 PG out	3/8" nibco ss
BV-1410 RGW	Inj. Pump 3 PG in	3/8" RuB brass thd.
BV-1411 RGW	Inj. Pump 3 PG out	3/8" RuB brass thd
BV-1412 D	TWT-1 Level monitor drain	1" Hayward TU PVC
BV-1413 D	TWT-2 level monitor drain	1" Hayward TU PVC
BV-1418 SA	Plant effluent sample port	¾" Hayward TU PVC
BV-1419 SA	Plant effluent sampling port	½" Hershey thd PVC
Butterfly Valves		
BF-1406 RGW	TWT-1 main to inj pump manifold	8" Crain Lug style
BF-1407 RGW	TWT-2 main to inj pump manifold	8" Crain Lug style
BF-1408 RGW	Inj. Pump feed manifold	8" Crain Lug style
BF-1409 RGW	Inj. Pump-1 influent	6" Crain lug style
BF-1410 RGW	Inj. Pump-2 influent	6" Crain lug style
BF-1411 RCY	Inj pump recycle manifold	6" Crain lug style
BF-1412 RCY	Inj pump recycle manifold	6" Crain lug style
BF-1413 RCY	Inj pump recycle manifold	6" Crain lug style
BF-1414 IW	Inj pump discharge manifold	6" Crain lug style

BF-1415 IW	Inj pump discharge manifold	6" Crain lug style
BF-1418 IW	Inj pump 1 discharge	6" Crain lug style
BF-1419 IW	Inj pump 2 discharge	6" Crain lug style
BF-1421 IW	IW-1 pre flow meter	3" Crain lug style
BF-1422 IW	IW-2 pre flow meter	3" Crain lug style
BF-1423 IW	IW-3 pre flow meter	3" Crain lug style
BF-1424 IW	IW-4 pre flow meter	3" Crain lug style
BF-1429 IW	IW-1 post flow meter	3" Crain lug style
BF-1430 IW	IW-2 post flow meter	3" Crain lug style
BF-1431 IW	IW-3 post flow meter	3" Crain lug style
BF-1432 IW	IW-4 post flow meter	3" Crain lug style
BF-1436 RGW	Inj. Pump 3 influent	6" Hayward PVC
BF-1437 RGW	Inj. Pump 3 effluent	6" Hayward PVC
BF-1499	Inj pump to backwash feed	8" Crain Lug, chain
Check Valves		
SC-1403 RGW	Inj. Pump 2	GA swing check
SC-1404 RGW	Inj. Pump 1	GA swing check
SC-1405 RGW	Inj. Pump 3	Hayward PVC swing check
Plug valves		
EP-1408	TWT-1 drain	4" flanged
EP-1409	TWT-2 drain	4" flanged
EP-1402 SA	TWT-1 to level monitor	3" Flanged
EP-1403 SA	TWT-1 to level monitor	3" Flanged
EP-1404 SA	TWT-2 to level monitor	3" Flanged
EP-1405 SA	TWT-2 to level monitor	3" Flanged
	Inj pump recycle sample port	¾" thd milcentric
Pumps		
P-2-12-1	Injection Pump 1	Flowserve 6x4x8
P-2-12-2	Injection Pump 2	Flowserve 6x4x8
P-2-12-3	Injection pump 3	Flowserve 6x4x3

ATTACHMENT 21

Miscellaneous Procedures

Document ID No.	Document
CPS-PSP-001	Liquid Phase Carbon Vessel Backwash Procedure
CPS-PSP-003	Liquid Carbon Change-out
CPS-PSP-004	Vapor Carbon Change-out
CPS-PSP-006	Filter Press Operation In Automatic Mode

Operations and Maintenance Document CPS-PSP-001

TITLE: Liquid Phase Carbon Vessel Backwash Procedure

SCOPE: These are the steps to follow when performing the backwash operation on the GAC vessels 1 and 2.

PURPOSE: The backwash procedure is used to clean the top surface of the carbon, to fluff or unpack the carbon bed and to remove any broken down carbon fines. Normally, water flows from the carbon feed pumps to the top of the vessels, through to the bottom of the vessel and out to the treated water tanks. In the back wash procedure, water flows from the treated water tanks by the injection pumps into the bottom of the carbon vessels, up through the carbon bed and out through the top to the floor drain pit.

