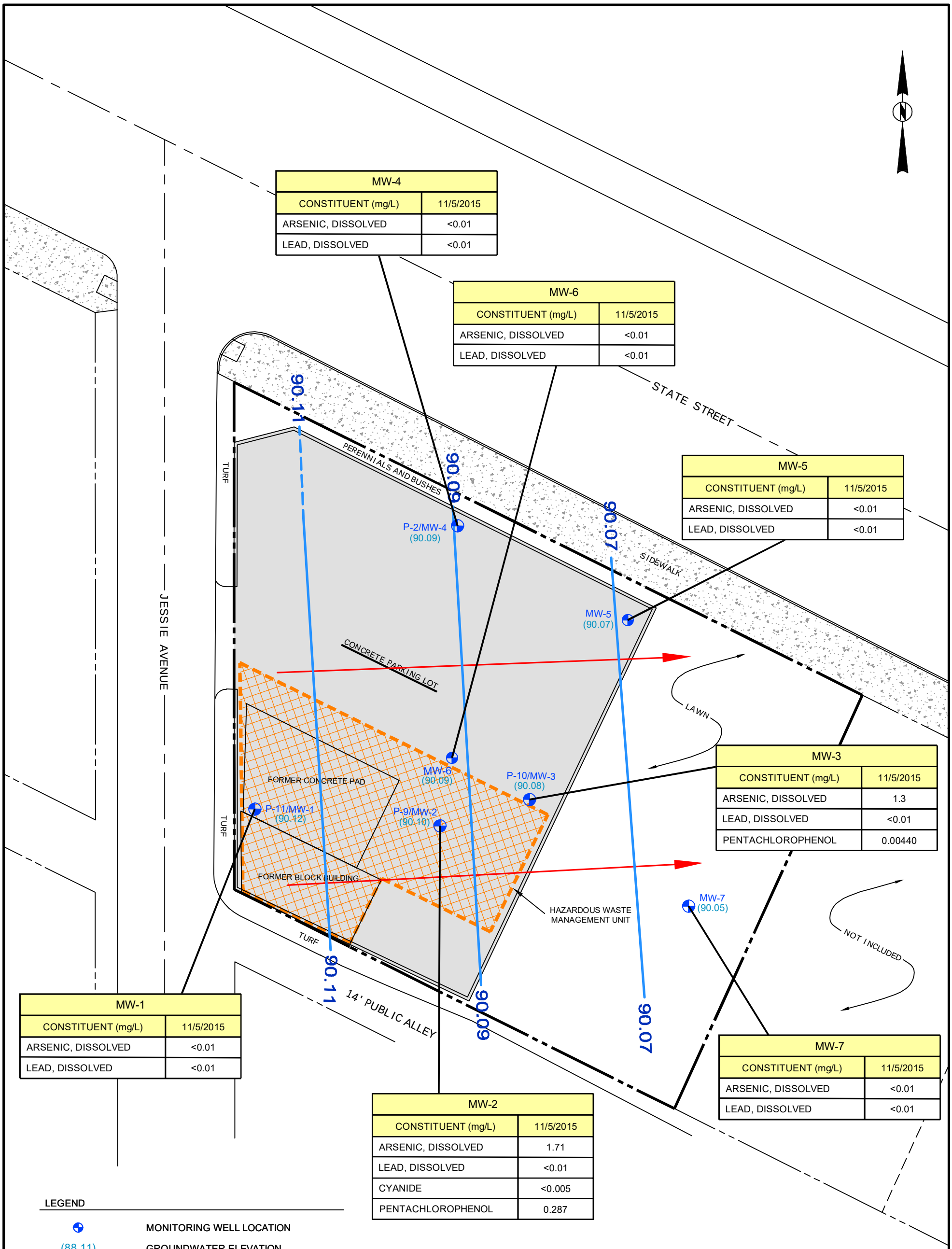


MW-4	
CONSTITUENT (mg/L)	11/5/2015
ARSENIC, DISSOLVED	<0.01
LEAD, DISSOLVED	<0.01

MW-6	
CONSTITUENT (mg/L)	11/5/2015
ARSENIC, DISSOLVED	<0.01
LEAD, DISSOLVED	<0.01

MW-5	
CONSTITUENT (mg/L)	11/5/2015
ARSENIC, DISSOLVED	<0.01
LEAD, DISSOLVED	<0.01

MW-3	
CONSTITUENT (mg/L)	11/5/2015
ARSENIC, DISSOLVED	1.3
LEAD, DISSOLVED	<0.01
PENTACHLOROPHENOL	0.00440

MW-1	
CONSTITUENT (mg/L)	11/5/2015
ARSENIC, DISSOLVED	<0.01
LEAD, DISSOLVED	<0.01

MW-2	
CONSTITUENT (mg/L)	11/5/2015
ARSENIC, DISSOLVED	1.71
LEAD, DISSOLVED	<0.01
CYANIDE	<0.005
PENTACHLOROPHENOL	0.287

MW-7	
CONSTITUENT (mg/L)	11/5/2015
ARSENIC, DISSOLVED	<0.01
LEAD, DISSOLVED	<0.01

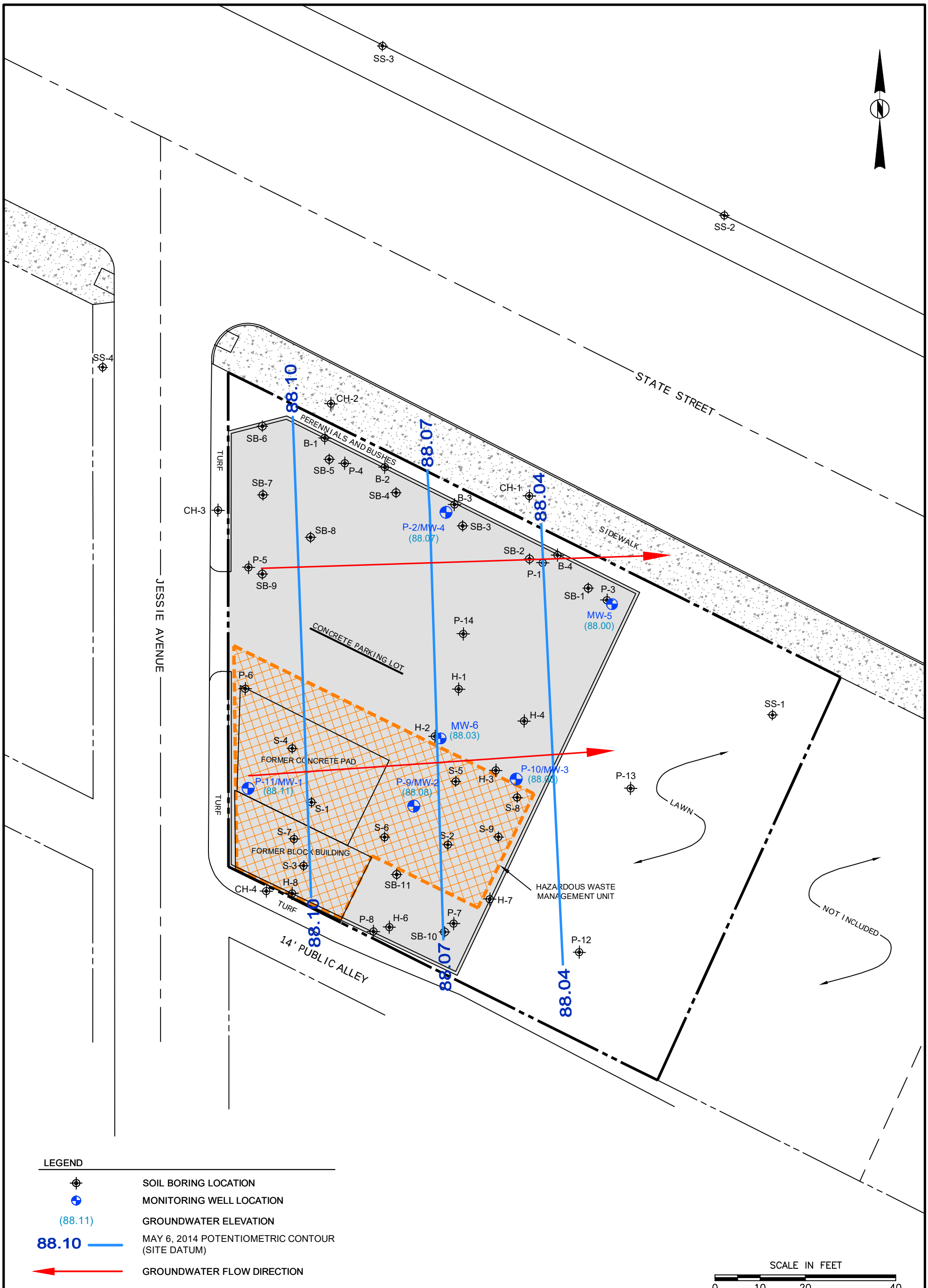
CHECK BY	OS
DRAWN BY	GRP
DATE	5-17-16
SCALE	AS SHOWN
CAD NO.	00184.02J7[2]
PRJ NO.	15-97010

GROUNDWATER FLOW AND ANALYTICAL RESULTS
NOVEMBER 2015

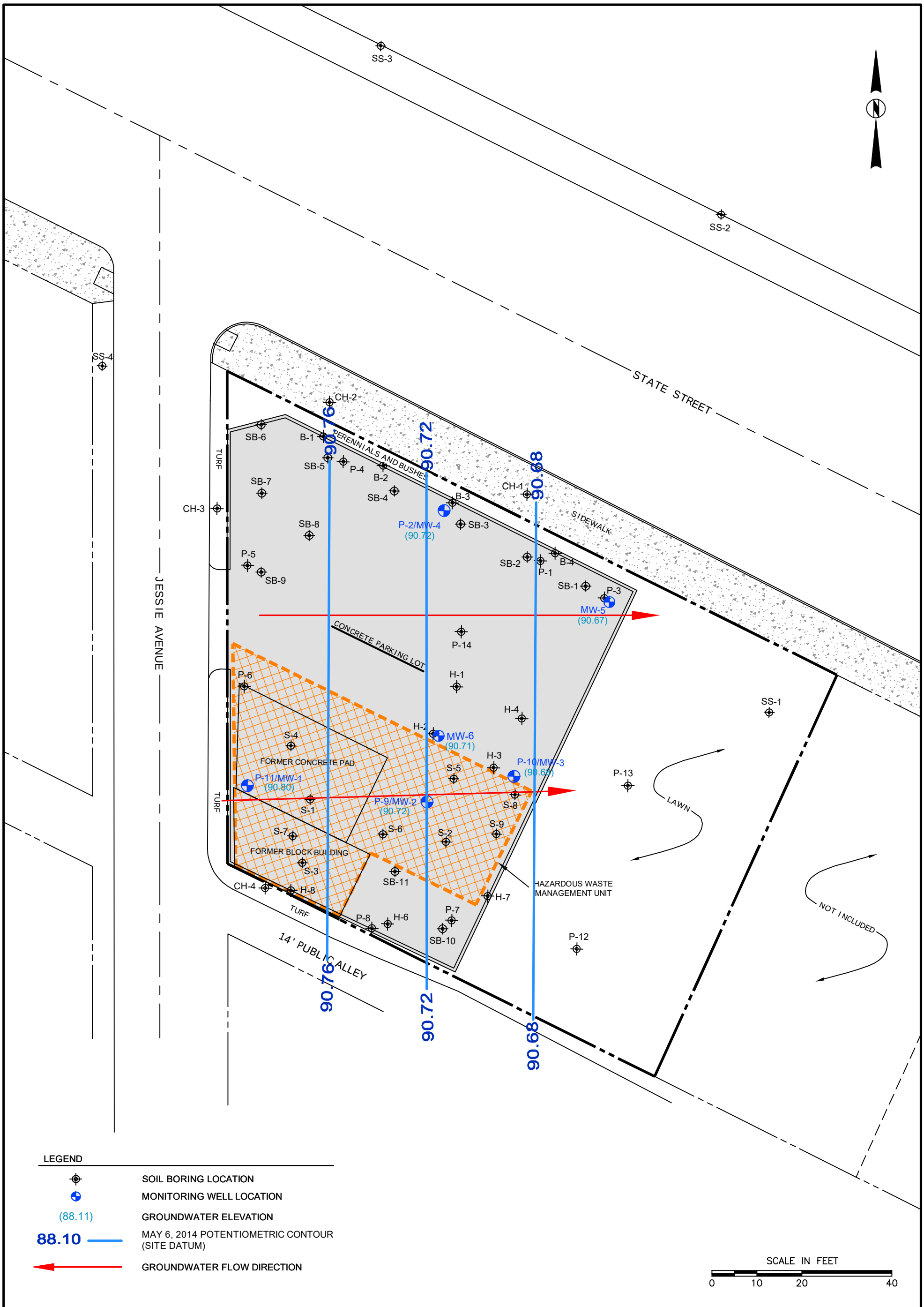
HAMMOND PEST CONTROL
HAMMOND, INDIANA

SM&A
ST. JOHN-MITTELHAUSER & ASSOCIATES
A Terracon COMPANY

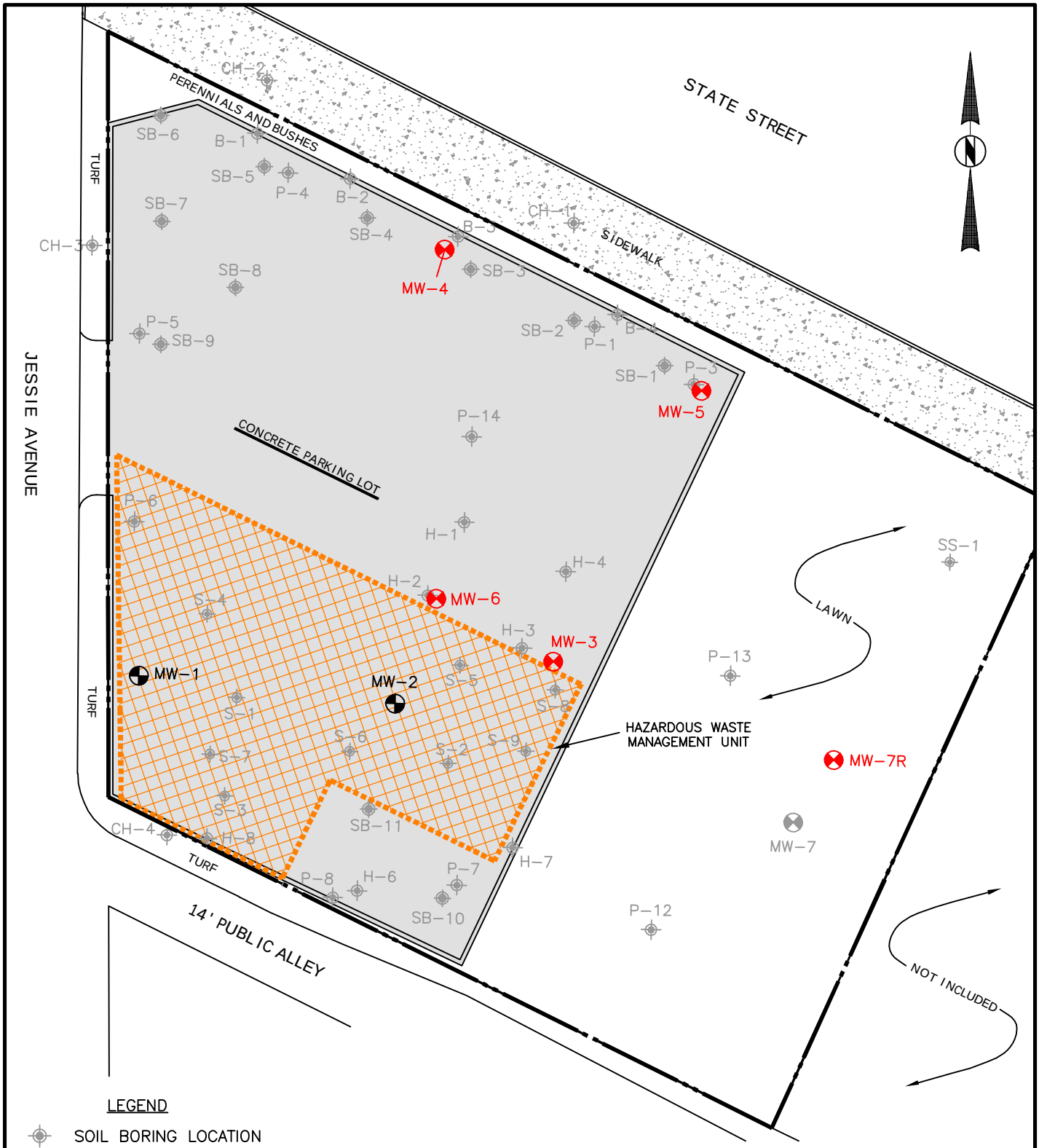
FIGURE
D-7



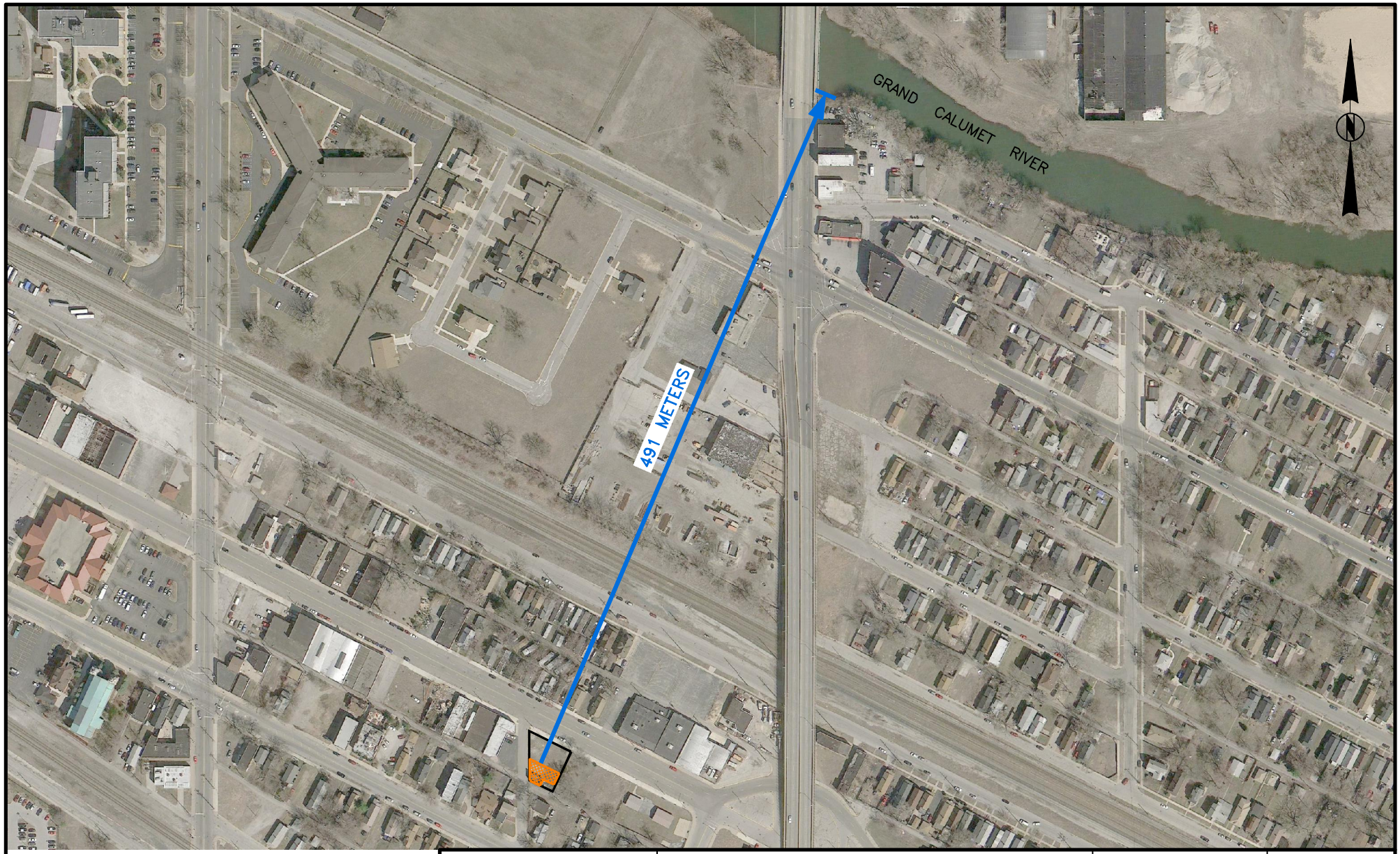
CHECK BY OS	GROUNDWATER FLOW MAY 6, 2014 HAMMOND PEST CONTROL HAMMOND, INDIANA	SM&A ST. JOHN-MITTELHAUSER & ASSOCIATES A Terracon COMPANY	FIGURE D-8
DRAWN BY GRP			
DATE 11-12-15			
SCALE AS SHOWN			
CAD NO. 00184.02J4[3]			
PRJ NO. 15-97010			



CHECK BY OS	GROUNDWATER FLOW JUNE 8, 2015 HAMMOND PEST CONTROL HAMMOND, INDIANA	SM&A ST. JOHN-MITTELHAUSER & ASSOCIATES A Terracon COMPANY	FIGURE
DRAWN BY GRP			D-9
DATE 11-12-15			
SCALE AS SHOWN			
CAD NO. 00184.02J5[3]			
PRJ NO. 15-97010			



CHECK BY OS	MONITORING WELL NETWORK HAMMOND PEST CONTROL HAMMOND, INDIANA	SM&A ST. JOHN-MITTELHAUSER & ASSOCIATES A Terracon COMPANY	FIGURE
DRAWN BY GRP			D-10
DATE 3-20-20			
SCALE AS SHOWN			
CAD NO. 00184.02G2[5]			
PRJ NO. 19-00184			



SCALE IN FEET

0 150 300 600

CHK BY	RS
DWN BY	OS
DATE	11-12-15
SCALE	NONE
CAD NO.	00184.02U
PRJ NO.	19-00184

HPC SITE AND HWMU DISTANCE TO THE GRAND CALUMET RIVER

HAMMOND PEST CONTROL
HAMMOND, INDIANA

SM&A
ST. JOHN-MITTELHAUSER & ASSOCIATES
A Terracon COMPANY

FIGURE

D-11

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date								
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		B - 1	B - 2	B - 3	B - 4	S - 1		S - 2		
				0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0 - 0.5'	0.5 - 1'	0 - 0.5'	0.5 - 1'	1.0 - 1.5'
				5/15/2000	5/15/2000	5/15/2000	5/15/2000	5/15/2000		5/15/2000		
Inorganics (mg/kg)												
Cyanide (free)	150	410	---	**12.1**	**5.46**	< 0.10	< 0.10	<0.1	<0.1	**0.22**	**0.14**	N/A
Arsenic (Total)	3.9	20	---	**100**	**64.2**	**84.14**	**341**	**3.6**	**6.2**	**708**	**322**	**882**
Lead (Total)	81	230	---	**282**	**347**	**557**	**142**	**56.3**	**172**	**162**	**90.5**	N/A
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)												
Aldrin	0.25	0.80	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
alpha-BHC	0.0072	0.024	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
beta-BHC	0.026	0.024	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
delta-BHC	NE	NE	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
gamma-BHC (Lindane)	0.0094	0.10	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
alpha-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	<0.08	<0.08	<0.08	<0.08	N/A
gamma-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	<0.08	<0.08	<0.08	<0.08	N/A
Total Chlordane	9.6	39	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	28	120	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
4,4'-DDE	20	86	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
4,4'-DDT	20	86	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
Dieldrin	0.046	0.15	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
Endosulfan I	NE	NE	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
Endosulfan II	NE	NE	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
Endosulfan sulfate	NE	NE	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
Endrin	0.99	15	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
Endrin aldehyde	NE	NE	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
Endrin ketone	NE	NE	---	N/A	N/A	N/A	N/A	<0.016	<0.016	<0.016	<0.016	N/A
Heptachlor	0.54	1.20	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
Heptachlor epoxide	0.47	1.0	---	N/A	N/A	N/A	N/A	<0.008	<0.008	<0.008	<0.008	N/A
Methoxychlor	160	180	---	N/A	N/A	N/A	N/A	<0.08	<0.08	<0.08	<0.08	N/A
Toxaphene	3.9	12	---	N/A	N/A	N/A	N/A	<0.16	<0.16	<0.16	<0.16	N/A
Pentachlorophenol	0.028	0.66	---	N/A	N/A	N/A	N/A	<1.6	<1.6	<1.6	<1.6	N/A
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	<0.66	<0.66	<0.66	<0.66	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date										
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		S - 3				S - 4		S - 5				
				0 - 0.5'	0.5 - 1'	1.0 - 1.5'	6 - 8'	0 - 0.5'	0.5 - 1.0'	0 - 0.5'	0.5 - 1.0'	1.5 - 2.0'	4 - 6'	6 - 8'
				5/15/2000			6/25/2001	5/15/2000		5/15/2000			6/25/2001	
Inorganics (mg/kg)														
Cyanide (free)	150	410	---	**0.46**	**0.26**	N/A	<0.13	**0.18**	**0.38**	**1.73**	**1.58**	NM	N/A	< 0.12
Arsenic (Total)	3.9	20	---	**1,240**	**113**	**67.6**	**29**	**17.2**	**6.6**	**52,300**	**21,100**	**21,400**	N/A	**5.2**
Lead (Total)	81	230	---	**679**	**106**	N/A	**3.1**	**388**	**370**	**1,040**	**3,420**	N/A	N/A	< 2.4
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)														
Aldrin	0.25	0.80	---	**11.2**	**10**	N/A	<0.033	<0.008	<0.008	**16.7**	**186**	**33.2**	<0.033	**0.05**
alpha-BHC	0.0072	0.024	---	<0.01	<0.028	N/A	<0.033	<0.008	<0.008	**0.108**	**0.089**	<0.008	<0.033	<0.033
beta-BHC	0.026	0.024	---	**0.192**	**0.124**	N/A	<0.033	<0.008	<0.008	**0.715**	**0.986**	<0.008	<0.033	<0.033
delta-BHC	NE	NE	---	**0.058**	**0.036**	N/A	<0.033	<0.008	<0.008	**0.459**	**0.822**	**1.21**	<0.033	<0.033
gamma-BHC (Lindane)	0.0094	0.10	---	**0.073**	**0.05**	N/A	<0.033	<0.008	<0.008	**0.753**	<0.0125	**0.858**	<0.033	<0.033
alpha-Chlordane	9.6[2]	39[2]	---	**2.84**	**2.46**	N/A	N/A	<0.08	<0.08	**6.84**	**96.3**	**41**	N/A	N/A
gamma-Chlordane	9.6[2]	39[2]	---	**3.28**	**2.7**	N/A	N/A	<0.08	<0.08	**8.58**	**121**	**53.9**	N/A	N/A
Total Chlordane	9.6	39	---	N/A	N/A	N/A	<0.033	N/A	N/A	N/A	N/A	N/A	<0.033	<0.033
4,4'-DDD	28	120	---	**0.182**	**0.172**	N/A	<0.033	<0.016	<0.016	**10**	**18.1**	**85.3**	<0.033	<0.033
4,4'-DDE	20	86	---	**0.318**	**0.234**	N/A	<0.033	<0.016	<0.016	**0.892**	**12.1**	**8.88**	<0.033	<0.033
4,4'-DDT	20	86	---	**1.68**	**1.31**	N/A	<0.033	<0.016	<0.016	**60.3**	**100**	**236**	<0.033	<0.033
Dieldrin	0.046	0.15	---	**2.27**	**1.62**	N/A	<0.033	<0.016	<0.016	**13.4**	**165**	**53.8**	<0.033	<0.033
Endosulfan I	NE	NE	---	<0.01	<0.008	N/A	<0.033	<0.008	<0.008	<0.025	<0.0125	<0.008	<0.033	<0.033
Endosulfan II	NE	NE	---	<0.02	<0.016	N/A	<0.033	<0.016	<0.016	<0.05	<0.025	<0.016	<0.033	<0.033
Endosulfan sulfate	NE	NE	---	<0.02	<0.016	N/A	<0.033	<0.016	<0.016	<0.05	<0.025	<0.016	<0.033	<0.033
Endrin	0.99	15	---	<0.02	<0.016	N/A	<0.033	<0.016	<0.016	<0.05	<0.025	<0.016	<0.033	<0.033
Endrin aldehyde	NE	NE	---	<0.02	<0.016	N/A	<0.033	<0.016	<0.016	<0.05	<0.025	<0.016	<0.033	<0.033
Endrin ketone	NE	NE	---	**0.242**	**0.172**	N/A	<0.033	<0.016	<0.016	**4.61**	**6.12**	**2.45**	<0.033	<0.033
Heptachlor	0.54	1.20	---	**0.975**	**0.738**	N/A	<0.033	<0.008	<0.008	**2.05**	**20.6**	**9.93**	<0.033	<0.033
Heptachlor epoxide	0.47	1.0	---	<0.01	<0.008	N/A	<0.033	<0.008	<0.008	<0.025	<0.012	<0.008	<0.033	<0.033
Methoxychlor	160	180	---	<0.1	<0.08	N/A	<0.033	<0.08	<0.08	<0.25	<0.125	<0.08	<0.033	<0.033
Toxaphene	3.9	12	---	<0.25	<0.16	N/A	<0.33	<0.16	<0.16	<0.5	<0.25	<0.16	<0.33	<0.33
Pentachlorophenol	0.028	0.66	---	<1.6	<1.6	N/A	N/A	<1.6	<1.6	**3.27**	**9.67**	N/A	<1.6	<1.6
Pyridine	NE	NE	---	<0.66	<0.66	N/A	N/A	<0.66	<0.66	<0.66	<0.66	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date										
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		S - 6					S - 7		S - 8			
				0 - 0.5'	0.5 - 1.0'	1.5 - 2.0'	4 - 6'	6 - 8'	0 - 0.5'	0.5 - 1.0'	0 - 0.5'	0.5 - 1.0'	4 - 6'	6 - 8'
				5/15/2000			6/25/2001		5/15/2000		6/1/2000		6/25/2001	
Inorganics (mg/kg)														
Cyanide (free)	150	410	---	**0.51**	**0.57**	N/A	N/A	**0.19**	**0.3**	**0.19**	N/A	N/A	**N/A**	< 0.13
Arsenic (Total)	3.9	20	---	**8,380**	**1,270**	**269**	N/A	**12**	**12.3**	**6.9**	**149**	**22.4**	**200**	**160**
Lead (Total)	81	230	---	**247**	**173**	N/A	N/A	**3.3**	**116**	**45.8**	N/A	N/A	N/A	**5.3**
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)														
Aldrin	0.25	0.80	---	**2.23**	**0.317**	N/A	< 33	<170	<0.008	<0.008	<0.008	<0.008	N/A	< 0.33
alpha-BHC	0.0072	0.024	---	<0.03	<0.008	N/A	< 33	<170	<0.008	<0.008	<0.008	<0.008	N/A	< 0.33
beta-BHC	0.026	0.024	---	**0.203**	<0.008	N/A	< 33	<170	<0.008	<0.008	<0.008	<0.008	N/A	< 0.33
delta-BHC	NE	NE	---	<0.03	<0.008	N/A	< 33	<170	<0.008	<0.008	<0.008	<0.008	N/A	< 0.33
gamma-BHC (Lindane)	0.0094	0.10	---	<0.03	<0.008	N/A	< 33	<170	<0.008	<0.008	<0.008	<0.008	N/A	< 0.33
alpha-Chlordane	9.6[2]	39[2]	---	**11.6**	**2.75**	N/A	N/A	N/A	<0.08	<0.08	**0.325**	<0.08	N/A	N/A
gamma-Chlordane	9.6[2]	39[2]	---	**15.2**	**3.5**	N/A	N/A	N/A	<0.08	<0.08	**0.408**	<0.08	N/A	N/A
Total Chlordane	9.6	39	---	N/A	N/A	N/A	**170**	<170	N/A	N/A	N/A	N/A	N/A	< 0.33
4,4'-DDD	28	120	---	**10**	**3.09**	N/A	< 33	<170	<0.016	<0.016	<0.016	<0.016	N/A	< 0.33
4,4'-DDE	20	86	---	**1.99**	**0.816**	N/A	< 33	<170	<0.016	<0.016	<0.016	<0.016	N/A	< 0.33
4,4'-DDT	20	86	---	**37.4**	**11.8**	N/A	< 33	<170	<0.016	<0.016	**0.2**	<0.016	N/A	< 0.33
Dieldrin	0.046	0.15	---	**1.7**	**0.757**	N/A	< 33	<170	<0.016	<0.016	**0.063**	<0.016	N/A	< 0.33
Endosulfan I	NE	NE	---	<0.03	<0.008	N/A	< 33	<170	<0.008	<0.008	<0.008	<0.008	N/A	< 0.33
Endosulfan II	NE	NE	---	<0.06	<0.016	N/A	< 33	<170	<0.016	<0.016	<0.016	<0.016	N/A	< 0.33
Endosulfan sulfate	NE	NE	---	<0.06	<0.016	N/A	< 33	<170	<0.016	<0.016	<0.016	<0.016	N/A	< 0.33
Endrin	0.99	15	---	<0.06	<0.016	N/A	< 33	<170	<0.016	<0.016	<0.016	<0.016	N/A	< 0.33
Endrin aldehyde	NE	NE	---	<0.06	<0.016	N/A	< 33	<170	<0.016	<0.016	<0.016	<0.016	N/A	< 0.33
Endrin ketone	NE	NE	---	<0.06	<0.016	N/A	< 33	<170	<0.016	<0.016	<0.016	<0.016	N/A	< 0.33
Heptachlor	0.54	1.20	---	**3.13**	**0.412**	N/A	< 33	<170	<0.008	<0.008	**0.018**	<0.008	N/A	< 0.33
Heptachlor epoxide	0.47	1.0	---	<0.03	<0.008	N/A	< 33	<170	<0.008	<0.008	<0.008	<0.008	N/A	< 0.33
Methoxychlor	160	180	---	<0.3	<0.08	N/A	< 33	<170	<0.08	<0.08	<0.08	<0.08	N/A	< 0.33
Toxaphene	3.9	12	---	<0.6	<0.16	N/A	< 330	<1,700	<0.16	<0.16	<0.16	<0.16	N/A	< 3.3
Pentachlorophenol	0.028	0.66	---	<1.6	<1.6	N/A	N/A	N/A	<1.6	<1.6	N/A	N/A	N/A	N/A
Pyridine	NE	NE	---	<0.66	<0.66	N/A	N/A	N/A	<0.66	<0.66	N/A	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date							
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		S - 9			EB-1	EB-2	H-1-1	H-2-1	H-2-1 dup
				0 - 0.5'	0.5 - 1'	6 - 8'	Equipment Blank	Equipment Blank	0-6"	0-6"	0-6"
				6/1/2000		6/25/2001	6/25/2001	6/25/2001	6/25/2001	6/25/2001	6/25/2001
Inorganics (mg/kg)											
Cyanide (free)	150	410	---	N/A	N/A	< 0.12	<.0050	<.0050	<0.12	<0.12	<0.12
Arsenic (Total)	3.9	20	---	**229**	**17.8**	**160**	**< .10**	**< .10**	**38**	**49**	**53**
Lead (Total)	81	230	---	N/A	N/A	**2.7**	< .050	<.050	**48**	**100**	**100**
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)											
Aldrin	0.25	0.80	---	<0.008	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
alpha-BHC	0.0072	0.024	---	<0.008	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
beta-BHC	0.026	0.024	---	<0.008	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
delta-BHC	NE	NE	---	<0.008	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
gamma-BHC (Lindane)	0.0094	0.10	---	<0.008	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
alpha-Chlordane	9.6[2]	39[2]	---	**0.657**	<0.08	N/A	N/A	N/A	N/A	N/A	N/A
gamma-Chlordane	9.6[2]	39[2]	---	**1.02**	<0.08	N/A	N/A	N/A	N/A	N/A	N/A
Total Chlordane	9.6	39	---	N/A	N/A	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
4,4'-DDD	28	120	---	<0.016	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
4,4'-DDE	20	86	---	<0.016	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
4,4'-DDT	20	86	---	**0.414**	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Dieldrin	0.046	0.15	---	**0.077**	<0.016	< 0.33	N/A	N/A	< 0.33	**0.36**	< 3.3
Endosulfan I	NE	NE	---	<0.008	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Endosulfan II	NE	NE	---	<0.016	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Endosulfan sulfate	NE	NE	---	<0.016	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Endrin	0.99	15	---	<0.016	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Endrin aldehyde	NE	NE	---	<0.016	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Endrin ketone	NE	NE	---	<0.016	<0.016	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Heptachlor	0.54	1.20	---	**0.138**	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Heptachlor epoxide	0.47	1.0	---	<0.008	<0.008	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Methoxychlor	160	180	---	<0.08	<0.08	< 0.33	N/A	N/A	< 0.33	< 0.33	< 3.3
Toxaphene	3.9	12	---	<0.16	<0.16	< 3.3	N/A	N/A	< 3.3	< 3.3	< 33
Pentachlorophenol	0.028	0.66	---	N/A	N/A	N/A	N/A	N/A	< 1.6	< 1.6	< 16
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date								
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		H-2-2	H-3-1	H-3-2	H-4-1	H-4-2	H-6-1	H-6-2	H-7-1	H-7-2
				6"-1'	0-6"	6"-1'	0-6"	6"-1'	0-6"	6"-1'	0-6"	6"-1'
				6/25/2001	6/25/2001	6/25/2001	6/25/2001	6/25/2001	6/25/2001	6/25/2001	6/25/2001	6/25/2001
Inorganics (mg/kg)												
Cyanide (free)	150	410	---	N/A	<0.12	N/A	<0.12	N/A	**0.22**	N/A	<0.12	N/A
Arsenic (Total)	3.9	20	---	**120**	**48**	**37**	**53**	**62**	**15**	N/A	**74**	**170**
Lead (Total)	81	230	---	N/A	**67**	N/A	**72**	N/A	**5300**	**760**	**130**	N/A
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)												
Aldrin	0.25	0.80	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
alpha-BHC	0.0072	0.024	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
beta-BHC	0.026	0.024	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
delta-BHC	NE	NE	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
gamma-BHC (Lindane)	0.0094	0.10	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
alpha-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chlordane	9.6	39	---	< 1.7	< 0.33	N/A	**2,400**	**720**	< 0.33	N/A	**3.4**	N/A
4,4'-DDD	28	120	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
4,4'-DDE	20	86	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
4,4'-DDT	20	86	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Dieldrin	0.046	0.15	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Endosulfan I	NE	NE	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Endosulfan II	NE	NE	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Endosulfan sulfate	NE	NE	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Endrin	0.99	15	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Endrin aldehyde	NE	NE	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Endrin ketone	NE	NE	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Heptachlor	0.54	1.20	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Heptachlor epoxide	0.47	1.0	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Methoxychlor	160	180	---	< 1.7	< 0.33	N/A	< 33	< 33	< 0.33	N/A	< 0.33	N/A
Toxaphene	3.9	12	---	< 17	< 3.3	N/A	< 330	< 330	< 3.3	N/A	< 3.3	N/A
Pentachlorophenol	0.028	0.66	---	N/A	< 1.6	N/A	< 1.6	N/A	N/A	N/A	N/A	N/A
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date												
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		H-8-1	P-1			P-2			P-3			P-4		
				0-6"	0-6"	2-4'	4-6'	0-6"	2-4'	4-6'	0-6"	3-5'	5-7'	0-6"	2-4'	4-6'
				6/25/2001	7/17/2002			7/17/2002			7/17/2002			7/17/2002		
Inorganics (mg/kg)																
Cyanide (free)	150	410	---	<0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic (Total)	3.9	20	---	**33**	**6.27**	N/A	<1.98	**87.0**	N/A	<1.94	**5.73**	N/A	**2.59**	**2.00**	N/A	<1.9
Lead (Total)	81	230	---	**120**	**553**	N/A	**2.49**	**201**	N/A	**2.03**	**44.9**	N/A	**2.49**	**17.3**	N/A	**2.52**
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)																
Aldrin	0.25	0.80	---	< 0.33	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
alpha-BHC	0.0072	0.024	---	< 0.33	<0.007	N/A	<0.007	<0.007	N/A	<0.007	<0.007	N/A	<0.007	<0.007	N/A	<0.007
beta-BHC	0.026	0.024	---	< 0.33	< 0.025	N/A	< 0.025	**0.037**	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
delta-BHC	NE	NE	---	< 0.33	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
gamma-BHC (Lindane)	0.0094	0.10	---	< 0.33	<0.009	N/A	< 0.009	< 0.009	N/A	< 0.009	< 0.009	N/A	< 0.009	< 0.009	N/A	< 0.009
alpha-Chlordane	9.6[2]	39[2]	---	N/A	**0.64**	N/A	< 0.025	**0.09**	N/A	<0.025	**0.072**	N/A	<0.025	**0.062**	N/A	<0.025
gamma-Chlordane	9.6[2]	39[2]	---	N/A	**0.37**	N/A	< 0.025	**0.078**	N/A	<0.025	**0.13**	N/A	<0.025	**0.04**	N/A	<0.025
Total Chlordane	9.6	39	---	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	28	120	---	< 0.33	< 0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	< 0.025
4,4'-DDE	20	86	---	< 0.33	< 0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	< 0.025
4,4'-DDT	20	86	---	< 0.33	**0.093J**	N/A	<0.025	**0.16**	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	< 0.025
Dieldrin	0.046	0.15	---	< 0.33	**0.032**	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endosulfan I	NE	NE	---	< 0.33	< 0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endosulfan II	NE	NE	---	< 0.33	< 0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endosulfan sulfate	NE	NE	---	< 0.33	**0.026**	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endrin	0.99	15	---	< 0.33	< 0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endrin aldehyde	NE	NE	---	< 0.33	< 0.025	N/A	<0.025	**0.028**	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endrin ketone	NE	NE	---	< 0.33	< 0.025	N/A	<0.025	**0.032**	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Heptachlor	0.54	1.20	---	< 0.33	< 0.025	N/A	<0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
Heptachlor epoxide	0.47	1.0	---	< 0.33	< 0.025	N/A	<0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
Methoxychlor	160	180	---	< 0.33	**0.082J**	N/A	<0.100	<0.100	N/A	<0.100	<0.100	N/A	<0.100	<0.100	N/A	<0.100
Toxaphene	3.9	12	---	< 3.3	<0.25	N/A	<0.25	<0.25	N/A	<0.25	<0.25	N/A	<0.25	<0.25	N/A	<0.25
Pentachlorophenol	0.028	0.66	---	N/A	**0.03**	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	**0.074**	<0.017	<0.017
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date											
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		P-5			P-6			P-7			P-8		
				0-6"	3-5'	5-7'	0-6"	2-4'	4-6'	0-6"	2.5-4.5'	4.5-6.5'	0-6"	2.5-4.5'	4.5-6.5'
				7/17/2002			7/17/2002			7/17/2002			7/17/2002		
Inorganics (mg/kg)															
Cyanide (free)	150	410	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic (Total)	3.9	20	---	**20.5**	N/A	**2.23**	**75.0**	N/A	**4.60**	**8.43**	N/A	**2.04**	**16.5**	N/A	**2.30**
Lead (Total)	81	230	---	**92.6**	N/A	**2.02**	**152**	N/A	**2.37**	**126**	N/A	**2.19**	**113**	N/A	**3.40**
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)															
Aldrin	0.25	0.80	---	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
alpha-BHC	0.0072	0.024	---	<0.007	N/A	<0.007	<0.007	N/A	<0.007	<0.007	N/A	<0.007	<0.007	N/A	<0.007
beta-BHC	0.026	0.024	---	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
delta-BHC	NE	NE	---	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
gamma-BHC (Lindane)	0.0094	0.10	---	< 0.009	N/A	< 0.009	< 0.009	N/A	< 0.009	< 0.009	N/A	< 0.009	< 0.009	N/A	< 0.009
alpha-Chlordane	9.6[2]	39[2]	---	**0.084**	N/A	<0.025	**0.41**	N/A	<0.025	<0.025	N/A	<0.025	**0.044**	N/A	<0.025
gamma-Chlordane	9.6[2]	39[2]	---	**0.06**	N/A	<0.025	**0.28**	N/A	<0.025	<0.025	N/A	<0.025	**0.031**	N/A	<0.025
Total Chlordane	9.6	39	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	28	120	---	**0.057**	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
4,4'-DDE	20	86	---	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
4,4'-DDT	20	86	---	**0.062**	N/A	< 0.025	**0.2J**	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
Dieldrin	0.046	0.15	---	**0.086**	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endosulfan I	NE	NE	---	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endosulfan II	NE	NE	---	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endosulfan sulfate	NE	NE	---	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endrin	0.99	15	---	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endrin aldehyde	NE	NE	---	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Endrin ketone	NE	NE	---	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025	<0.025	N/A	<0.025
Heptachlor	0.54	1.20	---	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
Heptachlor epoxide	0.47	1.0	---	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025	< 0.025	N/A	< 0.025
Methoxychlor	160	180	---	<0.100	N/A	<0.100	<0.100	N/A	<0.100	<0.100	N/A	<0.100	<0.100	N/A	<0.100
Toxaphene	3.9	12	---	<0.25	N/A	<0.25	<0.25	N/A	<0.25	<0.25	N/A	<0.25	<0.25	N/A	<0.25
Pentachlorophenol	0.028	0.66	---	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date										
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		P-9			P-10			P-11			DUP 1	DUP 2
				0-6"	2.5-4.5'	4.5-6.5'	0-6"	2-4'	4-6'	0-6"	2-4'	4-6'		
				7/17/2002			7/17/2002			7/17/2002			7/17/2002	7/17/2002
Inorganics (mg/kg)														
Cyanide (free)	150	410	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic (Total)	3.9	20	---	N/A	N/A	**1.86**	**11.3**	N/A	<2.0	N/A	**2.40**	**2.25**	ND	**25.3**
Lead (Total)	81	230	---	N/A	N/A	**2.89**	**99.6**	N/A	**2.44**	N/A	**3.12**	**3.08**	**7.99**	**3.02**
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)														
Aldrin	0.25	0.80	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	< 0.025	**0.34J**	< 0.025	< 0.025
alpha-BHC	0.0072	0.024	---	N/A	N/A	<0.007	<0.007	N/A	<0.007	N/A	<0.007	<0.007	<0.007	<0.007
beta-BHC	0.026	0.024	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	< 0.025	< 0.025	< 0.025	< 0.025
delta-BHC	NE	NE	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	< 0.025	< 0.025	< 0.025	< 0.025
gamma-BHC (Lindane)	0.0094	0.10	---	N/A	N/A	< 0.009	< 0.009	N/A	< 0.009	N/A	< 0.009	< 0.009	< 0.009	< 0.009
alpha-Chlordane	9.6[2]	39[2]	---	N/A	N/A	**0.097**	<0.025	N/A	<0.025	N/A	**0.092**	**1.4**	**0.3**	**0.56**
gamma-Chlordane	9.6[2]	39[2]	---	N/A	N/A	**0.096**	<0.025	N/A	<0.025	N/A	**0.069**	**0.95J**	**0.16**	**0.45**
Total Chlordane	9.6	39	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	28	120	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
4,4'-DDE	20	86	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
4,4'-DDT	20	86	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	<0.025	**0.054**	< 0.025	**0.1J**
Dieldrin	0.046	0.15	---	N/A	N/A	<0.025	<0.025	N/A	<0.025	N/A	<0.025	**0.052**	< 0.025	< 0.026
Endosulfan I	NE	NE	---	N/A	N/A	<0.025	<0.025	N/A	<0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
Endosulfan II	NE	NE	---	N/A	N/A	<0.025	<0.025	N/A	<0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
Endosulfan sulfate	NE	NE	---	N/A	N/A	<0.025	<0.025	N/A	<0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
Endrin	0.99	15	---	N/A	N/A	<0.025	<0.025	N/A	<0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
Endrin aldehyde	NE	NE	---	N/A	N/A	<0.025	<0.025	N/A	<0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
Endrin ketone	NE	NE	---	N/A	N/A	<0.025	<0.025	N/A	<0.025	N/A	<0.025	<0.025	< 0.025	< 0.025
Heptachlor	0.54	1.20	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	< 0.025	< 0.025	**0.057**	**0.049**
Heptachlor epoxide	0.47	1.0	---	N/A	N/A	< 0.025	< 0.025	N/A	< 0.025	N/A	< 0.025	< 0.025	**0.029**	< 0.025
Methoxychlor	160	180	---	N/A	N/A	<0.100	<0.100	N/A	<0.100	N/A	<0.100	<0.100	<0.100	<0.100
Toxaphene	3.9	12	---	N/A	N/A	<0.25	<0.25	N/A	<0.25	N/A	<0.25	<0.25	<0.250	<0.251
Pentachlorophenol	0.028	0.66	---	**0.032**	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.02	
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.02	