Prior to Backwash:

1. Make sure outside floor drain pit is empty. If not, pump it to the Sludge Tank (T-3-1-1) or Recycle Tank (T-3-4-10). If pit cover is removed, ensure that the area is properly marked for safety precautions.
2. Make sure Sludge Tank is empty. If not, empty it to the Recycle Tank for discharge to EQ Tank (T-1-3-1).
3. Shut off Extraction Well Pumps 1, 2, and 3 (pumps P-1-1-1, P-1-1-2, P-1-1-3) in order to let the Equalization Tank run down and make room for the backwash water.
4. Shut off Injection Well Pumps 1 and 2 (pumps P-2-12-1, P-2-12-2) in order to have sufficient water to supply the back wash. And close the 4 -3" well valves (BF-1421, BF-1422, BF-1423, and BF-1424).
5. Shut off Influent Pumps (pumps P-1-4-1, P-1-4-2, P-1-4-3) and close suction side 4" butterfly valves. At the discharge side of the sandfilters, close the chain operated 10" butterfly valves (BF-602FE, BF-603FE) discharging into the Air Stripper feed tanks.
6. Close four decant valves on Sludge Tank (BV-301, BV-302, BV-303, and BV-304).
7. Install sump pump in the floor drain pit and attach the 2" hose to valve BV-1507. at the RCY tank, close valves BV-1506, BV-1509 and BF-1502, and open BV-1508 so that the sump discharge is directed to Sludge Tank.
8. Allow the plant flows to come to a halt and air stripper blower to shut off. This can be accelerated by shutting off the Air Stripper feed pumps, (P-2-3-1, p-2-3-2, P-2-3-3).

Backwash Setup:

9. On the injection pump discharge, make sure the three normally closed 6" butterfly valves on Recycle Line are closed (BF-1411, 1412, 1413), and the two normally open 6"

butterfly valves on the plant discharge/ backwash line are open (valves BF-1414, BF1415).

10. Above the influent pumps, open the chain-operated 8" butterfly valve (valve BF-1499).
11. At wall adjacent to influent pumps close the two chain operated 8" butterfly valves (valves BF-811, BF-812) on pipe labeled carbon absorber effluent going to treated water tanks (tanks T-2-11-1, T-2-11-2).
12. If GAC-1 (tank T-2-10-1)is to be backwashed, then at GAC -1 and 2:
    A) Close 8" butterfly valve (valve BF-806)on GAC effluent line,
    B) Close 4" chain operated butterfly valve BF-804, on GAC-2 influent,
    C) Open 8" chain operated butterfly valve BF-899, on GAC-1 backwash effluent,
    D) Close 4" chain operated butterfly valve BF-802 on GAC-1 influent
13. If GAC-2 (tank T-2-10-2) is to be backwashed, then at GAC-1 and 2:
    A) Close 8" butterfly valve (valve BF-805)on GAC effluent line,
    B) Close 4" chain operated butterfly valve BF-804, on GAC-2 influent
    C) Open 8" chain operated butterfly valve BF-898, on GAC-2 backwash effluent,
    D) Close 4" chain operated butterfly valve BF-802 on GAC-1 influent
14. Attach 8" flexible hose to discharge outlet port (BF-897)on outside wall, assure that discharge side of hose is in floor drain pit opening.
15. Walk the flow circuit and insure that all valve orientations are correct. Review chart and drawing at the end of text.
16. Attach flexible airline from house compressor port at the ASF skid to the quick connect fitting on the selected vessel sample port (BV-800 or BV-801).
17. Open air line valve (BV-611) and the valve at the sample port to allow air into the bottom sparger. Crack the vent valve (BV-818 or BV-819) to allow for air discharge. Allow the air to sparge the carbon bed for 15-20 minutes.
18. Close air valves (BV-611, BV-818(819), and BV-800(801)).

Backwash Procedure:

19. Turn on both injection pumps and at wall open 8" wheel operated butterfly discharge valve (valve BF-897). Turn on portable sump pump.
20. Observe backwash discharge into pit, periodically take samples of discharge with a 1-liter beaker and look for carbon fines vs. granular carbon.
21. When effluent is within 2 feet of the top of the pit, turn off the pumps, close valve BF-897 – 8" wheel operated butterfly discharge valve and open vessel vent valve (BV-818, 819).
22. After the pit has been pumped to the Sludge Tank, repeat steps 17-21 as necessary. Steps 17-18 are optional. (Ensure that there is room in the sludge tank for the pit discharge).