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date								
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		SS-1	SS-2	SS-2 (Dup)	SS-3	SS-4	CH-1		CH-2	
				0-6"	0-6"	0-6"	0-6"	0-6"	0-2'	4-6'	0-2'	4-6'
				7/28/2003	7/28/2003	7/28/2003	7/28/2003	7/28/2003	11/1/2010		11/1/2010	
Inorganics (mg/kg)												
Cyanide (free)	150	410	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic (Total)	3.9	20	---	**11**	**6.31**	**6.27**	**5.9**	**4.78**	**2.6**	**3.0**	**2.7**	<2.3
Lead (Total)	81	230	---	**1620**	**330**	**286**	**186**	**76.3**	<2.3	<2.4	**2.5**	<2.3
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides (mg/kg)												
Aldrin	0.25	0.80	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
alpha-BHC	0.0072	0.024	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
beta-BHC	0.026	0.024	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
delta-BHC	NE	NE	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
gamma-BHC (Lindane)	0.0094	0.10	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
alpha-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
gamma-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
Total Chlordane	9.6	39	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	28	120	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
4,4'-DDE	20	86	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
4,4'-DDT	20	86	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
Dieldrin	0.046	0.15	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
Endosulfan I	NE	NE	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
Endosulfan II	NE	NE	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
Endosulfan sulfate	NE	NE	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
Endrin	0.99	15	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
Endrin aldehyde	NE	NE	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
Endrin ketone	NE	NE	---	N/A	N/A	N/A	N/A	N/A	<0.00407	<0.00363	<0.00431	<0.00349
Heptachlor	0.54	1.20	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
Heptachlor epoxide	0.47	1.0	---	N/A	N/A	N/A	N/A	N/A	<0.00208	<0.00185	<0.0022	<0.00178
Methoxychlor	160	180	---	N/A	N/A	N/A	N/A	N/A	<0.0204	<0.0182	<0.0216	<0.0175
Toxaphene	3.9	12	---	N/A	N/A	N/A	N/A	N/A	<0.0815	<0.0726	<0.0864	<0.07
Pentachlorophenol	0.028	0.66	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date													
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		CH-3		CH-4		SB-1				SB-2		SB-3		SB-4	
				0-2'	4-6'	0-2'	4-6'	1.0	2.0	3.0	4.0	1.0	2.0	1.0	2.0	1.0'	2.0'
				11/1/2010		11/1/2010		10/9/2012				10/9/2012		10/9/2012		10/9/2012	
Inorganics (mg/kg)																	
Cyanide (free)	150	410	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic (Total)	3.9	20	---	**16.6**	**2.3**	**3.5**	**2.4**	**48.3**	**38.0**	**14.6**	**26.9**	**4.1**	**3.9**	**6.7**	**2.6**	**4.3**	**3.0**
Lead (Total)	81	230	---	**502**	**2.0**	**63.8**	**2.3**	**115**	**42**	**4300**	**377**	**9.3**	**3.1**	**52.8**	**2.1**	**49.1**	**2.3**
Arsenic (TCLP)	---	---	5	N/A	N/A	N/A	N/A	<0.01	<0.01	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (TCLP)	---	---	5	N/A	N/A	N/A	N/A	<0.01	<0.01	**5.2**	**0.6**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pesticides (mg/kg)																	
Aldrin	0.25	0.80	---	<0.0402	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-BHC	0.0072	0.024	---	<0.0402	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
beta-BHC	0.026	0.024	---	<0.0402	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
delta-BHC	NE	NE	---	<0.0402	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-BHC (Lindane)	0.0094	0.10	---	<0.0402	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-Chlordane	9.6[2]	39[2]	---	**0.11**	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-Chlordane	9.6[2]	39[2]	---	**0.0565**	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chlordane	9.6	39	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	28	120	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDE	20	86	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT	20	86	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	0.046	0.15	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I	NE	NE	---	<0.0402	<0.00346	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	NE	NE	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	NE	NE	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	0.99	15	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde	NE	NE	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin ketone	NE	NE	---	<0.0788	<0.00346	<0.00367	<0.00376	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.54	1.20	---	<0.0402	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor epoxide	0.47	1.0	---	<0.0402	<0.00176	<0.00187	<0.00192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methoxychlor	160	180	---	<0.395	<0.0173	<0.0184	<0.0189	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	3.9	12	---	<1.58	<0.0692	<0.0735	<0.0753	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	0.028	0.66	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE D-1
Soil Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds	RISC Default Cleanup Goals[1]		TCLP Limit (mg/L)	Sample Name, Depth, and Date														
	Residential Default Closure Level (mg/kg)	Industrial Default Closure Level (mg/kg)		SB-5		SB-6		SB-7		SB-8		SB-9		SB-10		SB-11		
				1.0'	2.0'	1.0'	2.0'	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	3.0
				10/9/2012		10/9/2012		10/9/2012		10/9/2012		10/9/2012		10/9/2012		10/9/2012		
Inorganics (mg/kg)																		
Cyanide (free)	150	410	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic (Total)	3.9	20	---	**5.1**	**2.4**	**6.8**	**2.6**	**13.1**	**3.5**	**17.7**	**3.2**	**5.5**	**2.9**	**14.8**	**2.9**	**31.6**	**2.7**	**2.4**
Lead (Total)	81	230	---	**71.5**	**2.3**	**112**	**4.9**	**1,390**	**7.3**	**75.9**	**3.4**	**114**	**4.5**	**884**	**24.6**	**1,160**	**355**	**28.2**
Arsenic (TCLP)	---	---	5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.1
Lead (TCLP)	---	---	5	<0.01	<0.01	**0.011**	<0.01	**0.27**	<0.01	**0.021**	<0.01	**0.017**	<0.01	**2.1**	**0.025**	**0.055**	<0.01	**0.11**
Pesticides (mg/kg)																		
Aldrin	0.25	0.80	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-BHC	0.0072	0.024	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
beta-BHC	0.026	0.024	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
delta-BHC	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-BHC (Lindane)	0.0094	0.10	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
alpha-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma-Chlordane	9.6[2]	39[2]	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chlordane	9.6	39	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	28	120	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDE	20	86	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT	20	86	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	0.046	0.15	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin	0.99	15	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin ketone	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.54	1.20	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor epoxide	0.47	1.0	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methoxychlor	160	180	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	3.9	12	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	0.028	0.66	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyridine	NE	NE	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:
[1]Default Closure Levels based on IDEM 2001 RISC Closure Table
NE = Not Established
N/A = Not Analyzed
9.6[2] = Value is for Total Chlordane
Detected Concentrations are **Bolded**
2.19 = Above Industrial Default Closure Level

TABLE D-2
Groundwater Sampling Parameters, Containers and Holding Times

Hammond Pest Control / Hammond, Indiana

Parameter	SWA 846 Method	Matrix	Container Type	Number of Containers	Preservation	Hold Time
Arsenic	6010B	Water	250 mL Plastic	1	HNO_3 pH < 2	6 Months
Pentachlorophenol	8151A	Water	1 L Amber Glass	2	None	7 Days

TABLE D-3a
Monitoring Well Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds (mg/L)	RISC Default Cleanup Goals[1]		Sample Name and Date													
	Residential Default Closure Level	Industrial Default Closure Level	MW-1				MW-2						MW-3			
			8/6/2002	11/1/2010	7/22/2013	11/5/2015	8/6/2002	11/1/2010	7/22/2013	7/22/2013 (Dup-001)	11/5/2015	11/5/2015 (DUP-001)	8/6/2002	11/1/2010	7/22/2013	11/5/2015
Inorganics																
Arsenic (Dissolved)	0.05	0.05	< 0.05	<0.01	<0.01	<0.01	**2.19**	**4.65**	**2.34**	**2.28**	**1.71**	**1.72**	**0.787**	<0.01	**1.99**	**1.30**
Arsenic (Total)	0.05	0.05	< 0.01	<0.01	<0.01	NA	**2.52**	**4.40**	**2.32**	**2.31**	NA	NA	**0.755**	<0.01	**1.99**	NA
Lead (Dissolved)	0.015	0.042	< 0.05	<0.005	<0.005	<0.01	< 0.05	<0.005	<0.005	<0.005	<0.01	<0.01	< 0.05	<0.005	<0.005	<0.01
Lead (Total)	0.015	0.042	< 0.01	<0.01	<0.01	NA	< 0.01	<0.01	<0.01	<0.01	NA	NA	< 0.01	<0.01	<0.01	NA
Cyanide (Total)[2]	0.2	2	NA	NA	<0.01	<0.005	NA	NA	0.017	0.017	<0.005	<0.005	NA	NA	<0.01	<0.005
Pesticides																
Aldrin	0.000055	0.00017	< 0.00005	< 0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
alpha-BHC	0.00014	0.00045	< 0.00005	< 0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
beta-BHC	0.00047	0.0016	< 0.00005	< 0.00005	< 0.00005	< 0.000056	**0.00042**	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
delta-BHC	NE	NE	< 0.00005	< 0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
Gamma-BHC (Lindane)	0.0002	0.0022	< 0.00005	< 0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
alpha Chlordane	0.002[2]	0.0082[2]	< 0.00005	<0.00005	< 0.00005	< 0.00056	**0.00009**	**0.0000419J**	< 0.0005	< 0.0005	< 0.00056	< 0.00054	< 0.00005	<0.00005	< 0.00005	< 0.00055
gamma Chlordane	0.002[2]	0.0082[2]	< 0.00005	**0.0000273J**	< 0.00005	< 0.00056	< 0.00005	**0.0000479J**	< 0.0005	< 0.0005	< 0.00056	< 0.00054	< 0.00005	<0.00005	< 0.00005	< 0.00055
4,4'-DDD	0.0035	0.012	< 0.0001	<0.0001	<0.0001	<0.00011	**0.00018**	<0.0001	<0.001	<0.001	<0.00011	<0.00011	**0.00011**	<0.0001	<0.0001	<0.00011
4,4'-DDE	0.0025	0.0084	< 0.0001	<0.0001	<0.0001	<0.00011	< 0.0001	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
4,4'-DDT	0.0025	0.0084	< 0.0001	<0.0001	<0.0001	<0.00011	< 0.0001	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
Dieldrin	0.000053	0.00018	< 0.0001	< 0.00005	<0.0001	<0.00011	**0.00024**	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
Endosulfan I	NE	NE	< 0.00005	< 0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
Endosulfan II	NE	NE	< 0.0001	<0.0001	<0.0001	<0.00011	< 0.0001	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
Endosulfan sulfate	NE	NE	< 0.0001	<0.0001	<0.0001	<0.00011	< 0.0001	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
Endrin	0.002	0.031	< 0.0001	<0.0001	<0.0001	<0.00011	< 0.0001	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
Endrin aldehyde	NE	NE	< 0.0001	<0.0001	<0.0001	<0.00011	< 0.0001	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
Endrin ketone	NE	NE	< 0.0001	<0.0001	<0.0001	<0.00011	< 0.0001	<0.0001	<0.001	<0.001	<0.00011	<0.00011	< 0.0001	<0.0001	<0.0001	<0.00011
Heptachlor	0.0004	0.00064	< 0.00005	< 0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
Heptachlor epoxide	0.0002	0.00031	< 0.00005	< 0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.000056	< 0.000054	< 0.00005	<0.00005	< 0.00005	< 0.000055
Methoxychlor	0.04	0.045	< 0.00005	<0.0005	<0.0005	< 0.00056	< 0.00005	<0.0005	<0.005	<0.005	< 0.00056	< 0.00054	<0.0005	<0.0005	<0.0005	< 0.00055
Toxaphene	0.003	0.003	NA	<0.002	<0.002	<0.0011	NA	<0.002	<0.02	<0.02	<0.0011	<0.0011	NA	<0.002	<0.002	<0.0011
Pentachlorophenol	0.001	0.024	<0.001	NA	< 0.00005	<0.0011	<0.001	NA	**0.517**	**0.618**	**0.287**	**0.302**	<0.001	NA	**0.00054**	**0.00440**

TABLE D-3a
Monitoring Well Sample Results

Hammond Pest Control / Hammond, Indiana

Compounds (mg/L)	RISC Default Cleanup Goals[1]		Sample Name and Date									
	Residential Default Closure Level	Industrial Default Closure Level	MW-4					MW-5		MW-6		MW-7
			8/6/2002	8/6/02 (Dup-1)	11/1/2010	7/22/2013	11/5/2015	7/22/2013	11/5/2015	7/22/2013	11/5/2015	11/5/2015
Inorganics												
Arsenic (Dissolved)	0.05	0.05	< 0.05	< 0.05	**1.76**	< 0.05	<0.01	< 0.05	<0.01	< 0.05	<0.01	<0.01
Arsenic (Total)	0.05	0.05	< 0.01	< 0.01	**1.71**	< 0.01	NA	< 0.01	NA	< 0.01	NA	NA
Lead (Dissolved)	0.015	0.042	< 0.05	< 0.05	<0.005	< 0.005	<0.01	< 0.005	<0.01	< 0.005	<0.01	<0.01
Lead (Total)	0.015	0.042	< 0.01	< 0.01	<0.01	< 0.01	NA	< 0.01	NA	< 0.01	NA	NA
Cyanide (Total)[2]	0.2	2	NA	NA	NA	< 0.01	<0.005	< 0.01	<0.005	< 0.01	<0.005	<0.005
Pesticides												
Aldrin	0.000055	0.00017	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
alpha-BHC	0.00014	0.00045	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
beta-BHC	0.00047	0.0016	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
delta-BHC	NE	NE	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
Gamma-BHC (Lindane)	0.0002	0.0022	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
alpha Chlordane	0.002[2]	0.0082[2]	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.00056	< 0.00005	< 0.00056	< 0.00005	< 0.00054	< 0.00091
gamma Chlordane	0.002[2]	0.0082[2]	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.00056	< 0.00005	< 0.00056	< 0.00005	< 0.00054	< 0.00091
4,4'-DDD	0.0035	0.012	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
4,4'-DDE	0.0025	0.0084	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
4,4'-DDT	0.0025	0.0084	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
Dieldrin	0.000053	0.00018	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
Endosulfan I	NE	NE	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
Endosulfan II	NE	NE	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
Endosulfan sulfate	NE	NE	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
Endrin	0.002	0.031	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
Endrin aldehyde	NE	NE	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
Endrin ketone	NE	NE	< 0.0001	< 0.0001	<0.0001	<0.0001	<0.00011	<0.0001	<0.00011	<0.0001	<0.00011	<0.00018
Heptachlor	0.0004	0.00064	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
Heptachlor epoxide	0.0002	0.00031	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0.000056	< 0.00005	< 0.000056	< 0.00005	< 0.000054	< 0.000091
Methoxychlor	0.04	0.045	< 0.00005	< 0.00005	<0.0005	<0.0005	< 0.00056	<0.0005	< 0.00056	<0.0005	< 0.00054	< 0.00091
Toxaphene	0.003	0.003	NA	NA	<0.002	<0.002	<0.0011	<0.002	<0.0011	<0.002	<0.0011	<0.0018
Pentachlorophenol	0.001	0.024	<0.001	<0.001	NA	< 0.00005	<0.0011	< 0.00005	<0.0011	< 0.00005	<0.0011	<0.0011

NOTES:
[1]Default Closure Levels based on IDEM 2001 RISC Closure Table
[2]Default Closure Levels provided for Free Cyanide
0.002[2] = Value is for Total Chlordane
NE = Not Established
NA = Not Analyzed
Detected Concentrations are **Bolded**
2.19 = Above Industrial Default Closure Level

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date											
			MW-1											
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/5/2015	3/2/2016	3/2/2016 (Dup-001)	6/8/2016	8/30/2016	11/8/2016	11/8/2016 (Dup-001)	2/7/2017	5/16/2017	8/2/2017	11/28/2017	3/6/2018
Inorganics (mg/L)														
Arsenic (Dissolved)	9.8	ACL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	NA	<0.01	<0.01	NA	NA	NA	<0.01	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	NA	<0.005	<0.005	NA	NA	NA	<0.005	NA
Pesticides (mg/L)														
Aldrin	0.00017	IDCL	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
alpha-BHC	0.00045	IDCL	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
beta-BHC	0.0016	IDCL	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
delta-BHC	NE	NE	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
Gamma-BHC (Lindane)	0.0022	IDCL	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
alpha Chlordane	0.0082[2]	IDCL	< 0.00056	NA	NA	NA	NA	<0.0005	<0.0005	NA	NA	NA	<0.0005	NA
gamma Chlordane	0.0082[2]	IDCL	< 0.00056	NA	NA	NA	NA	<0.0005	<0.0005	NA	NA	NA	<0.0005	NA
4,4'-DDD	0.012	ACL	<0.00011	<0.00010	<0.00011	<0.00011	<0.00011	<0.00010	<0.00010	<0.00010	<0.00011	<0.0001	<0.0001	<0.00010
4,4'-DDE	0.0084	IDCL	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
4,4'-DDT	0.0084	IDCL	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
Dieldrin	0.00018	IDCL	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
Endosulfan I	NE	NE	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
Endosulfan II	NE	NE	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
Endosulfan sulfate	NE	NE	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
Endrin	0.031	IDCL	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
Endrin aldehyde	NE	NE	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
Endrin ketone	NE	NE	<0.00011	NA	NA	NA	NA	<0.0001	<0.0001	NA	NA	NA	<0.0001	NA
Heptachlor	0.00064	IDCL	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
Heptachlor epoxide	0.00031	IDCL	< 0.000056	NA	NA	NA	NA	<0.00005	<0.00005	NA	NA	NA	<0.00005	NA
Methoxychlor	0.045	IDCL	< 0.00056	NA	NA	NA	NA	<0.0005	<0.0005	NA	NA	NA	<0.0005	NA
Toxaphene	0.003	IDCL	<0.0011	NA	NA	NA	NA	<0.001	<0.001	NA	NA	NA	<0.001	NA
Pentachlorophenol	0.266	ACL	<0.0011	<0.0011	<0.0010	<0.0011	<0.0011	<0.001	<0.0011	<0.0011	<0.0010	<0.0011	<0.001	<0.0011

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date								
			MW-1								
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	5/24/2018	8/21/2018	8/21/2018 (DUP-001)	12/19/2018	2/27/2019	5/14/2019	8/26/2019	11/15/2019	2/12/2020
Inorganics (mg/L)											
Arsenic (Dissolved)	9.8	ACL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Dissolved)	0.042	IDCL	NA	NA	NA	<0.01	NA	NA	NA	<0.01	NA
Cyanide (Total)[2]	2	IDCL	NA	NA	NA	<0.005	NA	NA	NA	<0.005	NA
Pesticides (mg/L)											
Aldrin	0.00017	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
alpha-BHC	0.00045	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
beta-BHC	0.0016	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
delta-BHC	NE	NE	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
Gamma-BHC (Lindane)	0.0022	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
alpha Chlordane	0.0082[2]	IDCL	NA	NA	NA	<0.00050	NA	NA	NA	<0.00050	NA
gamma Chlordane	0.0082[2]	IDCL	NA	NA	NA	<0.00050	NA	NA	NA	<0.00050	NA
4,4'-DDD	0.012	ACL	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
4,4'-DDT	0.0084	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
Dieldrin	0.00018	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endosulfan I	NE	NE	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
Endosulfan II	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endosulfan sulfate	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endrin	0.031	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endrin aldehyde	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endrin ketone	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	NA
Heptachlor	0.00064	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
Heptachlor epoxide	0.00031	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	NA
Methoxychlor	0.045	IDCL	NA	NA	NA	<0.00050	NA	NA	NA	<0.00050	NA
Toxaphene	0.003	IDCL	NA	NA	NA	<0.0010	NA	NA	NA	<0.0010	NA
Pentachlorophenol	0.266	ACL	<0.0010	<0.0010	<0.0011	<0.001	<0.0010	<0.0010	<0.0011	<0.00098	<0.0010

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date											
			MW-2											
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/5/2015	11/5/2015 (DUP-001)	3/2/2016	6/8/2016	6/8/16 (DUP-001)	8/30/2016	11/8/2016	2/7/2017	2/7/2017 (DUP-001)	5/16/2017	8/2/2017	11/28/2017
Inorganics (mg/L)														
Arsenic (Dissolved)	9.8	ACL	**1.71**	**1.72**	**1.58**	**1.86**	**1.82**	**1.91**	**2.02**	**2.20**	**2.23**	**1.55**	**1.67**	**1.36**
Lead (Dissolved)	0.042	IDCL	<0.01	<0.01	NA	NA	NA	NA	<0.01	NA	NA	NA	NA	<0.01
Cyanide (Total)[2]	2	IDCL	<0.005	<0.005	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	<0.005
Pesticides (mg/L)														
Aldrin	0.00017	IDCL	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
alpha-BHC	0.00045	IDCL	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
beta-BHC	0.0016	IDCL	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
delta-BHC	NE	NE	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
Gamma-BHC (Lindane)	0.0022	IDCL	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
alpha Chlordane	0.0082[2]	IDCL	< 0.00056	< 0.00054	NA	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005
gamma Chlordane	0.0082[2]	IDCL	< 0.00056	< 0.00054	NA	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005
4,4'-DDD	0.012	ACL	<0.00011	<0.00011	<0.00010	<0.00010	<0.00010	<0.00011	<0.00011	<0.00010	<0.00010	<0.00011	<0.0001	<0.0001
4,4'-DDE	0.0084	IDCL	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
4,4'-DDT	0.0084	IDCL	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
Dieldrin	0.00018	IDCL	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
Endosulfan I	NE	NE	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
Endosulfan II	NE	NE	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
Endosulfan sulfate	NE	NE	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
Endrin	0.031	IDCL	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
Endrin aldehyde	NE	NE	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
Endrin ketone	NE	NE	<0.00011	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001
Heptachlor	0.00064	IDCL	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
Heptachlor epoxide	0.00031	IDCL	< 0.000056	< 0.000054	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005
Methoxychlor	0.045	IDCL	< 0.00056	< 0.00054	NA	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005
Toxaphene	0.003	IDCL	<0.0011	<0.0011	NA	NA	NA	NA	<0.0011	NA	NA	NA	NA	<0.001
Pentachlorophenol	0.266	ACL	**0.287**	**0.302**	**0.600**	**0.322**	**0.238**	**0.598**	**0.547**	**0.224**	**0.296**	**0.305**	**0.368**	**0.378**

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date											
			MW-2											
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/28/2017 (DUP-001)	3/6/2018	5/24/2018	5/24/2018 (DUP-001)	8/21/2018	12/19/2018	2/27/2019	2/27/2019 (DUP-001)	5/14/2019	8/26/2019	11/15/2019	2/12/2020
Inorganics (mg/L)														
Arsenic (Dissolved)	9.8	ACL	**1.41**	**4.46**	**1.20**	**1.22**	**1.16**	**2.65**	**0.985**	**0.999**	**0.870**	**0.957**	**0.797**	**1.080**
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	NA	<0.01	NA	NA	NA	NA	<0.01	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	<0.0052	NA
Pesticides (mg/L)														
Aldrin	0.00017	IDCL	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
alpha-BHC	0.00045	IDCL	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
beta-BHC	0.0016	IDCL	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
delta-BHC	NE	NE	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
Gamma-BHC (Lindane)	0.0022	IDCL	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
alpha Chlordane	0.0082[2]	IDCL	<0.0005	NA	NA	NA	NA	<0.00050	NA	NA	NA	NA	<0.00050	NA
gamma Chlordane	0.0082[2]	IDCL	<0.0005	NA	NA	NA	NA	<0.00050	NA	NA	NA	NA	<0.00050	NA
4,4'-DDD	0.012	ACL	<0.0001	<0.00011	<0.0001	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
4,4'-DDT	0.0084	IDCL	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Dieldrin	0.00018	IDCL	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endosulfan I	NE	NE	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
Endosulfan II	NE	NE	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endosulfan sulfate	NE	NE	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin	0.031	IDCL	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin aldehyde	NE	NE	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin ketone	NE	NE	<0.0001	NA	NA	NA	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Heptachlor	0.00064	IDCL	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
Heptachlor epoxide	0.00031	IDCL	<0.00005	NA	NA	NA	NA	<0.000050	NA	NA	NA	NA	**0.00021**	NA
Methoxychlor	0.045	IDCL	<0.0005	NA	NA	NA	NA	<0.00050	NA	NA	NA	NA	<0.00050	NA
Toxaphene	0.003	IDCL	<0.001	NA	NA	NA	NA	<0.0010	NA	NA	NA	NA	<0.0010	NA
Pentachlorophenol	0.266	ACL	**0.398**	**0.203**	**0.326**	**0.430**	**0.239**	**0.257**	**0.231**	**0.134**	**0.123**	**0.296**	**0.271**	**0.142**