System Restart:

23. Walk the flow circuit and reverse the valve positions that were changed for the backwash procedure. Review chart at end of text. (Valves should be in normal position.)
24. Turn on extraction well pumps.
25. Open valves on influent pumps and turn on pumps (make sure valves at sandfilter discharge have been opened).
26. Turn on injection well pumps, GAC feed pumps and Air Stripper feed pumps.
27. Watch system cycle and ensure that the GAC and AS feed pumps are operating correctly.
28. Decant sludge as necessary.

Valving Positions Common to Both Vessels

Valve No.	Valve Type	Valve description	Normal Position	Backwash Position
BV-301-303	1 ½" pvc BV	Sludge tank decant valves (3)	Open	closed
BV-304	2" pvc BV	Sludge tank side drain		closed
BV-1507	2" pvc BV	Pit discharge hose connection	Closed	open
BV-1506,	2" pvc BV	Pit pump discharge	Open	Closed
BV-1508	2" pvc BV	Pit pump discharge	Open	open
BV-1509	2" pvc BV	RCY tank influent	Open	closed
BF-1502	2" cs BF	Sludge tank decant to RCY tank	Open	closed
BF-1421	3" cs BF	Discharge to IW-1	Open	closed
BF-1422	3" cs BF	Discharge to IW-2	Open	closed
BF-1423	3" cs BF	Discharge to IW-3	Open	closed
BF-1424	3" cs BF	Discharge to IW-4	Open	closed
BF-1499	8" CO BF	Backwash feed over INF pumps	Closed	open
BF-811	8" CO BF	Carbon Adsorber effluent at INF pumps	Open	closed
BF-812	8" CO BF	Carbon Adsorber effluent at INF pumps	Open	Closed
BF-899	8" CO BF	GAC-1 Backwash effluent	Closed	Open
BF-602, 603	10" CO BF	Sandfilter discharge	Open	Closed

Backwash GAC Vessel #1 T-2-10-1

Valve No.	Valve Type	Valve description	Normal Position	Backwash Position
BF-806	8" CO BF	Carbon Adsorber effluent at GAC	Open	Closed
BF-804	4" CO BF	GAC-2 influent	Open	Closed
BF-899	8" CO BF	GAC-1 Backwash effluent	Closed	open
BF-803	4" CO BF	GAC-1 influent	Open	Closed

Backwash GAC Vessel #2 T-2-10-2

Valve No.	Valve Type	Valve description	Normal Position	Backwash Position
BF-805	8" CO BF	Carbon Adsorber effluent at GAC	Open	Closed
BF-804	4" CO BF	GAC-2 influent	Open	closed
BF-898	8" CO BF	GAC-2 Backwash effluent	Closed	open
BF-803	4" CO BF	GAC-1 influent	Open	Closed

BV – Ball Valve **BF** – Butterfly Valve ***CO*** – Chain Operated
WO – Wheel Operated **cs** – carbon steel