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date											
			MW-3											
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/5/2015	3/2/2016	6/8/2016	8/30/2016	8/30/2016 (DUP-001)	11/8/2016	2/7/2017	5/16/207	5/16/2017 (DUP-001)	8/2/2017	11/28/2017	3/6/2018
Inorganics (mg/L)														
Arsenic (Dissolved)	9.8	ACL	**1.30**	**0.941**	**0.990**	**1.000**	**1.030**	**1.100**	**1.130**	**1.090**	**1.080**	**0.802**	**1.300**	**0.942**
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	NA	<0.01	NA	NA	NA	NA	<0.01	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	<0.005	NA
Pesticides (mg/L)														
Aldrin	0.00017	IDCL	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
alpha-BHC	0.00045	IDCL	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
beta-BHC	0.0016	IDCL	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
delta-BHC	NE	NE	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
Gamma-BHC (Lindane)	0.0022	IDCL	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
alpha Chlordane	0.0082[2]	IDCL	< 0.00055	NA	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005	NA
gamma Chlordane	0.0082[2]	IDCL	< 0.00055	NA	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005	NA
4,4'-DDD	0.012	ACL	<0.00011	<0.00010	<0.00010	<0.00011	<0.00011	<0.00011	<0.00010	<0.00011	<0.00010	<0.00010	<0.00010	<0.00011
4,4'-DDE	0.0084	IDCL	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
4,4'-DDT	0.0084	IDCL	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
Dieldrin	0.00018	IDCL	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
Endosulfan I	NE	NE	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
Endosulfan II	NE	NE	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
Endosulfan sulfate	NE	NE	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
Endrin	0.031	IDCL	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
Endrin aldehyde	NE	NE	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
Endrin ketone	NE	NE	<0.00011	NA	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA
Heptachlor	0.00064	IDCL	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
Heptachlor epoxide	0.00031	IDCL	< 0.000055	NA	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA
Methoxychlor	0.045	IDCL	< 0.00055	NA	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005	NA
Toxaphene	0.003	IDCL	<0.0011	NA	NA	NA	NA	<0.0011	NA	NA	NA	NA	<0.001	NA
Pentachlorophenol	0.266	ACL	**0.00440**	**0.00410**	**0.00068**	**0.01170**	**0.01260**	**0.01420**	**0.00290**	**0.01060**	**0.0090**	**0.0027**	**0.0031**	**0.0048**

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date									
			MW-3									
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	5/24/2018	8/21/2018	12/19/2018	12/19/2018 (DUP-001)	2/27/2019	5/14/2019	8/26/2019	11/15/2019	2/12/2020	2/12/2020 (DUP-001)
Inorganics (mg/L)												
Arsenic (Dissolved)	9.8	ACL	**0.721**	**0.622**	**0.884**	**0.846**	**0.801**	**0.746**	**0.871**	**0.694**	**0.804**	**0.857**
Lead (Dissolved)	0.042	IDCL	NA	NA	<0.01	<0.01	NA	NA	NA	<0.01	NA	NA
Cyanide (Total)[2]	2	IDCL	NA	NA	<0.005	<0.005	NA	NA	NA	<0.005	NA	NA
Pesticides (mg/L)												
Aldrin	0.00017	IDCL	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
alpha-BHC	0.00045	IDCL	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
beta-BHC	0.0016	IDCL	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
delta-BHC	NE	NE	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
Gamma-BHC (Lindane)	0.0022	IDCL	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
alpha Chlordane	0.0082[2]	IDCL	NA	NA	<0.00050	<0.00050	NA	NA	NA	<0.00050	NA	NA
gamma Chlordane	0.0082[2]	IDCL	NA	NA	<0.00050	<0.00050	NA	NA	NA	<0.00050	NA	NA
4,4'-DDD	0.012	ACL	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
4,4'-DDT	0.0084	IDCL	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
Dieldrin	0.00018	IDCL	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
Endosulfan I	NE	NE	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
Endosulfan II	NE	NE	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
Endosulfan sulfate	NE	NE	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
Endrin	0.031	IDCL	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
Endrin aldehyde	NE	NE	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
Endrin ketone	NE	NE	NA	NA	<0.00010	<0.00010	NA	NA	NA	<0.00010	NA	NA
Heptachlor	0.00064	IDCL	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
Heptachlor epoxide	0.00031	IDCL	NA	NA	<0.000050	<0.000050	NA	NA	NA	<0.000050	NA	NA
Methoxychlor	0.045	IDCL	NA	NA	<0.00050	<0.00050	NA	NA	NA	<0.00050	NA	NA
Toxaphene	0.003	IDCL	NA	NA	<0.0010	<0.0010	NA	NA	NA	<0.0010	NA	NA
Pentachlorophenol	0.266	ACL	**0.0990**	**0.0053**	**0.0149**	**0.0136**	**0.0045**	**0.0783**	**0.0427**	**0.0191**	**0.0049**	**0.0065**

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date											
			MW-4											
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/5/2015	3/2/2016	6/8/2016	8/30/2016	11/8/2016	2/7/2017	5/16/2017	8/2/2017	11/28/2017	3/6/2018	3/6/2018 (DUP-001)	5/24/2018
Inorganics (mg/L)														
Arsenic (Dissolved)	9.8	ACL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	<0.01	NA	NA	NA	<0.01	NA	NA	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	<0.005	NA	NA	NA	<0.005	NA	NA	NA
Pesticides (mg/L)														
Aldrin	0.00017	IDCL	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
alpha-BHC	0.00045	IDCL	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
beta-BHC	0.0016	IDCL	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
delta-BHC	NE	NE	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
Gamma-BHC (Lindane)	0.0022	IDCL	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
alpha Chlordane	0.0082[2]	IDCL	< 0.00056	NA	NA	NA	<0.0005	NA	NA	NA	<0.0005	NA	NA	NA
gamma Chlordane	0.0082[2]	IDCL	< 0.00056	NA	NA	NA	<0.0005	NA	NA	NA	<0.0005	NA	NA	NA
4,4'-DDD	0.012	ACL	<0.00011	<0.00011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00011	<0.00010	<0.0001	<0.00010	<0.00011	<0.00010
4,4'-DDE	0.0084	IDCL	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
4,4'-DDT	0.0084	IDCL	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
Dieldrin	0.00018	IDCL	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
Endosulfan I	NE	NE	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
Endosulfan II	NE	NE	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
Endosulfan sulfate	NE	NE	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
Endrin	0.031	IDCL	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
Endrin aldehyde	NE	NE	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
Endrin ketone	NE	NE	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA	<0.0001	NA	NA	NA
Heptachlor	0.00064	IDCL	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
Heptachlor epoxide	0.00031	IDCL	< 0.000056	NA	NA	NA	<0.00005	NA	NA	NA	<0.00005	NA	NA	NA
Methoxychlor	0.045	IDCL	< 0.00056	NA	NA	NA	<0.0005	NA	NA	NA	<0.0005	NA	NA	NA
Toxaphene	0.003	IDCL	<0.0011	NA	NA	NA	<0.001	NA	NA	NA	<0.001	NA	NA	NA
Pentachlorophenol	0.266	ACL	<0.0011	<0.0010	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0010	<0.0011	<0.0011	<0.0010

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date						
			MW-4						
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	8/21/2018	12/19/2018	2/27/2019	5/14/2019	8/26/2019	11/15/2019	2/12/2020
Inorganics (mg/L)									
Arsenic (Dissolved)	9.8	ACL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Dissolved)	0.042	IDCL	NA	<0.01	NA	NA	NA	<0.01	NA
Cyanide (Total)[2]	2	IDCL	NA	<0.005	NA	NA	NA	<0.005	NA
Pesticides (mg/L)									
Aldrin	0.00017	IDCL	NA	<0.000050	NA	NA	NA	<0.000050	NA
alpha-BHC	0.00045	IDCL	NA	<0.000050	NA	NA	NA	<0.000050	NA
beta-BHC	0.0016	IDCL	NA	<0.000050	NA	NA	NA	<0.000050	NA
delta-BHC	NE	NE	NA	<0.000050	NA	NA	NA	<0.000050	NA
Gamma-BHC (Lindane)	0.0022	IDCL	NA	<0.000050	NA	NA	NA	<0.000050	NA
alpha Chlordane	0.0082[2]	IDCL	NA	<0.00050	NA	NA	NA	<0.00050	NA
gamma Chlordane	0.0082[2]	IDCL	NA	<0.00050	NA	NA	NA	<0.00050	NA
4,4'-DDD	0.012	ACL	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	NA	<0.00010	NA	NA	NA	<0.00010	NA
4,4'-DDT	0.0084	IDCL	NA	<0.00010	NA	NA	NA	<0.00010	NA
Dieldrin	0.00018	IDCL	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endosulfan I	NE	NE	NA	<0.000050	NA	NA	NA	<0.000050	NA
Endosulfan II	NE	NE	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endosulfan sulfate	NE	NE	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endrin	0.031	IDCL	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endrin aldehyde	NE	NE	NA	<0.00010	NA	NA	NA	<0.00010	NA
Endrin ketone	NE	NE	NA	<0.00010	NA	NA	NA	<0.00010	NA
Heptachlor	0.00064	IDCL	NA	<0.000050	NA	NA	NA	<0.000050	NA
Heptachlor epoxide	0.00031	IDCL	NA	<0.000050	NA	NA	NA	<0.000050	NA
Methoxychlor	0.045	IDCL	NA	<0.00050	NA	NA	NA	<0.00050	NA
Toxaphene	0.003	IDCL	NA	<0.0010	NA	NA	NA	<0.0010	NA
Pentachlorophenol	0.266	ACL	<0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.00098

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date											
			MW-5											
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/5/2015	3/2/2016	6/8/2016	8/30/2016	11/8/2016	2/7/2017	5/16/2017	8/2/2017	11/28/2017	3/6/2018	5/24/2018	8/21/2018
Inorganics (mg/L)														
Arsenic (Dissolved)	9.8	ACL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	<0.01	NA	NA	NA	<0.01	NA	NA	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	<0.005	NA	NA	NA	<0.005	NA	NA	NA
Pesticides (mg/L)														
Aldrin	0.00017	IDCL	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
alpha-BHC	0.00045	IDCL	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
beta-BHC	0.0016	IDCL	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
delta-BHC	NE	NE	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
Gamma-BHC (Lindane)	0.0022	IDCL	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
alpha Chlordane	0.0082[2]	IDCL	< 0.00056	NA	NA	NA	< 0.00053	NA	NA	NA	<0.0005	NA	NA	NA
gamma Chlordane	0.0082[2]	IDCL	< 0.00056	NA	NA	NA	< 0.00053	NA	NA	NA	<0.0005	NA	NA	NA
4,4'-DDD	0.012	ACL	<0.00011	<0.00010	<0.00010	<0.00011	<0.00011	<0.00010	<0.00010	<0.00010	<0.0001	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
4,4'-DDT	0.0084	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
Dieldrin	0.00018	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
Endosulfan I	NE	NE	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
Endosulfan II	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
Endosulfan sulfate	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
Endrin	0.031	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
Endrin aldehyde	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
Endrin ketone	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	<0.0001	NA	NA	NA
Heptachlor	0.00064	IDCL	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
Heptachlor epoxide	0.00031	IDCL	< 0.000056	NA	NA	NA	< 0.000053	NA	NA	NA	<0.00005	NA	NA	NA
Methoxychlor	0.045	IDCL	< 0.00056	NA	NA	NA	< 0.00053	NA	NA	NA	<0.0005	NA	NA	NA
Toxaphene	0.003	IDCL	<0.0011	NA	NA	NA	<0.0011	NA	NA	NA	<0.001	NA	NA	NA
Pentachlorophenol	0.266	ACL	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.001	<0.0011	<0.0010	<0.0010	<0.0011	<0.0010	<0.0011

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date						
			MW-5						
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	12/21/2018	2/27/2019	5/14/2019	8/26/2019	8/26/2019 (DUP-001)	11/15/2019	2/12/2020
Inorganics (mg/L)									
Arsenic (Dissolved)	9.8	ACL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	NA	<0.01	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	NA	<0.005	NA
Pesticides (mg/L)									
Aldrin	0.00017	IDCL	<0.000050	NA	NA	NA	NA	<0.000050	NA
alpha-BHC	0.00045	IDCL	<0.000050	NA	NA	NA	NA	<0.000050	NA
beta-BHC	0.0016	IDCL	<0.000050	NA	NA	NA	NA	<0.000050	NA
delta-BHC	NE	NE	<0.000050	NA	NA	NA	NA	<0.000050	NA
Gamma-BHC (Lindane)	0.0022	IDCL	<0.000050	NA	NA	NA	NA	<0.000050	NA
alpha Chlordane	0.0082[2]	IDCL	<0.00050	NA	NA	NA	NA	<0.00050	NA
gamma Chlordane	0.0082[2]	IDCL	<0.00050	NA	NA	NA	NA	<0.00050	NA
4,4'-DDD	0.012	ACL	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	<0.00010	NA	NA	NA	NA	<0.00010	NA
4,4'-DDT	0.0084	IDCL	<0.00010	NA	NA	NA	NA	<0.00010	NA
Dieldrin	0.00018	IDCL	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endosulfan I	NE	NE	<0.000050	NA	NA	NA	NA	<0.000050	NA
Endosulfan II	NE	NE	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endosulfan sulfate	NE	NE	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin	0.031	IDCL	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin aldehyde	NE	NE	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin ketone	NE	NE	<0.00010	NA	NA	NA	NA	<0.00010	NA
Heptachlor	0.00064	IDCL	<0.000050	NA	NA	NA	NA	<0.000050	NA
Heptachlor epoxide	0.00031	IDCL	<0.000050	NA	NA	NA	NA	<0.000050	NA
Methoxychlor	0.045	IDCL	<0.00050	NA	NA	NA	NA	<0.00050	NA
Toxaphene	0.003	IDCL	<0.0010	NA	NA	NA	NA	<0.0010	NA
Pentachlorophenol	0.266	ACL	<0.0010	<0.0010	<0.0010	<0.0011	<0.0010	<0.00095	<0.0010

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date											
			MW-6											
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/5/2015	3/2/2016	6/8/2016	8/30/2016	11/8/2016	2/7/2017	5/16/2017	8/2/2017	8/2/2017 (DUP-001)	11/28/2017	3/6/2018	5/24/2018
Inorganics (mg/L)														
Arsenic (Dissolved)	9.8	ACL	<0.01	**0.011**	<0.01	<0.01	<0.01	**0.0102**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.0116**
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	<0.01	NA	NA	NA	NA	<0.01	NA	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	<0.005	NA	NA	NA	NA	<0.005	NA	NA
Pesticides (mg/L)														
Aldrin	0.00017	IDCL	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
alpha-BHC	0.00045	IDCL	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
beta-BHC	0.0016	IDCL	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
delta-BHC	NE	NE	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
Gamma-BHC (Lindane)	0.0022	IDCL	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
alpha Chlordane	0.0082[2]	IDCL	< 0.00054	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005	NA	NA
gamma Chlordane	0.0082[2]	IDCL	< 0.00054	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005	NA	NA
4,4'-DDD	0.012	ACL	<0.00011	<0.00011	<0.00010	<0.00011	<0.00011	<0.00010	<0.00011	<0.00010	<0.00010	<0.0001	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
4,4'-DDT	0.0084	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
Dieldrin	0.00018	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
Endosulfan I	NE	NE	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
Endosulfan II	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
Endosulfan sulfate	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
Endrin	0.031	IDCL	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
Endrin aldehyde	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
Endrin ketone	NE	NE	<0.00011	NA	NA	NA	<0.00011	NA	NA	NA	NA	<0.0001	NA	NA
Heptachlor	0.00064	IDCL	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
Heptachlor epoxide	0.00031	IDCL	< 0.000054	NA	NA	NA	< 0.000053	NA	NA	NA	NA	<0.00005	NA	NA
Methoxychlor	0.045	IDCL	< 0.00054	NA	NA	NA	< 0.00053	NA	NA	NA	NA	<0.0005	NA	NA
Toxaphene	0.003	IDCL	<0.0011	NA	NA	NA	<0.0011	NA	NA	NA	NA	<0.001	NA	NA
Pentachlorophenol	0.266	ACL	<0.0011	<0.0011	<0.0010	<0.0010	<0.0011	<0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date							
			MW-6							
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	8/21/2018	12/21/2018	2/27/2019	5/14/2019 (DUP-001)	5/14/2019	8/26/2019	11/15/2019	2/12/2020
Inorganics (mg/L)										
Arsenic (Dissolved)	9.8	ACL	<0.01	**0.0643**	**0.0461**	**0.0154**	**0.0179**	**0.0205**	**0.600**	**0.849**
Lead (Dissolved)	0.042	IDCL	NA	<0.01	NA	NA	NA	NA	<0.01	NA
Cyanide (Total)[2]	2	IDCL	NA	<0.005	NA	NA	NA	NA	<0.005	NA
Pesticides (mg/L)										
Aldrin	0.00017	IDCL	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
alpha-BHC	0.00045	IDCL	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
beta-BHC	0.0016	IDCL	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
delta-BHC	NE	NE	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
Gamma-BHC (Lindane)	0.0022	IDCL	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
alpha Chlordane	0.0082[2]	IDCL	NA	<0.00050	NA	NA	NA	NA	<0.00050	NA
gamma Chlordane	0.0082[2]	IDCL	NA	<0.00050	NA	NA	NA	NA	<0.00050	NA
4,4'-DDD	0.012	ACL	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
4,4'-DDT	0.0084	IDCL	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Dieldrin	0.00018	IDCL	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endosulfan I	NE	NE	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
Endosulfan II	NE	NE	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endosulfan sulfate	NE	NE	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin	0.031	IDCL	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin aldehyde	NE	NE	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Endrin ketone	NE	NE	NA	<0.00010	NA	NA	NA	NA	<0.00010	NA
Heptachlor	0.00064	IDCL	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
Heptachlor epoxide	0.00031	IDCL	NA	<0.000050	NA	NA	NA	NA	<0.000050	NA
Methoxychlor	0.045	IDCL	NA	<0.00050	NA	NA	NA	NA	<0.00050	NA
Toxaphene	0.003	IDCL	NA	<0.0010	NA	NA	NA	NA	<0.0010	NA
Pentachlorophenol	0.266	ACL	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.00095	<0.0010

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date								
			MW-7								
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	11/5/2015	3/2/2016	6/8/2016	8/30/2016	11/8/2016	2/7/2017	5/16/2017	8/2/2017	11/28/2017 Not Sampled
Inorganics (mg/L)											
Arsenic (Dissolved)	9.8	ACL	<0.01	<0.01	<0.01	**0.0205**	**0.0189**	**0.0135**	**0.0140**	**0.0131**	NA
Lead (Dissolved)	0.042	IDCL	<0.01	NA	NA	NA	<0.01	NA	NA	NA	NA
Cyanide (Total)[2]	2	IDCL	<0.005	NA	NA	NA	<0.005	NA	NA	NA	NA
Pesticides (mg/L)											
Aldrin	0.00017	IDCL	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
alpha-BHC	0.00045	IDCL	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
beta-BHC	0.0016	IDCL	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
delta-BHC	NE	NE	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
Gamma-BHC (Lindane)	0.0022	IDCL	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
alpha Chlordane	0.0082[2]	IDCL	< 0.00091	NA	NA	NA	< 0.00052	NA	NA	NA	NA
gamma Chlordane	0.0082[2]	IDCL	< 0.00091	NA	NA	NA	< 0.00052	NA	NA	NA	NA
4,4'-DDD	0.012	ACL	<0.00018	<0.00010	<0.00010	<0.00011	<0.00010	<0.00010	<0.00010	<0.00010	NA
4,4'-DDE	0.0084	IDCL	<0.00018	NA	NA	NA	<0.0001	NA	NA	NA	NA
4,4'-DDT	0.0084	IDCL	<0.00018	NA	NA	NA	<0.0001	NA	NA	NA	NA
Dieldrin	0.00018	IDCL	<0.00018	NA	NA	NA	<0.00011	NA	NA	NA	NA
Endosulfan I	NE	NE	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
Endosulfan II	NE	NE	<0.00018	NA	NA	NA	<0.0001	NA	NA	NA	NA
Endosulfan sulfate	NE	NE	<0.00018	NA	NA	NA	<0.0001	NA	NA	NA	NA
Endrin	0.031	IDCL	<0.00018	NA	NA	NA	<0.0001	NA	NA	NA	NA
Endrin aldehyde	NE	NE	<0.00018	NA	NA	NA	<0.0001	NA	NA	NA	NA
Endrin ketone	NE	NE	<0.00018	NA	NA	NA	<0.0001	NA	NA	NA	NA
Heptachlor	0.00064	IDCL	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
Heptachlor epoxide	0.00031	IDCL	< 0.000091	NA	NA	NA	< 0.000052	NA	NA	NA	NA
Methoxychlor	0.045	IDCL	< 0.00091	NA	NA	NA	< 0.00052	NA	NA	NA	NA
Toxaphene	0.003	IDCL	<0.0018	NA	NA	NA	<0.001	NA	NA	NA	NA
Pentachlorophenol	0.266	ACL	<0.0011	<0.0010	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0010	NA

TABLE D-3b
Post-Closure Monitoring Well Results

Hammond Pest Control / Hammond, Indiana

Compounds	Groundwater Protection Standard		Monitoring Well Number and Sample Date									
			MW-7R									
	Groundwater Protection Standard	Basis for Groundwater Protection Standard	3/6/2018	5/24/2018	8/21/2018	12/19/2018	2/27/2019	5/14/2019	8/26/2019	11/15/2019	11/15/19 Dup-001	2/12/2020
Inorganics (mg/L)												
Arsenic (Dissolved)	9.8	ACL	**0.0434**	**0.363**	**1.380**	**0.286**	**0.081**	**0.024**	**0.0751**	**0.268**	**0.284**	**0.0764**
Lead (Dissolved)	0.042	IDCL	NA	NA	NA	<0.01	NA	NA	NA	<0.01	<0.01	NA
Cyanide (Total)[2]	2	IDCL	NA	NA	NA	<0.005	NA	NA	NA	<0.005	<0.005	NA
Pesticides (mg/L)												
Aldrin	0.00017	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
alpha-BHC	0.00045	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
beta-BHC	0.0016	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
delta-BHC	NE	NE	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
Gamma-BHC (Lindane)	0.0022	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
alpha Chlordane	0.0082[2]	IDCL	NA	NA	NA	<0.00050	NA	NA	NA	<0.00050	<0.00050	NA
gamma Chlordane	0.0082[2]	IDCL	NA	NA	NA	<0.00050	NA	NA	NA	<0.00050	<0.00050	NA
4,4'-DDD	0.012	ACL	<0.00011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
4,4'-DDE	0.0084	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
4,4'-DDT	0.0084	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
Dieldrin	0.00018	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
Endosulfan I	NE	NE	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
Endosulfan II	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
Endosulfan sulfate	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
Endrin	0.031	IDCL	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
Endrin aldehyde	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
Endrin ketone	NE	NE	NA	NA	NA	<0.00010	NA	NA	NA	<0.00010	<0.00010	NA
Heptachlor	0.00064	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
Heptachlor epoxide	0.00031	IDCL	NA	NA	NA	<0.000050	NA	NA	NA	<0.000050	<0.000050	NA
Methoxychlor	0.045	IDCL	NA	NA	NA	<0.00050	NA	NA	NA	<0.00050	<0.00050	NA
Toxaphene	0.003	IDCL	NA	NA	NA	<0.0010	NA	NA	NA	<0.0010	<0.0010	NA
Pentachlorophenol	0.266	ACL	<0.0011	<0.0010	<0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0010	<0.0010

NOTES:
Reported values are in mg/L
[1]Industrial Default Closure Levels (IDCL) based on IDEM 2001 RISC Closure Table
[2]Default Closure Levels provided for Free Cyanide
ACL = Alternate Cleanup Level
0.002[2] = Value is for Total Chlordane
NE = Not Established
NA = Not Analyzed
Detected Concentrations are **Bolded**
2.87 = Above Groundwater Protection Standard

TABLE D-5
Groundwater Sampling Parameters and Schedule

Hammond Pest Control / Hammond, Indiana

Monitoring Wells	Stability Demonstration Monitoring	
	Quarterly	Annual
MW-2 & MW-3	Arsenic and Pentachlorophenol	Arsenic and Pentachlorophenol
MW-6 & MW-7R	Arsenic	Arsenic

TABLE D-6
Groundwater Sampling Parameters, Methods, Reporting Limits, and Method Detection Limits

Hammond Pest Control / Hammond, Indiana

Parameter	Method	RL ug/L	MDL ug/L
Inorganics			
Arsenic	SW-846 6010B	10	3.84
Pesticides			
Pentachlorophenol	SW-846 8151A	1.0	0.54

NOTES:
Reporting Limit (RL) and Method Detection Limits (MDL) are subject to change.
Source: Pace Analytical Services, Inc.

TABLE D-7
Groundwater Protection Standards

Hammond Pest Control / Hammond, Indiana

Compounds (mg/L)	Groundwater Protection Standard	Basis for Groundwater Protection Standard
Inorganics		
Arsenic	9.8	ACL
Pesticides		
Pentachlorophenol	0.266	ACL

NOTES:
ACL = Calculated Alternate Concentration Limit (see text)
IDCL = Industrial Default Closure Level based on IDEM 2001 RISC Closure Table

APPENDICIES

Appendix A

STATE OF INDIANA
LAKE COUNTY
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2016 066906

2016 OCT -3 PM 1:01

MICHAEL B. BROWN
RECORDER

Environmental Restrictive Covenant

THIS ENVIRONMENTAL RESTRICTIVE COVENANT ("Covenant") is executed this _____day of August, 2016, by Hammond Pest Control ("HPC").

Recitals

A. HPC owns certain property located at 702-714 State Street, Hammond, Lake County, Indiana, parcel number 45-02-36-428-0026.000-023, and more particularly described as L.E. HOHMAN'S 2ND ADD. L.1 BL.1, L.2 BL.1, AND L.3 BL.1 (the "Real Estate").

B. HPC is a pest control company providing general pest control services. Part of HPC's business involved the storage of pest control products and chemicals intended for commercial use or sale.

C. In the 1990s, HPC stored certain chemicals beyond their useful product life, and some of these chemicals were released into soil and groundwater at the Real Estate. As a result, the Indiana Department of Environmental Management ("IDEM") required that HPC investigate these releases and submit a "RCRA Closure Work Plan" to address those releases.

D. HPC submitted a Modified RCRA Closure Work Plan ("Closure Plan") to IDEM dated July 12, 2012 and revised April 11, 2014, which IDEM approved on April 24, 2014. The approved Closure Plan required the removal of shallow soil and the construction and maintenance of a parking lot to prevent direct contact with underlying soils and help prevent precipitation from causing residual chemicals remaining under the parking lot from migrating off-site. The work required by the approved Closure Plan was completed in 2015. The final parking lot as-built design drawings are available on IDEM's Virtual File Cabinet ("VFC") at http://vfc.idem.IN.gov/ under document number 80304819, pages 151 and 152 of 369.

E. A map of the Real Estate to which this Covenant applies is attached hereto as Exhibit A.1 and shows the location of the parking lot that must be maintained. Exhibit A.2 contains the legal description of the parking lot area depicted on Exhibit A.1.

F. Exhibit B provides a description and the locations of the residual chemicals that remained in soil and groundwater at the Real Estate at the time this Covenant was recorded.

G. The approved Closure Plan and other documents related to work at the Real Estate may be found in IDEM's VFC. The approved Closure Plan is VFC document number 69916470.

FILED

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OCT 03 2016

JOHN E. PETALAS
LAKE COUNTY AUDITOR

Restrictions

HPC subjects the Real Estate to the following restrictions and provisions:

1. Restrictions: Unless modified or terminated pursuant to paragraph 4 below, the following land use and activity restrictions shall hereafter apply to the Real Estate:

   (a) The Real Estate shall not be used for any residential purpose including, but not limited to, residences, daily child care or educational facilities for children (e.g., daycare centers for children or K-12 schools).

   (b) Groundwater located at the Real Estate shall not be extracted and/or used for any purpose, including, but not limited to, human consumption, gardening, industrial processes, or agriculture. With the exception that groundwater may be extracted as part of an environmental investigation or remediation project.

   (c) The parking lot is depicted on Exhibit A.1, and is legally described on Exhibit A.2. HPC and any subsequent owner of the Real Estate must inspect and maintain the parking lot in the future as an engineered barrier in accordance with Exhibit C to prevent direct contact with underlying soils and help prevent precipitation from causing residual chemicals remaining under the parking lot from migrating off-site.

2. Effect of Covenant: This Covenant and the restrictions and obligations described herein shall run with the Real Estate in perpetuity (unless modified or terminated pursuant to paragraph 4 below) and shall be binding on the current and all future owners of the Real Estate or any interest therein and their respective successors, assigns, parents, affiliates, employees, contractors, mortgagees, representatives, agents, lessees, licensees, invitees, guests, and any other person acting under their direction or control (collectively, "Related Parties"). No conveyance, mortgage, lease, license, easement or other transfer of any interest in all or any part of the Real Estate shall affect the restrictions set forth herein. By taking title to the Real Estate, any subsequent owner agrees to comply with all of the restrictions set forth in paragraph 1 above, and with the other terms of this Covenant.

3. Site Access: IDEM (or any successor governmental agency) and HPC, and their respective designated representatives, shall have the right to enter the Real Estate at reasonable times for the purpose of determining and monitoring compliance with this Covenant.

4. Termination and Modification: This Covenant shall not be terminated, and the restrictions and obligations in this Covenant shall not be modified unless, and only to the extent that, IDEM (or any successor governmental agency) issues a written determination that any such termination or modification will not pose an unacceptable risk to human health or to the environment. Any request to terminate this Covenant, or to modify the restrictions and obligations herein, must be submitted in writing concurrently to IDEM and HPC at the addresses provided in paragraph 6 below by the owner of the Real Estate

at the time of the proposed termination or modification. If IDEM approves the request, the then-current owner of the Real Estate shall (a) record any such approved termination or modification in the Lake County Recorder's Office within thirty (30) days of IDEM's written determination to terminate or modify the ERC; and (b) promptly provide a copy of such recorded termination or modification to IDEM and HPC.

5. Required Notice for Future Conveyances and Transfers: Every conveyance or transfer of the Real Estate or any interest therein of any nature, including but not limited to deeds, leases or subleases, (but excluding mortgages, liens, similar financing interests, and other non-possessory encumbrances), shall include the following notice:

> NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL RESTRICTIVE COVENANT, DATED _____, 2016, RECORDED IN THE OFFICE OF THE RECORDER OF LAKE COUNTY ON_____, 2016, INSTRUMENT NUMBER (or other identifying reference)_____IN FAVOR OF AND ENFORCEABLE BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.

The failure to provide such notice, however, shall not affect or limit in any way this Covenant and the restrictions and obligations contained herein.

6. Notices: All notices and other communications made hereunder shall be in writing, shall be deemed to have been duly given on the date of delivery if delivered in person or the following day after being sent by overnight delivery by a nationally recognized overnight delivery service such as UPS or Federal Express, or three (3) business days after being mailed by U.S. certified mail (return receipt requested), and shall be addressed as follows:

To IDEM:
Hazardous Waste Permit Section – Section Chief
100 N. Senate Avenue
Indianapolis, Indiana 46204

To HPC:
Hammond Pest Control
Attn: Bob Dold
664 State Street
Hammond, IN 46320

With a copy to:
John M. Kyle III
Barnes & Thornburg LLP
11 South Meridian Street
Indianapolis, IN 46204

In addition to sending notices to the persons above, all notices required by this Covenant to be sent to HPC shall also be sent to the Registered Agent of record for the State of Indiana for HPC, if any, in accordance with the records of the Indiana Secretary of State.

7. Effect of Laws: In no event shall this Covenant be rendered unenforceable if Indiana's laws, regulations, or policies for environmental protection generally and environmental restrictive covenants or other institutional controls specifically, change.

8. Enforcement: IDEM may proceed in court to enforce this Covenant, pursuant to Ind. Code § 13-14-2-6(5). HPC shall also have the right but not the obligation to proceed in court to enforce this Covenant. Damages alone are insufficient to compensate either IDEM or HPC if any owner of the Real Estate or its Related Parties breach this Covenant or otherwise default hereunder. As a result, if any owner of the Real Estate, or any owner's Related Parties, breach this Covenant or otherwise default hereunder, IDEM and/or HPC shall have the right to demand and obtain specific performance and/or immediate injunctive relief to enforce this Covenant in addition to any other remedies it may have at law or at equity. By taking title to this Real Estate, any subsequent owner agrees that IDEM and/or HPC may bring an action to enforce this Covenant.

9. Attorney's Fees: If any action is instituted by HPC seeking to enforce this Covenant, HPC shall be entitled to recover (a) its reasonable attorneys' fees in such action, and on any appeal from any judgment or decree entered therein: (b) fees it incurred in connection with such action for the services of consultants, engineers, contractors, experts, and laboratories; and (c) all other costs it incurred in connection with enforcing this Covenant.

10. Indemnity: By virtue of taking title to the Real Estate, any owner of the Real Estate agrees to indemnify and hold harmless HPC from and against (a) any and all claims, judgments, damages, (including, without limitation, punitive damages), causes of action, liens, expenses, costs, fees (including, for the services of attorneys, consultants, engineers, contractors, experts, laboratories), penalties, liabilities and fines (collectively "Losses") arising from any default in the performance of any obligation to be performed under the terms of this Covenant, or any breach of the restrictions and covenants contained herein, by such owner or its Related Parties; and (b) any and all Losses incurred by HPC in enforcing this Covenant or in defending any action or proceeding brought thereon. If any action or proceeding is brought against HPC, by reason of the foregoing, the then-current owner of the Real Estate, upon notice from HPC, shall defend the same at the owner's expense by counsel approved by HPC that is seeking defense under this provision.

11. Non-waiver: No failure on the part of IDEM and/or HPC at any time to require performance by any owner of the Real Estate, or by any owner's Related Party, of any term of this Covenant shall be taken or held to be a waiver of such term or in any way affect IDEM and/or HPC's rights to enforce such term, and no waiver on the part of IDEM and/or HPC of any term hereof shall be taken or held to be a waiver of any other term hereof or the breach thereof.

12. Non-admission: Nothing herein shall be construed as an admission by HPC of any liability with respect to the environmental conditions of the Real Estate, or an affirmative obligation by HPC to remediate the Real Estate.

13. Indiana Law: This Covenant shall be governed by, and shall be construed and enforced according to, the laws of the State of Indiana.

14. Successors and Assigns: This Covenant shall inure to the benefit of, and shall be binding upon, all of the respective successors and assigns of HPC, IDEM or anyone seeking to exercise any of the rights, or to comply with any of the obligations, hereunder.

15. Severability: The illegality, invalidity or unenforceability of any particular provision hereof shall not affect the other provisions, and this Covenant shall be construed in all respects as if such invalid or unenforceable provision had not been contained herein.

16. Liability: An owner's rights and obligations under this Covenant shall terminate upon any conveyance or transfer of the owner's interest in the Real Estate except that liability for acts or omissions of such owner and its Related Parties occurring prior to such transfer or conveyance shall survive such transfer or conveyance.

AUTHORIZATION

The undersigned person executing this Covenant on behalf of Hammond Pest Control represents and certifies that he is duly authorized, and has been fully empowered, to execute and record this Covenant on behalf of Hammond Pest Control as the current owner.

IN WITNESS WHEREOF, Hammond Pest Control, the said owner of the Real Estate described above has caused this Environmental Restrictive Covenant to be executed on this 3 day of October, 2016.

Hammond Pest Control

By: _____
Name: Robert J. Dold
Title: President

STATE OF INDIANA)
) SS:
COUNTY OF LAKE)

Before me, the undersigned, a Notary Public in and for said County and State, personally appeared ROBERT DOLD, the PRESIDENT of Hammond Pest Control who acknowledged the execution of the foregoing Environmental Restrictive Covenant for and on behalf of said entity.

Witness my hand and Notarial Seal this 3 day of OCTOBER, 2016.

_____
(Signature)

TIMOTHY W. ANDERSON
(Printed Name) #679482
Notary Public

Residing in LAKE County, IN

My Commission Expires: FEBRUARY 4, 2024

This Covenant prepared by: John M. Kyle III, Attorney at Law, Barnes & Thornburg LLP, 11 South Meridian Street, Indianapolis, Indiana 46204

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law. John M. Kyle III

Exhibit A.1

Map of "Real Estate" with Location of Parking Lot to be Maintained

[Attached]

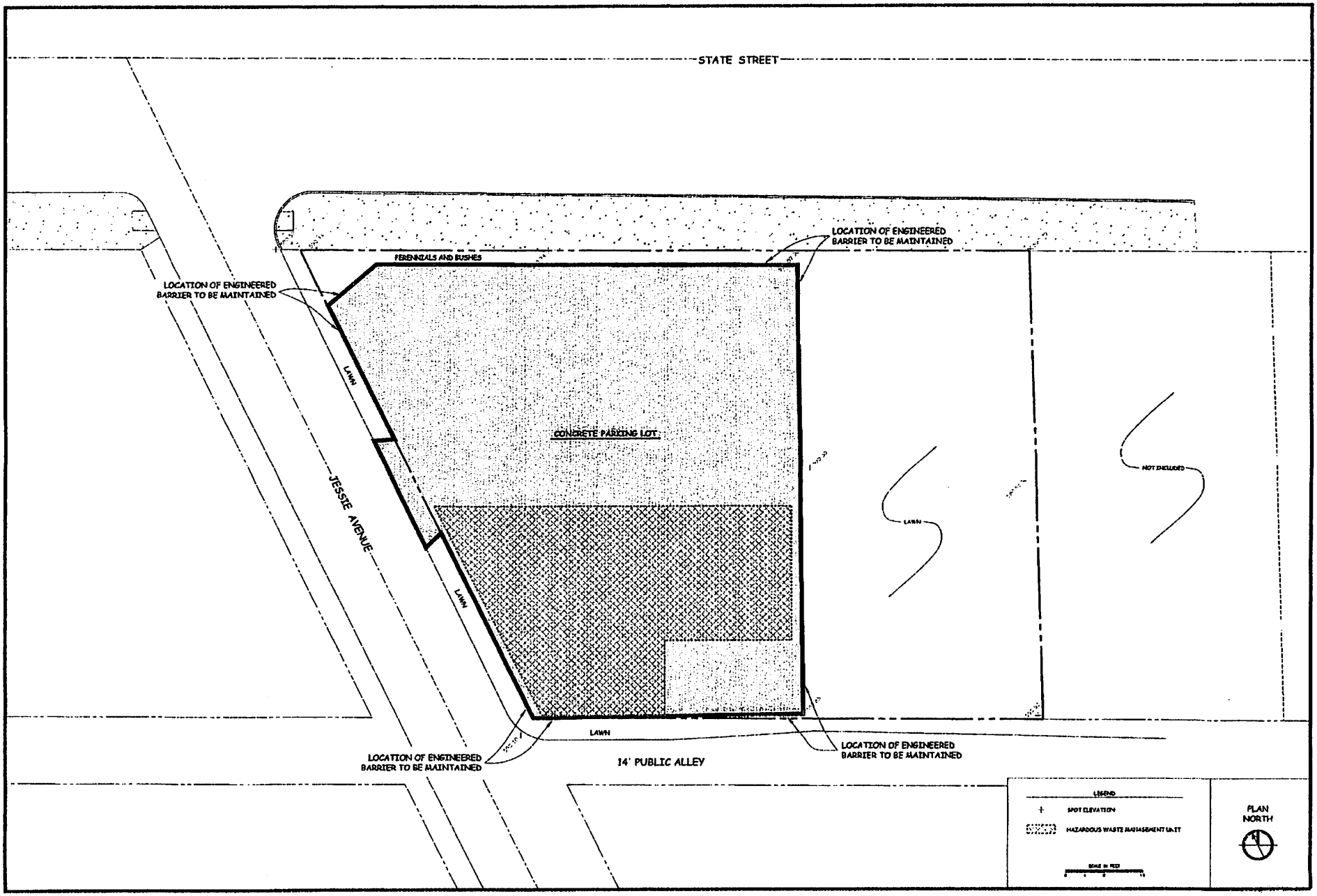
STATE STREET
PERENNIALS AND BUSHES
LOCATION OF ENGINEERED BARRIER TO BE MAINTAINED
LOCATION OF ENGINEERED BARRIER TO BE MAINTAINED
LAWN
CONCRETE PARKING LOT
JESSIE AVENUE
LAWN
LAWN
NOT INCLUDED
LAWN
LOCATION OF ENGINEERED BARRIER TO BE MAINTAINED
14' PUBLIC ALLEY
LOCATION OF ENGINEERED BARRIER TO BE MAINTAINED
LEGEND
SPOT ELEVATION
HAZARDOUS WASTE MANAGEMENT UNIT
SCALE IN FEET
PLAN NORTH

Exhibit A.2

Legal Description of Parking Lot to be Maintained

[Attached]

LEGAL DESCRIPTION

A PART OF LOTS 1 AND 2 IN BLOCK 1 OF L.E. HOHMAN'S SECOND ADDITION TO THE CITY OF HAMMOND BEING RECORDED IN PLAT BOOK 1, PAGE 74 IN THE OFFICE OF THE RECORDER OF LAKE COUNTY, INDIANA WITH SAID PART BEING A PERMANENT EASEMENT DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 1, THENCE NORTH 00 DEGREE 04 MINUTES 20 SECONDS WEST ON THE EXISTING EAST RIGHT OF WAY OF JESSIE AVENUE A DISTANCE OF 70.87 FEET TO A POINT ON A BACK OF CURB WITH SAID POINT BEING ON A NON TANGENT CURVE WITH A RADIUS OF 4.94 FEET AND ITS CENTER BEARS NORTH 36 DEGREES 08 MINUTES 20 SECONDS WEST; THENCE NORTHEASTERLY ON SAID CURVED BACK OF CURB AN ARC DISTANCE OF 4.09 FEET; THENCE NORTH 00 DEGREE 04 MINUTES 15 SECONDS WEST ON SAID BACK OF CURB A DISTANCE OF 26.35 FEET; THENCE NORTH 52 DEGREES 10 MINUTES 36 SECONDS EAST ON SAID BACK OF CURB A DISTANCE OF 4.23 FEET TO A POINT ON THE EDGE OF PAVEMENT; THENCE SOUTH 63 DEGREES 47 MINUTES 21 SECONDS EAST ON SAID EDGE OF PAVEMENT A DISTANCE OF 94.06 FEET TO A POINT ON A RETAINING WALL WITH SAID POINT BEING ON THE SOUTHEAST LINE OF SAID LOT 2; THENCE SOUTH 24 DEGREES 21 MINUTES 20 SECONDS WEST ON SAID RETAINING WALL AND SAID SOUTHEAST LINE OF LOT 2 A DISTANCE OF 95.22 FEET TO A POINT ON THE EXISTING NORTHERLY RIGHT OF WAY OF A 14 FOOT WIDE PUBLIC ALLEY; THENCE NORTH 63 DEGREES 33 MINUTES 31 SECONDS WEST ALONG SAID EXISTING NORTHERLY RIGHT OF WAY A DISTANCE OF 56.22 FEET TO THE POINT OF BEGINNING CONTAINING 7,348 SQUARE FEET, MORE OR LESS OR 0.169 ACRES, MORE OR LESS.

SAID PERMANENT EASEMENT AREA BEING THE FOOTPRINT OF THE PARKING AREA INCLUSIVE OF ALL EDGES OF PAVEMENTS, CURB LINES AND RETAINING WALLS LOCATED ON SAID LOTS 1 AND 2 AT THE SOUTHEAST CORNER OF JESSIE AVENUE AND STATE STREET IN HAMMOND, INDIANA AND AS DESCRIBED ABOVE.

Exhibit B

Description of Constituents of Concern

This Exhibit B describes the Constituents of Concern ("COCs") that remain at the Real Estate at the time of the execution of the ERC, and provides information on the levels and location of these COCs. The IDEM-approved closure plan required construction of the parking lot depicted in Exhibit A.1, and removing impacted soils located outside the parking lot footprint. Soils outside the parking lot footprint were cleaned up to meet IDEM's commercial/industrial soil cleanup standards for unrestricted commercial/industrial land use. As a result, that portion of the Real Estate is suitable for commercial industrial use without any further restrictions. The parking lot that will be maintained will prevent direct contact with underlying soils, and will help prevent precipitation from causing residual chemicals remaining in the soil under the parking lot from entering the groundwater.

COCs under the parking lot have been found in shallow soil (generally less than two feet deep) at levels above IDEM's soil cleanup standards. The following is a list of the pest control chemicals that were detected above IDEM's soil cleanup standards along with a range of concentrations interpreted from laboratory analysis of soil samples; the higher concentrations of these COCs were all located under the parking lot to be maintained: aldrin (from non-detect ("ND") - 186 ppm (0.5-1.0 ft)); dieldrin (from ND - 165 ppm (0.5-1.0 ft)); alphachlordane (from ND – 96.3 ppm (0.5-1.0 ft)); chlordane (from ND – 2.4 ppm (0-0.5 ft)); 4,4'-DDT (from ND - 236 ppm (1.5-2.0 ft)); heptachlor (from ND – 20.6 ppm (0.5-1.0 ft)); arsenic (from ND - 52,300 mg/kg (0-0.5 ft)); lead (from ND - 5,300 mg/kg (0-0.5 ft)); cyanide (from ND – 1.73 mg/kg (0-0.5 ft)); and gamma-chlordane (from ND – 121.1 ppm (0.5-1.0 ft)).

The following COCs have been found in groundwater at the Real Estate: dieldrin and arsenic. The individual groundwater sampling results were interpreted to include: dieldrin (from ND - 0.00024 mg/L) and dissolved arsenic (from ND - 2.19 mg/L).

Additional information regarding the investigation and remedial activities can be found by reviewing the documents referenced in Recital Paragraph G of the ERC.

Exhibit C

Parking Lot Inspection and Maintenance Plan

The parking lot at the Real Estate was required by IDEM as part of the approved Closure Plan. The details of the construction of the parking lot were approved by the City of Hammond and included a "Stormwater Management System Operations and Maintenance Plan" ("City Stormwater Plan") which is VFC document number 80304819, page 109 of 369. HPC and any future owner of the Real Estate must comply with this Exhibit C and with the City Stormwater Plan.

Inspection Activities

1. Parking Lot. The integrity of the parking lot will be inspected annually in the late spring/early summer by a qualified building construction professional ("inspector"). An annual inspection is considered adequate as potential issues will likely only become apparent in the spring following the freeze-thaw cycle and once snow has melted from the parking lot. The inspector will determine whether 1) precipitation and runoff is being captured and not allowed to pool on top of the parking lot; 2) the parking lot is free of material cracks; 3) the interceptor trench is free of debris and is working as designed; 4) the Stormceptor is free of debris and is working as designed; 5) the concrete joint sealant is intact; and 6) the backflow prevention devices are working as designed.

2. Retaining Wall. The retaining wall associated with the parking lot at the Real Estate will be inspected annually by an inspector to verify that it remains structurally sound. The inspector will determine whether the retaining wall is free of material cracks and settling.

3. Stormwater Management System. The stormwater management system associated with the parking lot will be inspected by HPC or its designee pursuant to the City Stormwater Plan.

Maintenance Activities

If problems are noted with the parking lot, drainage system, Stormceptor, or retaining wall during the annual inspection or at any other time during the year, repairs will be scheduled as soon as practical.

Reporting Requirements

The inspector will be required to certify in writing to IDEM the results of the inspection within sixty days of completing the annual inspection. If corrective action is required, the inspector will also certify that the corrective actions have been completed.

Amendment or Withdrawal of Inspection and Maintenance Plan

This plan can be amended or terminated with the written approval of the IDEM Hazardous Waste Permit Section.

2016 066906

STATE OF INDIANA
LAKE COUNTY
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2016 OCT -3 PM 1:01

MICHAEL B. BROWN
RECORDER

Appendix B

Stormwater Management System
Operations and Maintenance Plan

Hammond Pest Control Parking Lot
702 State Street
Hammond, Indiana

May 8, 2014
SMA Project No. 19-00184.00

Prepared For:

Hammond Pest Control
71 Warrick Road
Winnetka, Illinois 60093

Prepared By:

St. John – Mittelhauser & Associates, Inc.
1401 Branding Avenue, Suite 315
Downers Grove, Illinois 60515

CONTENTS

Section **Page**

1.0 INTRODUCTION 1
1.1 OVERVIEW OF STORMWATER MANAGEMENT SYSTEM 1
1.2 RESPONSIBILITY 2
1.3 DOCUMENTATION 3

2.0 MAINTENANCE PROGRAM 3
2. 1 ROUTINE MAINTENANCE PROGRAM 4
2. 2 STORMWATER COLLECTION SYSTEM 4
2. 3 SUBSLAB DRAINAGE SYSTEM 4
2. 4 STORMCEPTOR UNIT 5

Figures

1 Stormwater Management System Layout
2 Stormwater Collection System

Table

1 Stormwater Management System Maintenance Program Summary Checklist

Attachments

A CleanCheck Backflow Prevention Device Information
B Site Drainage Calculations
C Stormwater Management System Inspection and Maintenance Log
D Stormceptor ® STC Inspection and Maintenance Information

1.0 INTRODUCTION

This Stormwater Management System Operations and Maintenance Plan (O&MP) has been prepared at the request of the City of Hammond Sanitary District and Department of Environmental Control and will be implemented at the Hammond Pest Control (HPC) Parking Lot development site located at 702 State Street, Hammond, Indiana to ensure that the stormwater management system functions as designed. HPC is the current property owner, and as such possesses the primary responsibility for implementing and overseeing the O&MP and assigning Subcontractors as needed for the proper operation and maintenance of the stormwater structures.