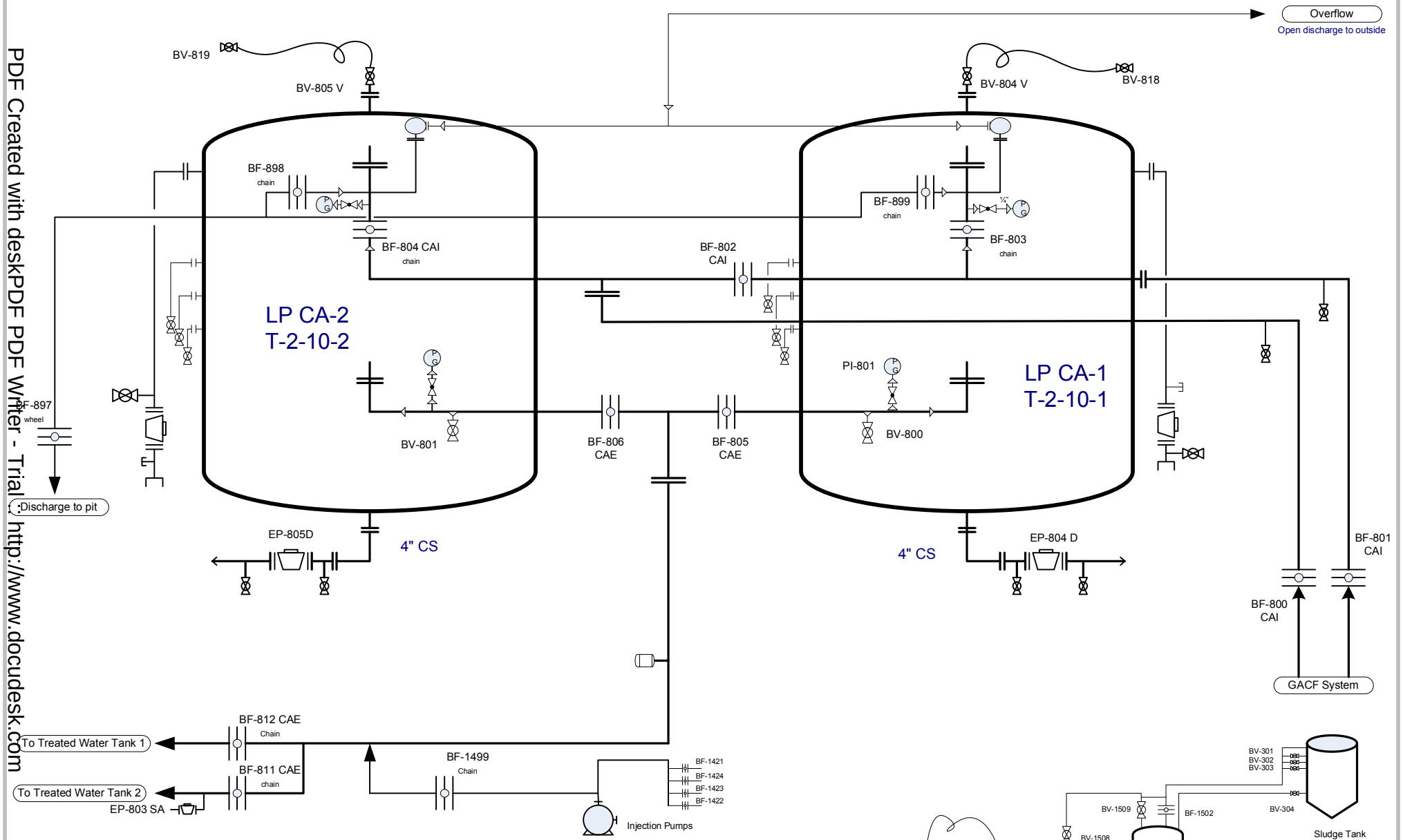
References:

Operating System Drawings
Procedure Drawing CPS-Dwg-001 Backwash Valving
GWTP O&M Manual

Backwash options Include:

Varying the duration of air sparging
Using one injection pump or two

File: SOP and Instructions/PSP/Backwash Procedure



SAIC – Claremont Polychemical Site	Rev. Date: 12-8-09	File Name: SOP & Instructions/PSP/CA Backwash Valving	
Drawing Title: CA Vessel Backwash Valving	Rev. No.: B	Scale: None	Drawing No.: CPS-Dwg-001

Operations and Maintenance Document CPS-PSP-003

Subject: Liquid Carbon Change-out

Scope: These procedures apply to the change out of the liquid phase carbon Adsorber units at the Claremont Polychemical groundwater treatment plant (GWTP).

Purpose: This instruction provides a safe and consistent procedure for the removal and recharge of the liquid phase carbon adsorber vessels.

Procedures:

A. Plant setup for carbon change out
   1. Schedule vacuum truck and carbon delivery.
   2. Shut off extraction well pumps and injection well pumps
   3. Let Equalization tank to drop below 50% and Treated Water tanks to fill to greater than 50%.
   4. Let system cycle out.
   5. Close isolation valves on influent pumps.

B. Carbon Change out
   1. Attach the truck hose to the 4-inch quick-disconnect fittings on the bottom of the vessel to direct the spent carbon to the vacuum truck.
   2. Open the 4-inch drain valve (PV-806 or PV-807, depending on which vessel is being emptied) at the bottom of the vessel and begin removal of spent carbon. Open vent valve to assist drainage.
   3. To assist the vacuum truck and to speed up the procedure slurry in treated water to the vessel by following the backwash procedure outline above, try to use as little treated water as possible by throttling the flow rate to just enough to assist. Too much water will fill the sump and require the process to halt until the sump is pumped down.
   4. Once the carbon has been removed, close the bottom drain and inspect the interior of the vessel
   5. Through the bottom side man-way, inspect carbon vessel internal laterals and tank walls. If necessary enter the tank (confined space entry procedures) and remove laterals for cleaning.
   6. Once the inspection and maintenance tasks are complete, close and seal the man-way ports.

   Note: if there is difficulty in removing the spent carbon, see below for additional steps to taks

C. Vessel - carbon recharge
   1. Begin loading fresh reactivated carbon by connecting the vacuum truck piping to the vessel at the 4-inch carbon exchange inlet. If the vacuum truck requires water to be added to the carbon to make a less viscous slurry, non-potable water can be used for this purpose.

2. Exhaust must be provided either through the tank vents or through the drain valves, during filling.
3. Each vessel is designed to hold approximately 15,000 pounds of carbon (it may necessary to monitor the level of carbon in the vessel as it is being loaded). The maximum allowable level of carbon in each vessel is 24 inches below the bottom of the header pipe. Remove the man-way from the header dish of the vessel to monitor the carbon level.

> ***WARNING:*** **DO NOT PLACE YOU'RE HEAD IN OR NEAR THE MANWAY DURING CARBON LOADING AS SUFFOCATION MAY RESULT. Before examining the level of carbon in the vessel, instruct the vacuum truck operator to cease loading the vessel.**

4. Upon completion of loading, make sure drain and vent valves are closed. Remove carbon injection connection and close valves. Make sure all man-ways are secured.
5. Open the vent valve of the vessel loaded with fresh carbon and allow it to fill with water.
6. Once filled with clean water to about 1 to 3 inches above the top of the inlet header, close the outlet valve and proceed with the normal backwash procedure as described above.
7. Backwash the fresh carbon unit to remove fines which may pass through the drains laterals to the treated water storage tanks. Backwashing will allow the bed to settle evenly to prevent channeling, which will reduce efficiency of the carbon adsorption unit.

Notes

- These procedures are repeated for the second vessel
- Return valving back to the standard operation positions.

Additional steps to use when removal of spent carbon is difficult.

- Stop vacuum truck operations and close drain valve.
- Open top manway and loosen carbon with high pressure water
- When nearly full seal the manway.
- Introduce air to pressurize the vessel. Make connection through sample port in order to force air through bottom laterals.
- Resume vacuum truck operations
- Repeat as necessary

Reference Documents

- Liquid Phase Carbon Vessel Backwash Procedures - Claremont GWTP Manual of Standard Operating Procedures and System Instructions - procedure CPS-PSP-001
- MSDS for the Granular Carbon used – Claremont GWTS Material Safety Data Sheets - e.g. 08-01 Calgon Granular carbon
- Backwash Valving – Claremont GWTP Operating System Drawing Log – CPS-Dwg-001
- GAC Feed System PID - Claremont GWTP Operating System Drawing Log – CPS-Dwg-014

Operations and Maintenance Document CPS-PSP-004

Subject: Vapor Carbon Change-out

Scope: These procedures apply to the change out and recharging of the vapor carbon adsorber units at the Claremont Polychemical groundwater treatment plant (GWTP)

Purpose: These instructions provide a safe and consistent procedure when changing the carbon in the vapor phase units at the Claremont GWTP.

Procedures:

A. Plant set up for the carbon change out
   1. Schedule the vacuum truck and carbon delivery
   2. Schedule a long reach, all terrain fork lift truck, (Hertz rental)
   3. Prep the vessel to be changed for fall protection. An operator will be required to work on top of the vessel.
   4. This spent carbon is considered a hazardous waste. Before the change out, have the vender provide the proper waste manifest paperwork. This must be signed by the representative of the USACE.
   5. Make sure area is clear for vac-truck and forklift.

B. Carbon change out
   1. Don proper personal protective equipment.
   2. Ensure that fall protection is in place.
   3. Remove the vent stacks from the top of the vessel.
   4. Introduce ridged wand from vacuum truck through the top of the vessel and remove carbon to the vac-truck.
   5. When the vessel is empty, inspect the internal grids. Open the access covers only if necessary. Do not enter vessel unless it is absolutely necessary.
   6. Make required repairs and seal access covers.

c. Vessel – carbon refill
   1. Don proper PPE and ensure fall protection is in place.
   2. Close the condensate drain valve at the bottom of the vessel.
   3. Using the forklift, bring carbon sack over the top opening of vessel. Add the reactivated carbon to the vessel through the outlet ports until the activated carbon level is within 6-in. from the top of the vessel – NOTE: carbon densities will affect the mass which can be added to the absorbers
   4. Verify that the carbon is evenly distributed over the carbon bed to prevent the possibility of the air flow stream channeling through the thinner sections of the bed.