The O&MP will include litter removal, non-routine spill cleanup, and prohibitions on the repair of company vehicles or equipment on the Parking Lot. The property owner will follow a regular inspection schedule to ensure that (1) the program is effective in reducing potential pollutants from entering the stormwater management system; and (2) the stormwater management system will be maintained to remove any material that is collected in the system.

In case of the transfer of property ownership, future property owners will be notified of the presence of the stormwater management system and will be responsible for proper implementation of the O&MP.

1.1 OVERVIEW OF STORMWATER MANAGEMENT SYSTEM

The property owner is proposing to construct an approximate 7,000 square foot parking lot for employee, company, and customer vehicle parking. This parking lot will also serve as an engineered cap to contain hazardous wastes in soil at the property pursuant to the approval of the Indiana Department of Environmental Management. No stormwater will come into contact with the hazardous wastes due to a containment cover system consisting of a geocomposite liner (GCL), an aggregate and sand drainage layer, and 6 inches of reinforced concrete. Any minor amount of precipitation that may possibly seep through the concrete or condensed soil

moisture that may collect in the aggregate and sand drainage layer below the concrete and above the GCL will be collected in a subslab drainage layer above the GCL before it has a chance to contact hazardous waste in the soil. Water from the drainage layer will gravity flow through a 3-inch diameter pipe to the Stormceptor System. The pipe will include a cleanout and backflow prevention device (see Attachment A). Elements of the stormwater management and subslab drainage systems are shown in Figure 1. The final locations of the backflow prevention devices and cleanouts will be determined during construction.

The Parking Lot will be sloped to direct the precipitation towards an interceptor trench at the driveway entrance. The interceptor trench has been designed to collect the stormwater flow from a 100-year storm event (see Attachment B). Water from the trench will gravity flow through a 6-inch diameter pipe to the Stormceptor System. The pipe will include a cleanout and backflow prevention device. The Stormceptor System is a water quality treatment device used to remove total suspended solids (TSS) and free oil (TPH) from stormwater run-off. Concurrently, Stormceptor also takes the place of a conventional junction structure within the stormdrain system. The system is manufactured with precast concrete components and a fiberglass disc insert in accordance with American Association of State Highway and Transportation Officials (AASHTO) and American Society for Testing and Materials (ASTM) standards.

1.2 RESPONSIBILITY

The purpose of the O&MP is to ensure the inspection of the system, removal of accumulated sediments, oils and debris, and implementation of corrective action and record keeping activities. The ongoing responsibility is with the property owner, its successors and assigns. Adequate maintenance is defined in this document as good working condition.

Contact information for the current property owner is provided below:

Owner's Name:	Hammond Pest Control
Address:	664 State Street
City, State:	Hammond, IN, 46324
Contact:	Robert Dold, Senior
Telephone:	(847) 441-8300
Email:	r.dold@rosepestcontrol.com

1.3 DOCUMENTATION

An Inspection and Maintenance Record Log (see Attachment C) will be kept by the Owner and/or assigned Subcontractor summarizing inspections, maintenance, repairs and any corrective actions taken. The log will include the date and time of the inspection, inspector's name, observations made, and recommendations for any repairs or maintenance activities that are needed. A description of all repairs and maintenance activities will be documented and maintained in a file containing the inspection logs. Files will be maintained on by the owner for a period of at least three years from the date of the inspection.

2.0 MAINTENANCE PROGRAM

The owner will ensure that the Operation and Maintenance program set forth in this document is performed, that inspections and record keeping are timely and accurate, and that cleaning and maintenance are performed.

The following areas, facilities and measures will be inspected by the owner or an assigned Subcontractor and maintained as specified below. Identified deficiencies will be corrected. Refer to the Stormceptor Inspection and Maintenance Information in Attachment D.

2.1 ROUTINE MAINTENANCE PROGRAM

Routine maintenance includes the following tasks:

- Routine maintenance of the Stormwater Management System will be in accordance with the Operations and Maintenance Checklist in Table 1.
- Clippings and/or mulch from routine maintenance of lawns, gardens, and other landscaped areas will not left on the parking lot where it could be washed into the collection trench.
- Good housekeeping practices will be used to keep the Parking Lot clean. All areas should be kept free of trash and debris. Adsorbent will be used to clean up any oil leaked or spilled from vehicles onto the Parking Lot. If the oil came from a company vehicle, the vehicle will be removed from the Parking Lot until the leak is fixed.
- Routine inspection and maintenance of the water discharge lines to ensure that the lines do not become clogged and that the backflow prevention devices work properly.

2.2 STORMWATER COLLECTION SYSTEM

The stormwater collection system consists of an interceptor trench and 6-inch diameter sewer piping. The interceptor trench is relatively shallow (less than 2 feet) with a removable grate. The grate can be removed and swept or flushed with water. Likewise, the pipes can be flushed with water to clear them, and a cleanout will be installed in the discharge pipe to assist in cleaning and flushing the line. The backflow prevention device can be removed for inspection and cleaned if necessary. No trees are proposed for the west and north sides of the property where the sewer pipe will be located; therefore, no root damage is expected. The stormwater collection trench will be inspected and maintained in accordance with the schedule in Table 1.

2.3 SUBSLAB DRAINAGE SYSTEM

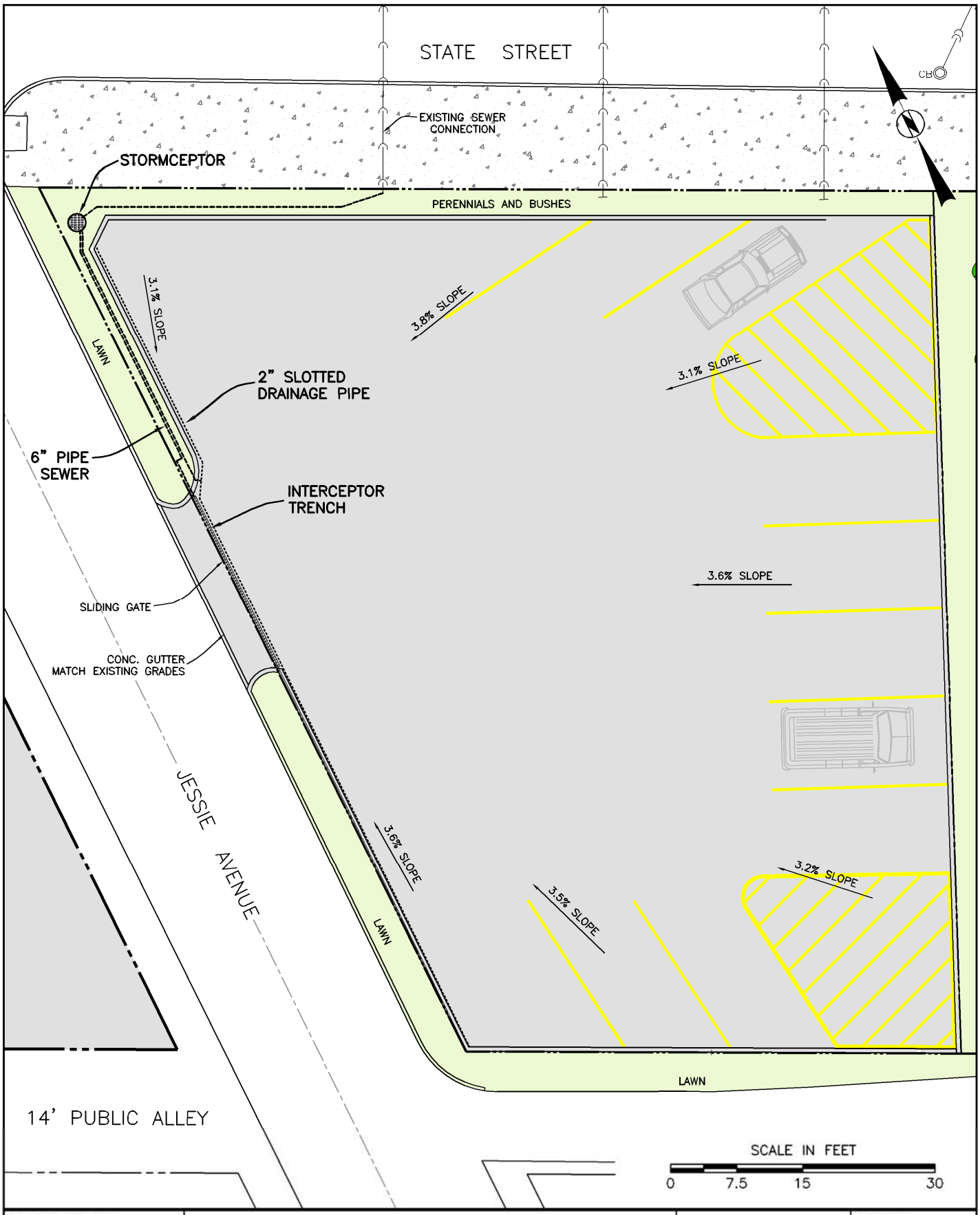
The subslab drainage system consists of 3-inch slotted pipe to collect water and 3-inch discharge pipe. A cleanout will be installed in the discharge pipe to assist in cleaning and flushing the line, and a backflow prevention device will be installed in the event the sewer pipe

backs up. The backflow prevention device can be removed for inspection and cleaned if necessary. No trees are proposed for the west and north sides of the property where the discharge pipe will be located; therefore, no root damage is expected. The subslab drainage discharge system will be inspected and maintained in accordance with the schedule in Table 1.

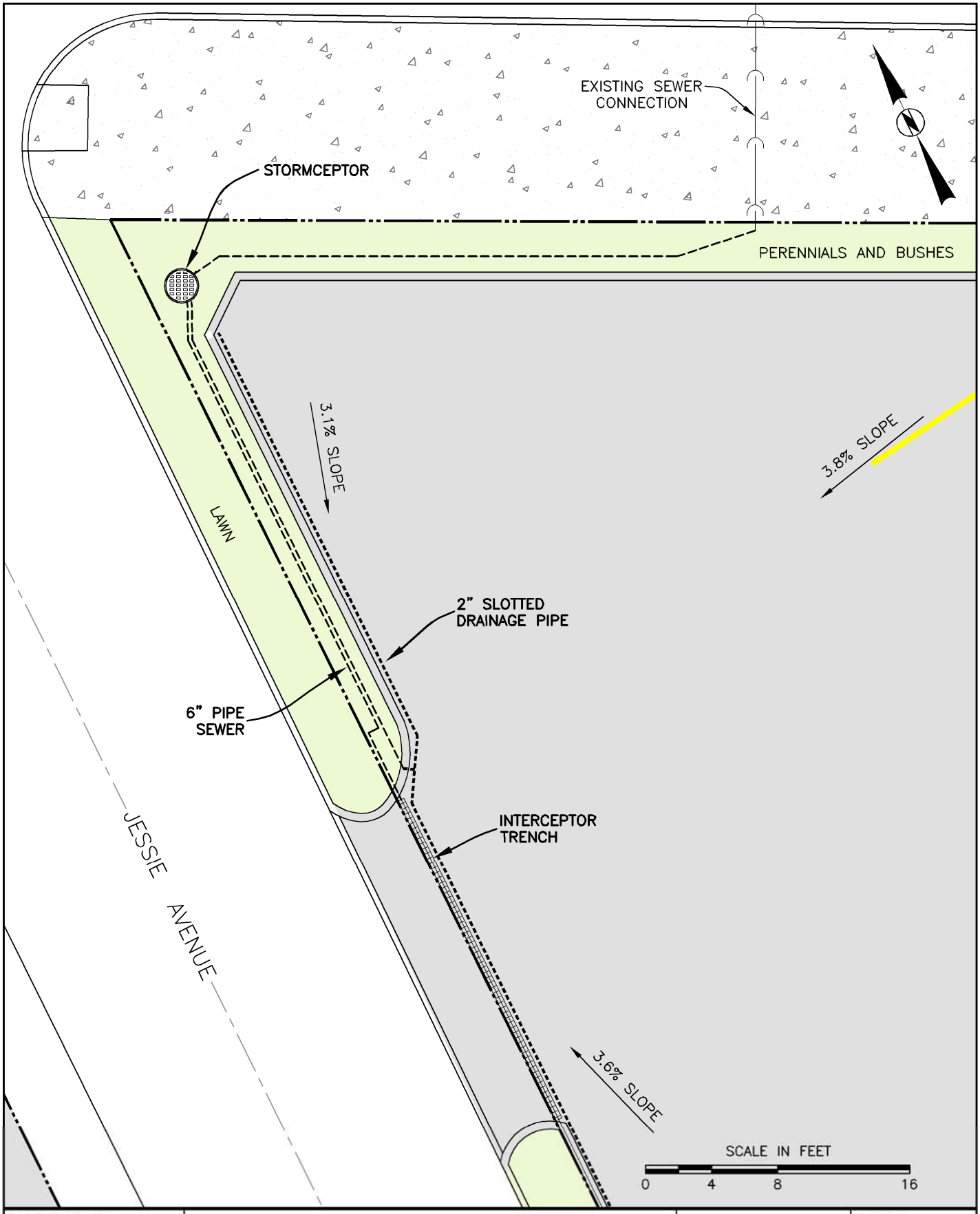
2.4 STORMCEPTOR UNIT

The maintenance of the Stormceptor unit begins immediately at post-construction prior to putting the unit into service. During the first year of operation, the unit should be inspected quarterly in order to determine the rate of accumulation of sediment and oils. In subsequent years, the unit can be inspected at a frequency determined by the accumulation rate of sediment and oils, but in no cases should the inspection frequency exceed six months. At a minimum, the Stormceptor should be inspected and maintained (if necessary) at the end of the foliage and winter seasons. Cleaning of the units is required when the sediment has accumulated to 15 percent of the Stormceptor's capacity. The unit should also be cleaned immediately if there is a spill that enters the collection trench. Inspection and maintenance procedures for the Stormceptor unit are described in Attachment D.

FIGURES



CHECK BY MJ	STORMWATER MANAGEMENT SYSTEM LAYOUT	SM&A St. John · Mittelhauser & Associates	FIGURE
DRAWN BY OS			
DATE 5-7-14			1
SCALE AS SHOWN	HAMMOND PEST CONTROL		
CAD NO. 00184.02P4	702 STATE STREET		
PRJ NO. 19-00184	HAMMOND, INDIANA		



CHECK BY MJ	STORMWATER COLLECTION SYSTEM	SM&A St. John · Mittelhauser & Associates	FIGURE
DRAWN BY OS			
DATE 5-7-14			2
SCALE AS SHOWN	HAMMOND PEST CONTROL		
CAD NO. 00184.02P5	702 STATE STREET		
PRJ NO. 19-00184	HAMMOND, INDIANA		

TABLE

TABLE 1

STORMWATER MANAGEMENT SYSTEM MAINTENANCE PROGRAM
SUMMARY CHECKLIST

Hammond Pest Control

Item	Actions	Frequency			
		Monthly	Quarterly	Semi-Annual	Annual
Parking Lot Sweeping/ Housekeeping	Inspect lot for oil spills; sweep to remove small debris and sediments; large debris should be removed by hand prior to sweeping actions; spills should be cleaned up with adsorbent	X			
Stormwater Collection System	Inspect for sediment quarterly and debris; inspect at end of foliage and at end of snowmelt; remove upon accumulation		X		
Stormceptor Unit	Inspect monthly for first six months; inspect for sediment accumulation quarterly or semi—annually thereafter; inspect and clean if needed immediately after spills		X	X	

ATTACHMENT A

CLEANCHECK BACKFLOW PREVENTION DEVICE INFORMATION

RECTORSEAL

CLEAN® CHECK

Stop Sewage Backups

A simple but revolutionary extendable backwater valve that eliminates the need for expensive and unsightly manholes regardless of the burial depth.

- Complies with the requirements of IAPMO/UPC, ICC, IPC & CSA Standards
- Easy to perform maintenance & inspection from ground level
- Capable of handling back pressure up to 75 psi

NO costly manhole.

NO more indoor backwater valves which could be hidden by cabinets, stairwells or floor coverings.

NO more sewer gas or mess inside a building during maintenance inspection.

Scan to view video demo

UPC FILE NO. 4068

ICC ES PMG

Features & Benefits

- Prevents sewage backup into a residence or building as a result of a plugged sewer system.
- Valve flapper seals the system, blocking reverse flow.
- The unique design allows accessibility to the flapper, thus eliminating the need for vaults or manholes, it is direct buried using a riser pipe and standard clean-out plug.
- Backwater valves are building code required when the flood level rim of the lowest fixture in a structure is below the first upstream manhole cover. They must be accessible for inspection and service.

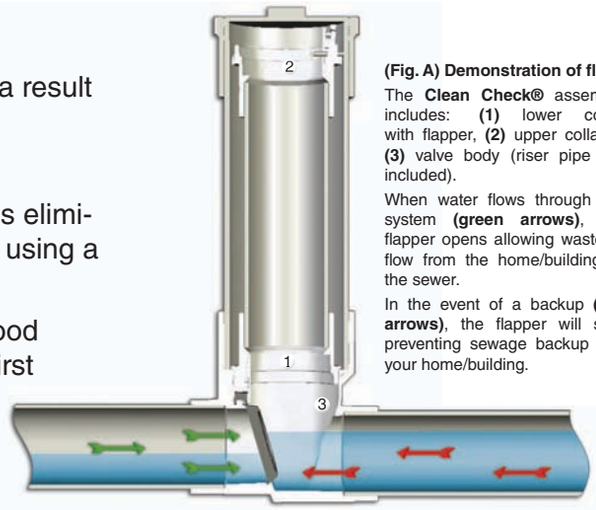


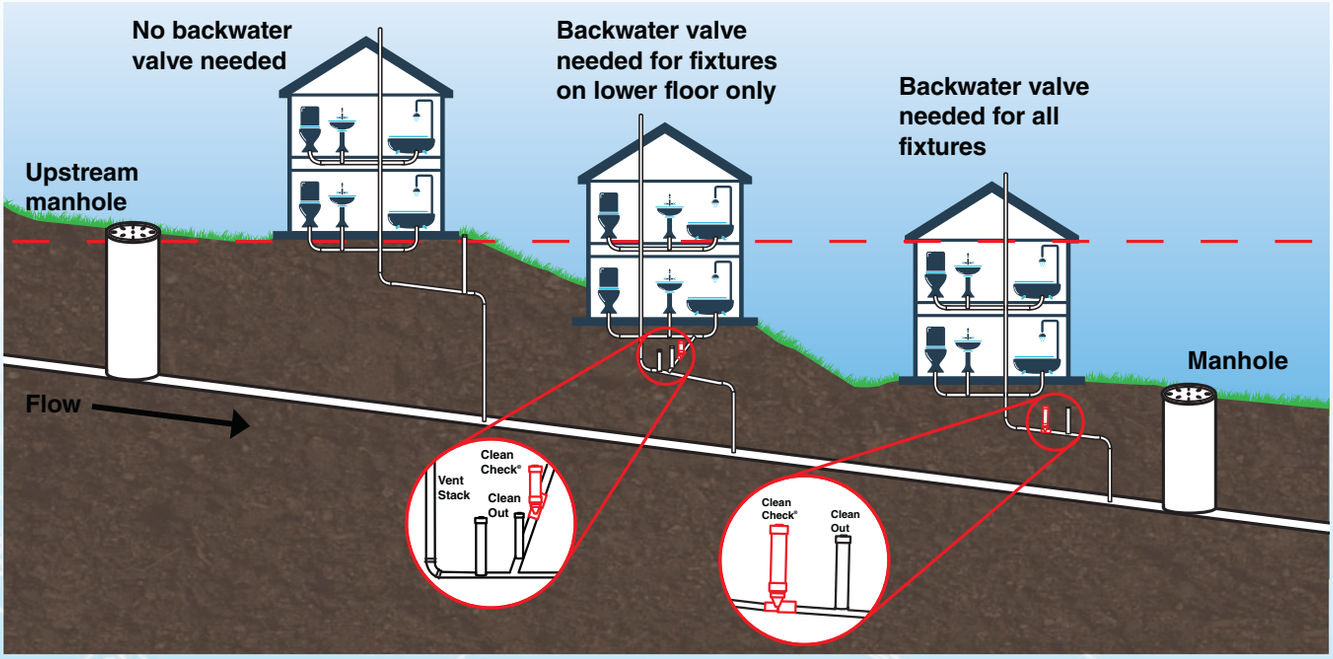
Fig. A

(Fig. A) Demonstration of flow:
The **Clean Check®** assembly includes: **(1)** lower collar with flapper, **(2)** upper collar & **(3)** valve body (riser pipe not included).

When water flows through the system **(green arrows)**, the flapper opens allowing waste to flow from the home/building to the sewer.

In the event of a backup **(red arrows)**, the flapper will seal preventing sewage backup into your home/building.

Installation Diagram



Ordering Information

Code	Description	Qty.
96903	3" ABS	6
96904	4" ABS	6
96913	3" ABS w/adapter & plug	4
96914	4" ABS w/adapter & plug	4
96923	3" PVC	6
96924	4" PVC	6
96926	6" PVC	3
96933	3" PVC w/adapter & plug	4
96934	4" PVC w/adapter & plug	4

Kit available in both ABS & PVC; all replacement parts including the flapper are individually available.

www.rectorseal.com 2601 Spenwick Drive, Houston, TX 77055 713.263.8001 - 800.231.3345 713.263.7577 - 800.441.0051

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ATTACHMENT B

SITE DRAINAGE CALCULATIONS

SITE DRAINAGE CALCULATIONS

From the Interceptor Surface Drainage Specifications & Design Manual (page 4):

Sheet Flow

This runoff occurs perpendicular to the trench and flows with a relatively uniform depth along the entire trench. Interceptor A-67 can help control
sheet flows that cause dangerous hydroplaning at commercial or residential entrances or multi-lane super-elevations. Hydraulic testing, performed by
an independent laboratory, establishes the intercept capability of the Interceptor A-67 grate at 0.011 m3/s /m (.12 cfs /ft), so

LD = Q/CS

Where: LD = Length of Drain (ft)
Q = Flow (cfs)
CS = 0.12 cfs/ft

St. John - Mittelhauser & Associates, Inc. (SMA) used the City of Chicago's Stormwater Tool to estimate the flows (Q) from 5, 10, 25, 50, 100 year storm events (see attached sheets). Based on the above design equation and estimated flow, the maximum trench length that would be need to prevent sheet flow from the parking lot would be approximately 12 feet. The proposed trench length at the parking lot is 22 feet.

Hydraulic Capacity

From the Interceptor Surface Drainage Specifications & Design Manual (page 4):

Hydraulic Capacity Q (cfs)			
Channel Slope (S_c)	Channel Invert at 12.4”	Channel Invert at 19.5”	Channel Invert at 26.6”
0.00	0.95	1.62	2.29
0.0025	1.13	1.93	2.72
0.0050	1.29	2.19	3.09
0.0075	1.43	2.43	3.43
0.0100	1.56	2.64	3.73
0.0125	1.67	2.84	4.01
0.0150	1.78	3.03	4.27
0.0175	1.89	3.20	4.52
0.0200	1.98	3.37	4.76
0.0225	2.08	3.53	4.98
0.0250	2.17	3.68	5.19
0.0275	2.25	3.82	5.40
0.0300	2.33	3.96	5.60
0.0325	2.41	4.10	5.79
0.0350	2.49	4.23	5.97
0.0375	2.57	4.36	6.15
0.0400	2.64	4.48	6.33
0.0425	2.71	4.60	6.50
0.0450	2.78	4.72	6.65
0.0475	2.84	4.83	6.82
0.0500	2.91	4.94	6.98

A channel slope of one percent would be required for a channel with a 12.4” invert and a 5 minute, 100 year storm event of 1.45 cfs. Alternately, channel inverts with 19.5” and 26.6” could be supplied without concern of channel slope.