5. Reconnect the outlet pipes.

CAUTION: **Carbon with particles sizes smaller than the wire mesh opening must not be used or the carbon will pass through the wire mesh reducing operating performance and possibly plugging the inlet pipe and condensate drain.**

WARNING: **When loading carbon, workers must be protected from breathing the fine carbon dust particles - a particle mask is REQUIRED. In addition, eye goggles and protective coveralls are REQUIRED. Be sure to check the manufacturer Material Safety Data Sheet for more detailed safety and handling information.**

Related Documents and Items:

- MSDS for the carbon used – Claremont GWTP Material Safety and Data Sheets – e.g. 07-03 Envirotrol Activated carbon
- PPE -fall protection harness and safety line if required
  -dust mask or respirator, Tyvex suit, gloves

Operations and Maintenance Document CPS-PSP-006

Subject: Filter Press Operation in Automatic Mode

Scope: These procedures are for the automatic operation of the filter press (M-3-3-1).

Purpose: In order to operate the filter press in a safe and consistent manner, these procedures are to be followed.

Procedures:

6. Turn on the compressor and open Air Supply (A/S) valve BV-406 and BV-305.
7. At the Filter Press (FP) control panel turn the power switch to ON.
8. Ensure that the inlet air pressure is not above 100 psig (maximum design pressure). Adjust as necessary at sludge pump PCV-300.
9. Check that the hydraulic ram mode switch is in the Retract position.
10. Check the press plates and cloths for proper seating.
11. Turn Filter Press Air Supply On switch to ON. Open A/S valve BV-408 and turn ram mode switch to Extend.

    While the press is closing, stay clear of plates as serious injury is probable if any body parts are caught in the plate stack.
12. When plate stack is fully closed, the pressure gauge should indicate 3000-3400 psig and the air driven hydraulic pump should pulse infrequently. Keep the press controls on and plate stack closed while filling.
13. Open valves BV-409, BV-410, and BV-411 (V1, V3, and V1).
14. Using the air hoses, connect A/S regulator PCV-300 to air control valve FCV-300 and FCV-300 to the sludge pump P-3-2-1 at the oiler AO-300.
15. At the sludge tank open valve BF-301 and at the pump BV-306
16. To start filling the press, press the Start/Jog Feed switch on the control panel. The pumping pressure will be indicated at the Feed Pump Pressure pressure gauge PI-3-3-3.

    In the automatic mode, the system uses solenoid timer valves on the A/S which incrementally increases the air to the pump.
17. After 10 minutes of pumping, open valves BV-412 and BV-413 (V-5 and V4).
18. The system will continue to pump until backpressure in the system signals the press full alarm. When alarmed the Stop Feed/Silence switch is pressed.
19. In preparation of the press blowdown, close Valves BV-409, BV-412, and BV-413 (V2, V5, and V4). Open valve BV-407 and BV-405 (V7 and V6).
20. At the Blowdown Air Pressure pressure gauge (PI-3-3-1), ensure that the air pressure does not exceed 80 psi. Adjust PCV-400 as necessary.

21. After 10 minutes, open BV-413 (V4) and close BV-410 (V3). After an additional 10 minutes, open BV-412 (V5) and close BV-413 (V4). After and additional 10 minutes open BV-413 (V4).
22. After 60 minutes and there is no flow of filtrate to the Recycle Tank, close valve BV-405 (V-6).
23. Before opening the press, the blow-down pressure gauge and the feed pump pressure gauge should both read 0 psi. The press discharge valves should be in the open position. Except for the hydraulic ram, make sure that the system is no longer under pressure.
24. To open the press, turn the ram mode switch to Retract.
25. When the press is fully open, turn the A/S switch to Off.
26. Make sure the hopper is underneath the press plates.
27. One by one slide the plates open to allow the filter cake to fall into the hopper. Any residual cake should be carefully scraped with the plastic scrapers. Care must be taken not to damage the filter cloths.
28. Transfer the dry cake to the lined metal drum. Label the drum appropriately.
29. Shut down the system: Turn Filter Press A/S On switch to Off, turn Control Power switch to Off. Close A/S valves BV-405, BV-405, BV-406, and BV-305. Open press valve BV-411, close sludge tank valve BF-301.
30. Power down the air compressor.

Related documents:

Claremont Drawing CPS-Dwg-030

FDS – Installation, Operation and Maintenance Manual for press EPG630/32-20