Date:	December 13, 2013
Name of Project:	Hammond Pest Control
Address:	702 State Street, Hammond, IL
A/E of Record:	St. John - Mittelhauser & Associates, Inc.
Prepared by:	Mike Johnson, P.E.

Weighted C Value Calculation

		Proposed Area (sq. ft.)	C-Value 100-Year
Pervious Land	Lawns - Sandy soil, flat, 0% to 2%	0	0.18
	Lawns - Heavy soil, flat, 0% to 2%	0	0.30
Impervious Land	Pavement/Building Roof	7,000	0.95

Summary	Total pervious area (sq ft)	0
	Total impervious area (sq ft)	7,000
	Total site area (sq ft)	7,000
	Weighted C- value	0.95

Runoff Calculation

STORM EVENT (5,10,25,50 or 100) = **100**

Storm Duration (minute)	Runoff Coefficient C	Rainfall Intensity (in/hr)	Drainage Area A (acres)	Flow Rate (cfs) Q=CIA	Total Storm Vol (cf)	Intercept Capability (cfs/ft)	Required Trench Length $L_D = Q/C_S$ (ft)
5	0.95	9.504	0.16	1.45	435	0.12	12.1
10	0.95	7.792	0.16	1.19	714	0.12	9.9
15	0.95	6.634	0.16	1.01	912	0.12	8.4
20	0.95	5.795	0.16	0.88	1,062	0.12	7.4
25	0.95	5.157	0.16	0.79	1,181	0.12	6.6
30	0.95	4.655	0.16	0.71	1,279	0.12	5.9
35	0.95	4.248	0.16	0.65	1,362	0.12	5.4
40	0.95	3.911	0.16	0.60	1,433	0.12	5.0
45	0.95	3.628	0.16	0.55	1,495	0.12	4.6
50	0.95	3.385	0.16	0.52	1,550	0.12	4.3
55	0.95	3.175	0.16	0.48	1,600	0.12	4.0
60	0.95	2.992	0.16	0.46	1,644	0.12	3.8
90	0.95	2.241	0.16	0.34	1,847	0.12	2.9
120	0.95	1.806	0.16	0.28	1,985	0.12	2.3
180	0.95	1.319	0.16	0.20	2,174	0.12	1.7
240	0.95	1.049	0.16	0.16	2,306	0.12	1.3
300	0.95	0.876	0.16	0.13	2,407	0.12	1.1
360	0.95	0.755	0.16	0.12	2,489	0.12	1.0
420	0.95	0.665	0.16	0.10	2,559	0.12	0.8
480	0.95	0.596	0.16	0.09	2,620	0.12	0.8
540	0.95	0.541	0.16	0.08	2,674	0.12	0.7
600	0.95	0.495	0.16	0.08	2,722	0.12	0.6
720	0.95	0.426	0.16	0.06	2,807	0.12	0.5
1080	0.95	0.303	0.16	0.05	2,999	0.12	0.4
1440	0.95	0.238	0.16	0.04	3,140	0.12	0.3

Date:	December 13, 2013
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Address:	702 State Street, Hammond, IL
A/E of Record:	St. John - Mittelhauser & Associates, Inc.
Prepared by:	Mike Johnson, P.E.

Weighted C Value Calculation

		Proposed Area (sq. ft.)	C-Value 100-Year
Pervious Land	Lawns - Sandy soil, flat, 0% to 2%	0	0.18
	Lawns - Heavy soil, flat, 0% to 2%	0	0.30
Impervious Land	Pavement/Building Roof	7,000	0.95

Summary	Total pervious area (sq ft)	0
	Total impervious area (sq ft)	7,000
	Total site area (sq ft)	7,000
	Weighted C- value	0.95

Runoff Calculation

STORM EVENT (5,10,25,50 or 100) = **50**

Storm Duration (minute)	Runoff Coefficient C	Rainfall Intensity (in/hr)	Drainage Area A (acres)	Inflow Rate (cfs) Q=CIA	Total Storm Vol (cf)	Intercept Capability (cfs/ft)	Required Trench Length $L_D = Q/C_S$ (ft)
5	0.95	8.513	0.16	1.30	390	0.12	10.8
10	0.95	6.980	0.16	1.07	639	0.12	8.9
15	0.95	5.943	0.16	0.91	817	0.12	7.6
20	0.95	5.191	0.16	0.79	951	0.12	6.6
25	0.95	4.620	0.16	0.71	1,058	0.12	5.9
30	0.95	4.170	0.16	0.64	1,146	0.12	5.3
35	0.95	3.805	0.16	0.58	1,220	0.12	4.8
40	0.95	3.503	0.16	0.53	1,284	0.12	4.5
45	0.95	3.249	0.16	0.50	1,339	0.12	4.1
50	0.95	3.032	0.16	0.46	1,389	0.12	3.9
55	0.95	2.845	0.16	0.43	1,433	0.12	3.6
60	0.95	2.680	0.16	0.41	1,473	0.12	3.4
90	0.95	2.007	0.16	0.31	1,655	0.12	2.6
120	0.95	1.618	0.16	0.25	1,779	0.12	2.1
180	0.95	1.181	0.16	0.18	1,948	0.12	1.5
240	0.95	0.940	0.16	0.14	2,065	0.12	1.2
300	0.95	0.785	0.16	0.12	2,156	0.12	1.0
360	0.95	0.676	0.16	0.10	2,230	0.12	0.9
420	0.95	0.596	0.16	0.09	2,292	0.12	0.8
480	0.95	0.534	0.16	0.08	2,347	0.12	0.7
540	0.95	0.484	0.16	0.07	2,395	0.12	0.6
600	0.95	0.444	0.16	0.07	2,439	0.12	0.6
720	0.95	0.381	0.16	0.06	2,514	0.12	0.5
1080	0.95	0.272	0.16	0.04	2,686	0.12	0.3
1440	0.95	0.213	0.16	0.03	2,813	0.12	0.3

Date:	December 13, 2013
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Address:	702 State Street, Hammond, IL
A/E of Record:	St. John - Mittelhauser & Associates, Inc.
Prepared by:	Mike Johnson, P.E.

Weighted C Value Calculation

		Proposed Area (sq. ft.)	C-Value 100-Year
Pervious Land	Lawns - Sandy soil, flat, 0% to 2%	0	0.18
	Lawns - Heavy soil, flat, 0% to 2%	0	0.30
Impervious Land	Pavement/Building Roof	7,000	0.95

Summary	Total pervious area (sq ft)	0
	Total impervious area (sq ft)	7,000
	Total site area (sq ft)	7,000
	Weighted C- value	0.95

Runoff Calculation

STORM EVENT (5,10,25,50 or 100) = **25**

Storm Duration (minute)	Runoff Coefficient C	Rainfall Intensity (in/hr)	Drainage Area A (acres)	Inflow Rate (cfs) Q=CIA	Total Storm Vol (cf)	Intercept Capability (cfs/ft)	Required Trench Length $L_D = Q/C_S$ (ft)
5	0.95	7.572	0.16	1.16	347	0.12	9.6
10	0.95	6.208	0.16	0.95	569	0.12	7.9
15	0.95	5.286	0.16	0.81	726	0.12	6.7
20	0.95	4.617	0.16	0.70	846	0.12	5.9
25	0.95	4.109	0.16	0.63	941	0.12	5.2
30	0.95	3.709	0.16	0.57	1,019	0.12	4.7
35	0.95	3.384	0.16	0.52	1,085	0.12	4.3
40	0.95	3.116	0.16	0.48	1,142	0.12	4.0
45	0.95	2.890	0.16	0.44	1,191	0.12	3.7
50	0.95	2.697	0.16	0.41	1,235	0.12	3.4
55	0.95	2.530	0.16	0.39	1,275	0.12	3.2
60	0.95	2.384	0.16	0.36	1,310	0.12	3.0
90	0.95	1.785	0.16	0.27	1,472	0.12	2.3
120	0.95	1.439	0.16	0.22	1,582	0.12	1.8
180	0.95	1.051	0.16	0.16	1,732	0.12	1.3
240	0.95	0.836	0.16	0.13	1,837	0.12	1.1
300	0.95	0.698	0.16	0.11	1,918	0.12	0.9
360	0.95	0.601	0.16	0.09	1,983	0.12	0.8
420	0.95	0.530	0.16	0.08	2,039	0.12	0.7
480	0.95	0.475	0.16	0.07	2,087	0.12	0.6
540	0.95	0.431	0.16	0.07	2,130	0.12	0.5
600	0.95	0.395	0.16	0.06	2,169	0.12	0.5
720	0.95	0.339	0.16	0.05	2,236	0.12	0.4
1080	0.95	0.242	0.16	0.04	2,389	0.12	0.3
1440	0.95	0.190	0.16	0.03	2,502	0.12	0.2

Date:	December 13, 2013
Name of Project:	Hammond Pest Control
Address:	702 State Street, Hammond, IL
A/E of Record:	St. John - Mittelhauser & Associates, Inc.
Prepared by:	Mike Johnson, P.E.

Weighted C Value Calculation

		Proposed Area (sq. ft.)	C-Value 100-Year
Pervious Land	Lawns - Sandy soil, flat, 0% to 2%	0	0.18
	Lawns - Heavy soil, flat, 0% to 2%	0	0.30
Impervious Land	Pavement/Building Roof	7,000	0.95

Summary	Total pervious area (sq ft)	0
	Total impervious area (sq ft)	7,000
	Total site area (sq ft)	7,000
	Weighted C- value	0.95

Runoff Calculation

STORM EVENT (5,10,25,50 or 100) = **10**

Storm Duration (minute)	Runoff Coefficient C	Rainfall Intensity (in/hr)	Drainage Area A (acres)	Inflow Rate (cfs) Q=CIA	Total Storm Vol (cf)	Intercept Capability (cfs/ft)	Required Trench Length $L_D = Q/C_S$ (ft)
5	0.95	6.483	0.16	0.99	297	0.12	8.2
10	0.95	5.316	0.16	0.81	487	0.12	6.8
15	0.95	4.526	0.16	0.69	622	0.12	5.8
20	0.95	3.953	0.16	0.60	724	0.12	5.0
25	0.95	3.518	0.16	0.54	806	0.12	4.5
30	0.95	3.175	0.16	0.48	873	0.12	4.0
35	0.95	2.898	0.16	0.44	929	0.12	3.7
40	0.95	2.668	0.16	0.41	978	0.12	3.4
45	0.95	2.475	0.16	0.38	1,020	0.12	3.1
50	0.95	2.309	0.16	0.35	1,058	0.12	2.9
55	0.95	2.166	0.16	0.33	1,091	0.12	2.8
60	0.95	2.041	0.16	0.31	1,122	0.12	2.6
90	0.95	1.528	0.16	0.23	1,260	0.12	1.9
120	0.95	1.232	0.16	0.19	1,354	0.12	1.6
180	0.95	0.900	0.16	0.14	1,483	0.12	1.1
240	0.95	0.716	0.16	0.11	1,573	0.12	0.9
300	0.95	0.597	0.16	0.09	1,642	0.12	0.8
360	0.95	0.515	0.16	0.08	1,698	0.12	0.7
420	0.95	0.454	0.16	0.07	1,746	0.12	0.6
480	0.95	0.406	0.16	0.06	1,787	0.12	0.5
540	0.95	0.369	0.16	0.06	1,824	0.12	0.5
600	0.95	0.338	0.16	0.05	1,857	0.12	0.4
720	0.95	0.290	0.16	0.04	1,915	0.12	0.4
1080	0.95	0.207	0.16	0.03	2,046	0.12	0.3
1440	0.95	0.162	0.16	0.02	2,142	0.12	0.2

Date:	December 13, 2013
Name of Project:	Hammond Pest Control
Address:	702 State Street, Hammond, IL
A/E of Record:	St. John - Mittelhauser & Associates, Inc.
Prepared by:	Mike Johnson, P.E.

Weighted C Value Calculation

		Proposed Area (sq. ft.)	C-Value 100-Year
Pervious Land	Lawns - Sandy soil, flat, 0% to 2%	0	0.18
	Lawns - Heavy soil, flat, 0% to 2%	0	0.30
Impervious Land	Pavement/Building Roof	7,000	0.95

Summary	Total pervious area (sq ft)	0
	Total impervious area (sq ft)	7,000
	Total site area (sq ft)	7,000
	Weighted C- value	0.95

Runoff Calculation

STORM EVENT (5,10,25,50 or 100) = **5**

Storm Duration (minute)	Runoff Coefficient C	Rainfall Intensity (in/hr)	Drainage Area A (acres)	Inflow Rate (cfs) Q=CIA	Total Storm Vol (cf)	Intercept Capability (cfs/ft)	Required Trench Length $L_D = Q/C_S$ (ft)
5	0.95	5.899	0.16	0.90	270	0.12	7.5
10	0.95	4.751	0.16	0.73	435	0.12	6.0
15	0.95	4.010	0.16	0.61	551	0.12	5.1
20	0.95	3.485	0.16	0.53	638	0.12	4.4
25	0.95	3.091	0.16	0.47	708	0.12	3.9
30	0.95	2.782	0.16	0.42	764	0.12	3.5
35	0.95	2.533	0.16	0.39	812	0.12	3.2
40	0.95	2.328	0.16	0.36	853	0.12	3.0
45	0.95	2.156	0.16	0.33	888	0.12	2.7
50	0.95	2.008	0.16	0.31	920	0.12	2.6
55	0.95	1.881	0.16	0.29	948	0.12	2.4
60	0.95	1.770	0.16	0.27	973	0.12	2.3
90	0.95	1.316	0.16	0.20	1,085	0.12	1.7
120	0.95	1.055	0.16	0.16	1,159	0.12	1.3
180	0.95	0.762	0.16	0.12	1,257	0.12	1.0
240	0.95	0.601	0.16	0.09	1,321	0.12	0.8
300	0.95	0.498	0.16	0.08	1,369	0.12	0.6
360	0.95	0.427	0.16	0.07	1,408	0.12	0.5
420	0.95	0.374	0.16	0.06	1,439	0.12	0.5
480	0.95	0.333	0.16	0.05	1,466	0.12	0.4
540	0.95	0.301	0.16	0.05	1,490	0.12	0.4
600	0.95	0.275	0.16	0.04	1,510	0.12	0.3
720	0.95	0.234	0.16	0.04	1,546	0.12	0.3
1080	0.95	0.164	0.16	0.03	1,624	0.12	0.2
1440	0.95	0.127	0.16	0.02	1,679	0.12	0.2

ATTACHMENT C

STORMWATER MANAGEMENT SYSTEM INSPECTION AND MAINTENANCE LOG

ATTACHMENT C

INSPECTION AND MAINTENANCE LOG

Parking Lot – 702 State Street

Inspection Date/Time	Maintenance Performed or Needed[1]	Observations Made[2]	Inspector's Name

Notes:

[1] Maintenance activities may include, but are not limited to: sweeping, removing debris from Parking Lot, cleaning or flushing interceptor trench; removing sediment thickness in Stormceptor; cleaning oil/fluid from Parking Lot.

[2] Observations may include signs of fluids leaking from vehicles; physical condition of parking lot, interceptor trench and grate, and Stormceptor unit; evidence of overtopping or debris blockage; and maintenance required of each structure.

ATTACHMENT D

STORMCEPTOR® STC INSPECTION AND MAINTENANCE INFORMATION

Stormceptor® STC
Inspection and Maintenance Information

Stormceptor® Inspection and Maintenance

Regular inspection and maintenance is a proven, cost-effective way to maximize water resource protection for all stormwater pollution control practices, and are required to insure proper functioning of the Stormceptor System. Both inspection and maintenance of the Stormceptor system is easily performed from the surface. Stormceptor's patented technology has no moving parts, simplifying the inspection and maintenance process.

Please refer to the following information and guidelines before conducting inspection and maintenance activities.

When is inspection needed?

- Post-construction inspection is required prior to putting the Stormceptor System into service.
- Routine inspections are recommended during the first year of operation to accurately assess the sediment accumulation.
- Specifically for New Jersey installations, regulations require all BMPs to be inspected a minimum four times per year and after every storm with greater than one inch of rainfall.
- Inspection frequency in subsequent years is based on the maintenance plan developed in the first year.
- Inspections should also be performed immediately after an oil, fuel or other chemical spill.

When is maintenance cleaning needed?

- For optimum performance, the unit should be cleaned out once the sediment depth reaches 15% of the unit's total storage capacity (see Table 1). Generally, the minimum cleaning frequency is once annually, although the frequency can be based on historical inspection results.
- The unit should be cleaned out immediately after an oil, fuel or chemical spill.

Table 1

Sediment Maintenance Depth* and Oil Capacity		
STC Model	**Sediment Depth*** (inches)	**Oil Capacity** (gallons)
450i	8	86
900	8	251
1200	10	251
1800	15	251
2400	12	840

3600	17	840
4800	15	909
6000	18	909
7200	15	1059
11000	17	2797
13000	20	2797
16000	17	3055
* based on 15% of the lower chamber volume		

What conditions can compromise the Stormceptor System performance?

- If the system is not maintained regularly and fills with sediment and debris beyond the capacity indicated in Table 1, sediment removal efficiency may be reduced.
- If an oil spill(s) exceeds the oil capacity of the system, subsequent spills may not be captured.
- If debris clogs the inlet of the system, removal efficiency of sediment and hydrocarbons may be reduced.
- If a downstream blockage occurs, a backwater condition may occur in the system and removal efficiency of sediment and hydrocarbons may be reduced.

What training is required?

The Stormceptor System is inspected and maintained by professional vacuum cleaning service providers with experience in the maintenance of underground tanks, sewers and catch basins. For typical inspection and maintenance activities, no specific supplemental training is required for the Stormceptor System. Information provided in this document or the Stormceptor Operation and Maintenance Manual (provided to the system owner) contains sufficient guidance to maintain the system properly.

In unusual circumstances, such as if a damaged component needs replacement or some other condition requires manned entry into the vessel, confined space entry procedures must be followed. Only professional maintenance service providers trained in these procedures should enter the vessel. Service provider companies typically have personnel who are trained and certified in confined space entry procedures according to local, state, and federal standards.

What equipment is typically required for inspection?

- Manhole access cover lifting tool
- Oil dipstick
- Sediment probe
- Flashlight
- Camera
- Data log
- Safety cones and caution tape
- Hard hat, safety shoes, safety glasses, and chemical-resistant gloves

How is the Stormceptor System inspected?

- The Stormceptor System can be inspected through a standard surface manhole

access cover.

- Sediment and oil depth inspections are performed with a sediment probe and oil dipstick. Oil depth is measured through the oil inspection port. Sediment depth can be measured through the oil inspection port or exit riser pipe.
- Inspections also involve a visual inspection of the internal components of the system.

What equipment is typically required for maintenance?

- Vacuum truck equipped with water hose and jet nozzle
- Small pump and tubing for oil removal
- Manhole access cover lifting tool
- Oil dipstick
- Sediment probe
- Flashlight
- Camera
- Data log
- Safety cones and caution tape
- Hard hats, safety shoes, safety glasses, chemical-resistant gloves, and hearing protection for service providers
- Gas analyzer, respiratory gear, and safety harness for specially trained personnel if confined space entry is required

How is the Stormceptor System maintained?

- The Stormceptor System can be maintained through a standard surface manhole access cover.
- Insert the oil dipstick into the oil inspection port. If oil is present, pump off the oil layer into separate containment using a small pump and tubing.
- Maintenance cleaning of accumulated sediment is performed with a vacuum truck.
- For 6-ft diameter models and larger, the vacuum hose is inserted into the lower chamber via the 24-inch outlet riser pipe.
- For 4-ft diameter model, the removable drop tee is lifted out, and the vacuum hose is inserted into the lower chamber via the 12-inch drop tee hole.
- Using the vacuum hose, decant the water from the lower chamber to the sanitary sewer, if permitted by the local regulating authority, or into a separate containment tank.
- Remove the sludge from the bottom of the unit using the vacuum hose.
- Re-fill the lower chamber with water where required by the local jurisdiction.
- Units that have not been maintained regularly, have surpassed the maximum recommended sediment capacity, or contain damaged components may require manned entry by trained personnel using proper confined space entry procedures.

.

What is required for proper disposal?

- Disposal requirements for recovered pollutants may vary depending on local guidelines. In most areas the sediment, once dewatered, can be disposed of in a sanitary landfill. It is not anticipated that the sediment would be classified as hazardous waste.

What about oil spills?

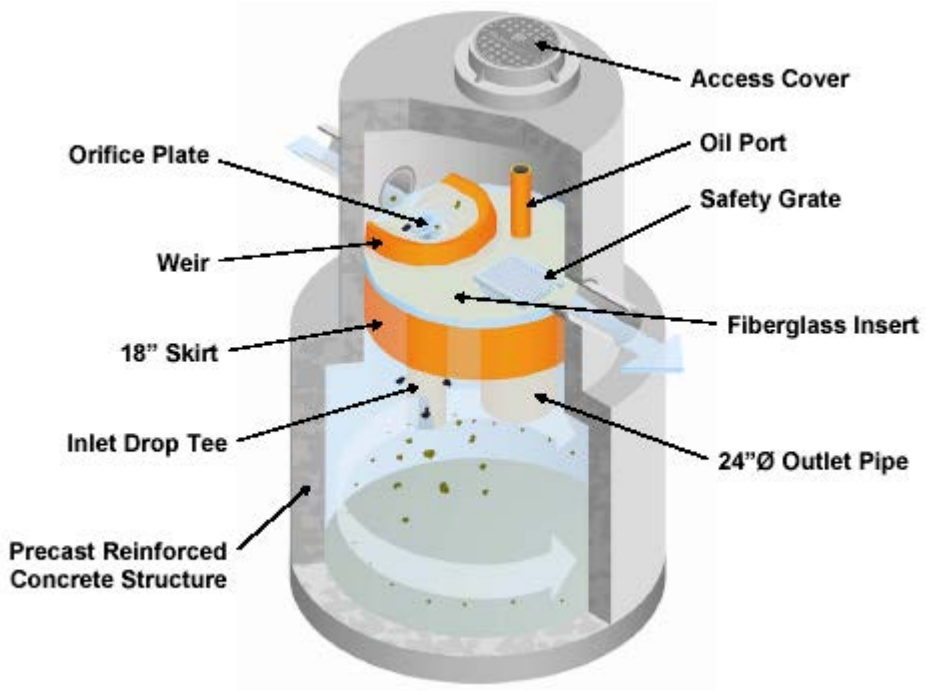
- Petroleum-based pollutants captured by the Stormceptor system (oil/chemical/fuel spills) should be removed and disposed of by a licensed waste management company.
- Although Stormceptor captures virtually all free oil, a sheen at the outlet **does not** mean the unit isn't working. A rainbow or sheen can be visible at oil concentrations of less than 10 mg/L (ppm).

What factors affect the costs involved with inspection/maintenance?

- Inspection and maintenance costs are based on unit size, sediment/oil/hazardous material loads, transportation distances, tipping fees, disposal requirements and other local regulations.

System schematic and component functions

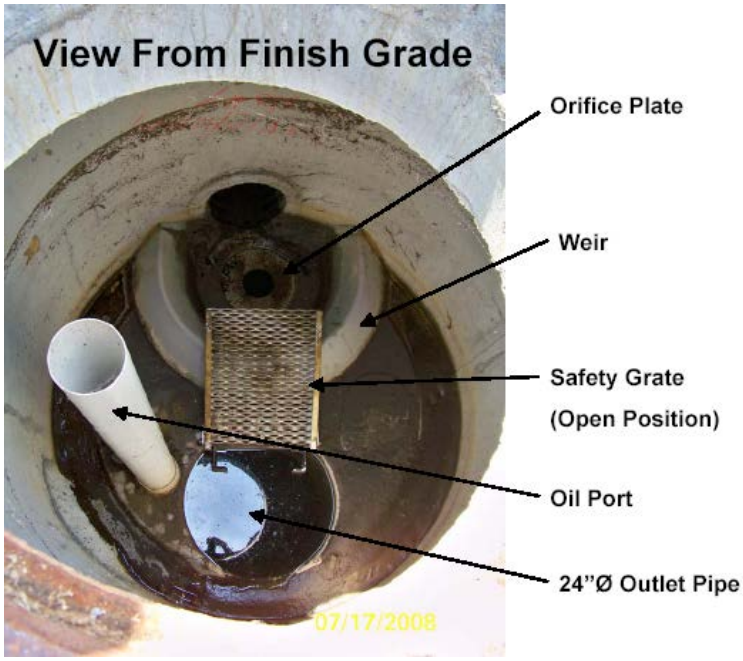
Below is a schematic of the Stormceptor System with key components identified and their functions briefly described.



- **Manhole access cover** – provides access to the subsurface components
- **Precast reinforced concrete structure** – provides the vessel's watertight structural support
- **Fiberglass insert** – separates vessel into upper and lower chambers
- **Weir** – directs incoming stormwater and oil spills into the lower treatment chamber
- **Orifice plate** – controls water flow rate into the lower treatment chamber and prevents scour of accumulated pollutants
- **Inlet drop tee** – conveys stormwater into the lower treatment chamber and splits flow into two opposite tangential streams
- **Fiberglass skirt** – provides double-wall containment of hydrocarbons
- **Outlet riser pipe** – conveys treated water to the upper chamber; primary vactor access port for sediment removal

- **Oil inspection port** – primary access for measuring oil depth and oil removal
- **Safety grate** – safety measure to cover riser pipe in the event of manned entry into vessel

The Stormceptor System has no moving parts to wear out and therefore maintenance activities are generally focused on pollutant removal.



The depth of sediment can be measured from the surface by using a sediment probe or dipstick tube equipped with a ball check valve and inserted through the 24-inch outlet riser pipe. Oil level can similarly be checked through the oil inspection port.

A maintenance worker stationed on the surface uses a vacuum hose to evacuate water, sediment, and debris from the system.

Purchasing replacement parts

Since there are no moving parts in the Stormceptor System, broken, damaged, or worn parts are not typically encountered. However, if replacements parts are necessary, they may be obtained by contacting the following supplier of authentic Stormceptor components.

In New Jersey, contact:

Camtek Construction Products Corp.
3481 Treeline Drive
Murrysville, PA 15668
Phone: (724) 327-3400

The benefits of regular inspection and maintenance are many – from ensuring maximum operation efficiency, to keeping maintenance costs low, to the continued protection of natural waterways – and provide the key to Stormceptor's long and effective service life.

Appendix C

WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: _____ Date(s) of Inspection: _____

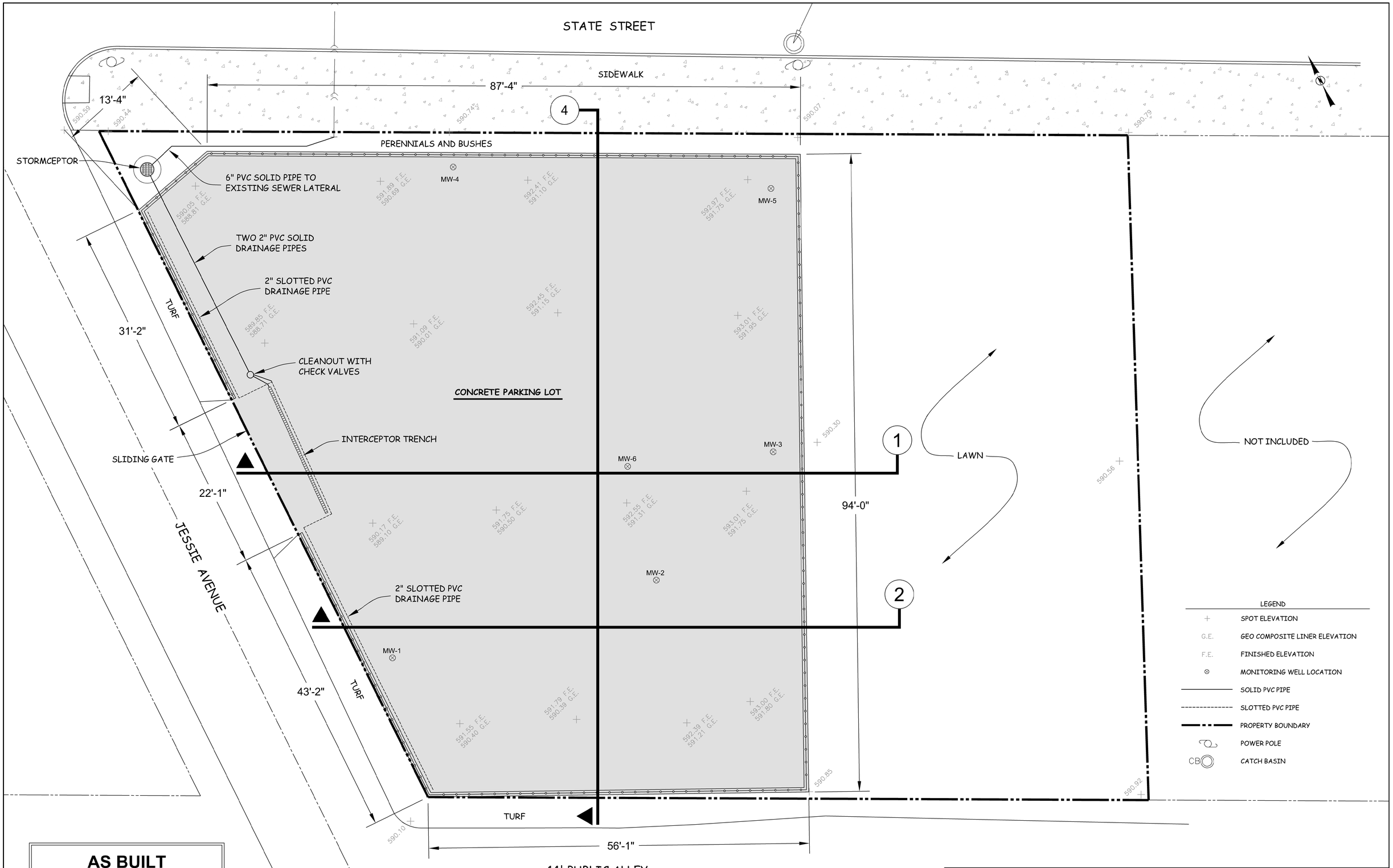
Project No.: _____ Field Personnel: _____

WELL INTEGRITY INFORMATION

Well ID	Static Levels		Well Casing		Security		Flush Mount				Concrete Surface				Grade/Slope			Additional Comment(s) Below
	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Intact	Cracked	Well Secured/Locked	Well Cap Present	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Gap Around Well	Away From Well	Facilitates Access	Standing Water	
MW-1																		
MW-2																		
MW-3																		
MW-4																		
MW-5																		
MW-6																		
MW-7R																		

ADDITIONAL COMMENTS: _____

Appendix D



AS BUILT

CHECKED BY:	MAJ
DRAWN BY:	OS
DATE:	10-23-15
SCALE:	AS SHOWN
CAD NO.:	00184.02P6
PROJECT NO.:	19-00184

SM&A
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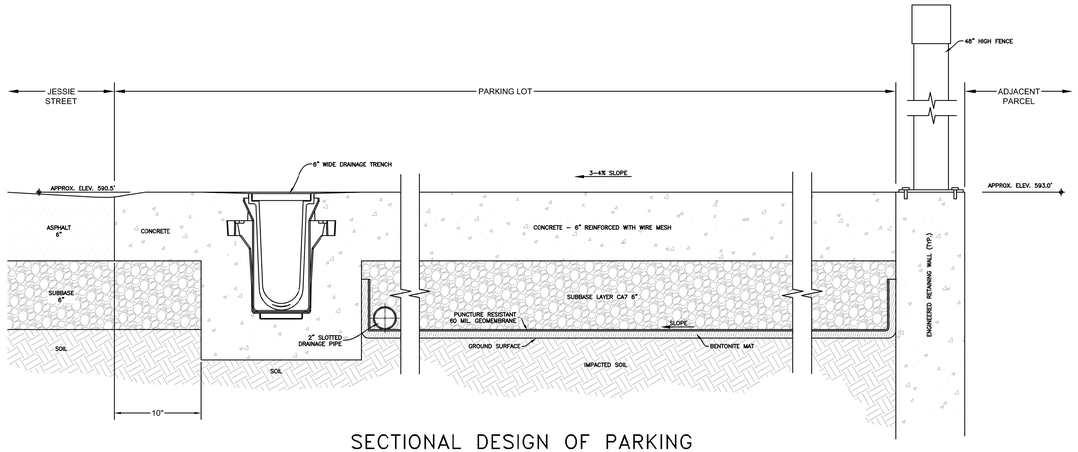
AS BUILT PLAN VIEW

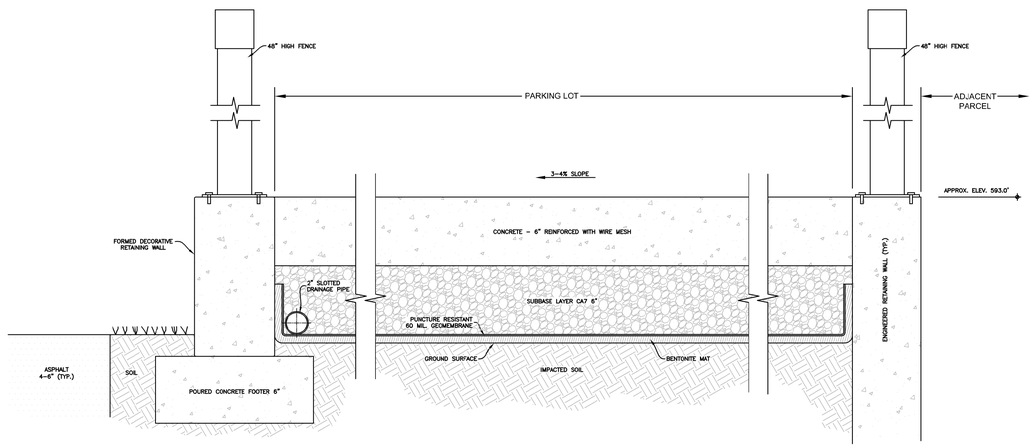
HAMMOND PEST CONTROL
HAMMOND, INDIANA

FIGURE
D-1



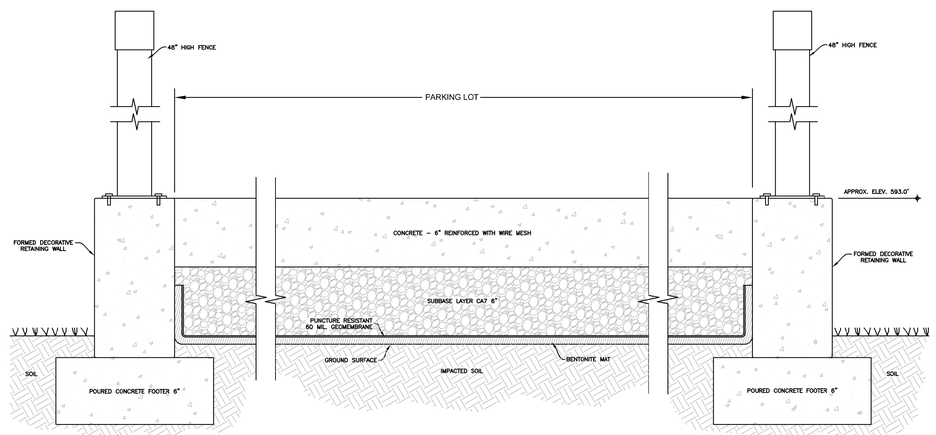
1 SECTIONAL DESIGN OF PARKING LOT ENGINEERED BARRIER

NOT TO SCALE



2 SECTIONAL DESIGN OF PARKING LOT ENGINEERED BARRIER

NOT TO SCALE



4 SECTIONAL DESIGN OF PARKING LOT ENGINEERED BARRIER

NOT TO SCALE

AS BUILT

CHECKED BY:	MJ
DRAWN BY:	OS
DATE:	10–23–15
SCALE:	AS SHOWN
CAD NO.:	00184.02P6
PROJECT NO.:	19–00184

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DETAILS AND SPECIFICATIONS

HAMMOND PEST CONTROL
HAMMOND, INDIANA

FIGURE

D–2

Appendix E

Groundwater
Sampling and Analysis Plan

Hammond Pest Control
664 State Street
Hammond, Indiana

May 11, 2020
SMA Project No. 19-00184.00-200

Prepared For:

Hammond Pest Control
71 Warrick Road
Winnetka, Illinois 60093

Prepared By:

St. John – Mittelhauser & Associates, Inc.,
A Terracon Company
1401 Branding Avenue, Suite 315
Downers Grove, Illinois 60515

CONTENTS

Section **Page**

1.0 INTRODUCTION 1

2.0 POST-CLOSURE MONITORING 1
2.1 ANALYTICAL PARAMETERS AND METHODS 1
2.2 PROPOSED GROUNDWATER MONITORING SCHEDULE 2
2.3 MEASURING THE STATIC WATER LEVER ELEVATION 2
2.4 MONITORING WELL INSPECTION 2
2.5 GROUNDWATER SAMPLING PROCEDURES 3
2.6 FIELD LOGBOOK 4

3.0 SAMPLE PRESERVATION AND HANDLING 5
3.1 SAMPLE CONTAINERS, PRESERVATION AND HOLDING TIMES 5
3.2 PACKAGING, SHIPPING AND HANDLING PROCEDURES 5

4.0 CHAIN OF CUSTODY CONTROL 6
4.1 SAMPLE LABELS 6
4.2 SAMPLE NUMBER FORMAT 6
4.3 CHAIN OF CUSTODY RECORD 6

5.0 FIELD AND LABORATORY QUALITY ASSURANCE / QUALITY CONTROL 8
5.1 FIELD QA/QC PROCEDURES 8
5.1.1 Calibration of Field Equipment 8
5.1.2 Decontamination of Field Sampling Equipment 8
5.2 LABORATORY QA/QC PROCEDURES 9
5.2.1 Equipment Blanks 9
5.2.2 Duplicate Samples 10
5.2.3 Matrix Spike / Matrix Spike Duplicate Samples 10
5.2.4 QA/QC Sample Number Format 10

6.0 SCHEDULE 11

Appendices

A Well Integrity Survey Form

B Field Data Sheet

1.0 INTRODUCTION

This Groundwater Sampling and Analysis Plan (GWSAP) was developed for the Hammond Pest Control site (HPC) to describe the methods and procedures for the collection and analysis of groundwater samples during the post-closure monitoring period. The GWSAP is included as Appendix E in the RCRA Hazardous Waste Post-Closure Permit Renewal Application (Post-Closure Permit Renewal Application) and has been prepared and submitted consistent with the provisions of the RCRA Chapter of the RISC User Guide published February 15, 2001 (IDEM, 2001), the IDEM Remediation Closure Guide (RCG) published March 22, 2012 (IDEM, 2012) and additional applicable statutes and rules.

2.0 POST-CLOSURE MONITORING

2.1 ANALYTICAL PARAMETERS AND METHODS

Groundwater samples will be collected from monitoring wells MW-2, MW-3, MW-6, and MW-7R on a quarterly basis. On a quarterly and annual basis, samples from MW-2 and MW-3 will be analyzed for dissolved arsenic, heptachlor epoxide, and pentachlorophenol (PCP) during the post-closure permit monitoring period. On a quarterly basis, the samples from MW-6 and MW-7R will be analyzed for dissolved arsenic. On an annual basis the samples from MW-6 and MW-7R will also be analyzed for heptachlor epoxide. Measurement of field stabilization parameters will be conducted as discussed in Section 2.5.

Groundwater samples will be analyzed using methodologies provided in Table D-2 of the Post-Closure Permit Renewal Application. The groundwater sampling parameters and sampling schedule is provided in Table D-5 of the Post-Closure Permit Renewal Application. The laboratory reporting limits for the parameters will meet or be less than the values listed in Table D-6 of the Post-Closure Permit Renewal Application, excluding matrix interferences/dilution requirements. The reporting limits may be modified periodically based on laboratory MDL/PQL studies.

2.2 PROPOSED GROUNDWATER MONITORING SCHEDULE

Monitoring wells MW-2, MW-3, MW-6, and MW-7R will be sampled on a quarterly basis during the post-closure permit groundwater monitoring period. This quarterly groundwater sampling data will provide the basis for plume stability statistical evaluation as described in the Post-Closure Permit Renewal Application.

SMA will prepare quarterly groundwater monitoring reports for submission to IDEM. The content of these reports is described in the Post-Closure Permit Renewal Application.

2.3 MEASURING THE STATIC WATER LEVEL ELEVATION

Well gauging will be performed and recorded prior to the start of sampling activities. Gauging will include depth to water and total well depth (once a year). Measurements will be obtained using an electric sounding meter that has a weighted probe. The measurements in each well will be taken from a permanent marking that identifies a referenced survey point on the top of the casing (i.e., surveyor's notch) or the north side of the casing. The measurements will be recorded in the logbook and/or appropriate field form to the nearest 0.01-foot.

2.4 MONITORING WELL INSPECTION

Monitoring wells will be inspected during each sampling event, and a formal well integrity survey will be performed during a late spring/early summer sampling event and documented on the Well Integrity Survey Form (Appendix A). This time frame is considered to be the most appropriate as it will allow an evaluation after winter conditions have ended. This schedule does not preclude the ability to conduct more frequent inspections or the responsibility to address maintenance issues on as needed basis.

The Well Integrity Survey Form will be reviewed by the field manager or his designee to identify wells with potential maintenance concerns. Appropriate well maintenance will be conducted as needed based on this review.

2.5 GROUNDWATER SAMPLING PROCEDURES

Groundwater samples at the HPC site will be collected using modified low flow sampling procedures (i.e. a peristaltic pump and in-line flow through cell water quality meter). Upon arrival at each well, a depth to water and total depth (annually) will be collected and recorded in the field logbook. New tubing will be lowered into the well and connected to the peristaltic pump. The well will be purged at a constant flow rate (100-500 mL/min) and drawdown will be monitored so that it does not exceed 0.3 feet. During purging, the groundwater will be monitored for pH, conductivity, dissolved oxygen, ORP, temperature, and turbidity using an In-situ Troll 9500 water quality meter (or equivalent meter). Prior to use, the water quality meter will be calibrated according to the manufacturer's instructions and the calibration results will be recorded in the logbook.

Water quality readings will be collected after purging each tubing plus flow cell volume (or use a specific time duration). Purging will continue until the water quality parameters have stabilized over three consecutive readings. The stabilization criteria are provided in the table below. Monitoring of field parameters will be saved to a field PDA and recorded in the logbook.

Parameter	Stabilization Goal
pH	± 0.1 unit
Conductivity	± 3% µS/cm
Oxidation Reduction Potential (ORP)	± 10 millivolts
Dissolved Oxygen[1]	NA
Turbidity	±10% NTUs, or ≤10 NTU for 3 readings)
Temperature	± 0.5º Celsius

1 Dissolved oxygen values will be recorded. However, because a peristaltic pump is being used for sampling, dissolved oxygen will not be used as a stabilization goal for sampling.

Once the water quality parameters have stabilized, the groundwater samples will be collected directly from the tubing after disconnecting the flow through cell. Samples will be collected by directly filling the laboratory containers for all parameters, except for the dissolved arsenic where a Geotech™ high capacity 0.45 micron single-use disposable filter will be connected to the tubing prior to filling the sample bottles. Field quality assurance/quality control (QA/QC)

samples will be collected as discussed in Section 5.2. A list of parameters, containers, and preservatives used for groundwater sampling is provided in Table D-2 in the Post-Closure Permit Renewal Application.

Upon completion of sampling, the bottles will be labeled and placed in a cooler with ice pending laboratory analysis. Proper chain of custody procedures will be followed as discussed in Section 4.3.

2.6 FIELD LOGBOOK

A hardbound field logbook with numbered pages will be maintained to record field activities, procedures, measurements, and observations. The purpose of the logbook is to provide a record with sufficient information so that the sampling event can be reconstructed without consulting the sampling personnel.

A standard format for entries into the logbook is necessary so that all required information is recorded. Documentation of sample acquisition data may also be completed on specified field data sheets (see Appendix B). All entries will be made with an ink pen.

Entries in the logbook and/or field data sheets regarding sample acquisition will include the following, as appropriate:

- Well identification
- Sample location and depth
- Static water depth (if pertinent)
- Total well depth (if collected)
- Sample acquisition procedure/equipment
- Sample identification
- Date and time of sample collection
- Type and number of sample containers used
- Preservatives used, if required
- Parameters requested for analysis
- Field measurements (e.g., pH, temperature, etc.)
- Sample transporter and laboratory name (field manager or their designee only)
- Field observations
- Name(s) and signature(s) of collector(s).

3.0 SAMPLE PRESERVATION AND HANDLING

3.1 SAMPLE CONTAINERS, PRESERVATION AND HOLDING TIMES

Appropriate sample containers will be provided by the laboratory conducting the analysis. Information for the sample analysis, including analytical methods, sample bottles, preservatives, and holding times is provided in Table D-2 of Post-Closure Permit Renewal Application. Samples submitted for analysis will be shipped at the end of each sampling event.

3.2 PACKAGING, SHIPPING AND HANDLING PROCEDURES

Special attention and care will be maintained during sample packaging to ensure the integrity of the groundwater samples. Prior to packaging for transport to the laboratory, the exteriors of the sealed bottles containing groundwater samples will be cleaned, as necessary, with a paper towel moistened with water and dried, if necessary, with a paper towel. The sample bottles will also be sealed in plastic bags of sufficient size to prevent possible leakage.

Samples requiring thermal-control will be placed in an insulated container and packed with ice to keep the samples cold. Ice will be placed into the coolers surrounding the samples. If the coolers will be shipped, the sample bottles will be wrapped with bubble-wrap to prevent breakage of the sample bottles.

The contracted analytical laboratory may have a courier pick up the samples or samples may be directly transported to the laboratory. A commercial carrier may also be scheduled to transport the samples to the laboratory. A chain of custody (COC) record will accompany each shipping container (see Section 4.3).

All required shipping information will be provided on the COC record. If the samples are shipped, the shipping container will be clearly labeled with the name and address of the person or company responsible for the samples and the address of the laboratory.

4.0 CHAIN OF CUSTODY CONTROL

The sampling personnel and analytical laboratory will maintain a strict COC for the groundwater samples. The COC will provide a basis for tracking the possession and handling of each sample from the time of collection to analysis by the laboratory. The components of the COC are discussed in the following sections.

4.1 SAMPLE LABELS

Pertinent sample information will be recorded on self-adhering sample labels. The sample labels will be adhered to the sample container(s) and will include the following information printed with an ink pen (as space permits):

- Sample ID
- Date and time of collection
- Identification of sampler
- Preservatives, if any

4.2 SAMPLE NUMBER FORMAT

Each sample will be given a unique sample identification to facilitate tracking and cross-referencing sample information. The sample identification format is as follows:

SAMPLE NOMENCLATURE		
Water	Well ID / MMDDYY	Example: MW-4 / 072515

4.3 CHAIN OF CUSTODY RECORD

The field manager, or their designee, may complete the COC record on behalf of individual samplers without requiring the identification of all individuals on the COC record. The field logbook documentation can be used to establish the identity of the collector(s) of any specific sample(s), as/if needed. A courier or commercial carrier used to transport samples to the laboratory will not be included on COC record as the COC form will be sealed inside the cooler during transport.

The COC Record will include the following minimum information:

- Project name
- Sample identification (ID)
- Number of sample containers
- Sample Matrix
- Date and time of collection
- Signature of persons in the chain of possession (excluding commercial carriers)
- Inclusive dates and time upon each transfer of possession
- Analytical parameters
- Annotation as to whether the sample has been filtered

The above information is to appear on the COC record and a COC record will accompany each shipping container. A two- or three-part carbonless COC record (form) will be used with the client copy of the form maintained by the sampling team. One original and one copy of the COC record will then accompany the sample shipment to the laboratory and will be signed by the receiving laboratory's sample custodian, who will retain the copy.

If the samples are sent by common carrier, an appropriate shipping form will be used, and copies of the form will be retained as permanent documentation. Commercial carriers are not required to sign the COC form as long as the form is sealed inside the sample cooler and the tape remains intact.

5.0 FIELD AND LABORATORY QUALITY ASSURANCE/QUALITY CONTROL

QA/QC procedures will be implemented as part of this GWSAP, as follows.

5.1 FIELD QA/QC PROCEDURES

5.1.1 Calibration of Field Equipment

To ensure that field measurements are accurate, all field measurement devices that require calibration will be calibrated at the start of each sampling day, prior to use, in accordance with the applicable instructions. Field equipment may also be calibrated at any other time during use, when the sampling team deems it necessary. QC procedures for field measurements will be limited to calibrating the instruments.

5.1.2 Decontamination of Field Sampling Equipment

The only downhole sampling equipment consists of tubing for the peristaltic pump. New tubing will be used for each monitoring well and the used tubing will be disposed of. Non-dedicated down-well equipment, such as water level measuring devices, will be decontaminated between each usage by a detergent wash, tap water rinse, multiple distilled water rinses and air-drying or with paper towels. Proper decontamination will prevent cross-contamination between well locations.