New York State Department of Environmental Conservation
Division of Water
Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233-3505
Phone: (518) 402-8111 • FAX**:** (518) 402-9029
Website: www.dec.ny.gov

MEMORANDUM

TO: Robert Schick, Director, Division of Environmental Remediation

FROM: Mark Klotz, Director, Division of Water /s/

RE: Generic Effluent Criteria for Groundwater Discharges

Date: August 28, 2103

This memo is to transmit a general authorization for short term, batch groundwater discharges of water generated at remediation sites under the Division of Environmental Remediation's programs. These waters may be generated during sampling, pump tests, well development, and dewatering of excavations. The attached generic groundwater effluent criteria and general conditions were developed by DOW staff to reduce delays in implementing these short term groundwater discharges and to save staff time for both Divisions. Please have your staff pay particular attention to the footnotes listed at the end of the document.

The attached criteria are subject to the following conditions:

1. The attached criteria do not contain discharge limitations for radioactive discharges. Limitations on discharges of radiation or radioactive isotopes are addressed under Part 380 Radiation Control Permits.

2. Alternate frequencies, discharges limitations (where appropriate) or inclusion of parameters not identified in the attachments will be considered; however, a complete review by DOW staff will be required.

3. The attached parameter list is extensive and DOW's intent is for monitoring to be conducted only for those parameters which are known or suspected to be present at the site. Monitoring of parameters not present is not required by these criteria.

Additionally, for excavation dewatering:

1. Prior to beginning work, DER will review and approve the methods plan and equipment list of the proposed water treatment and handling system(s). The approved method plan will include provisions that fully comply with the conditions in this memo. This approval will be limited in duration to the term specified in the construction contract.

2. Approval for each batch discharges from temporary storage tanks (21,000 gallon tanks, approximately) will be granted based upon review and approval of sampling results by the Department and Engineer demonstrating that the treatment achieved compliance with the specified discharge criteria developed for site specific contaminants of concern. Representative samples shall be collected after approved water treatment has been completed and before it enters the temporary storage tank at a frequency of 1 sample per 7000 gallons treated. If any sample fails to meet the discharge criteria, it shall be assumed that the entire storage volume does not meet the discharge criteria. In such cases, the water will require re-treatment and re-sampling as specified above, demonstrating compliance before discharge will be allowed. Discharge rate limitations and infiltration design may be required to protect against erosion and prevent overland flow.

Division of Environmental Remediation (DER) will be responsible for ensuring compliance with the attached effluent criteria and approval of all engineering submissions. **Footnote 9** requires identification of the DER contact person who will receive all effluent results, engineering submissions and modification requests. The Regional Water Engineer should be kept appraised of the status of this discharge and sent copy of the effluent results for informational purposes.

Long term groundwater and both short and long term surface water discharges are not addressed in the attached criteria. A complete review of these proposed discharge scenarios will require full DOW review. All such requests should be directed to the Director of the Bureau of Water Permits in DOW.

If you have any questions, please call Brian Baker at 402-8124 or Shayne Mitchell at 402-8125.

Attachments

c: Regional Water Engineers
Koon Tang, DOW

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning: with the start of each discharge event

and lasting until: 7 days from the start of the discharge.

The discharges from the treatment facility to **Groundwater** shall be limited and monitored by the operator as specified below:

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	**CAS No.**	**Limitations Daily Max.**	**Units**	**Minimum Monitoring Requirements**		**FN**
				Measurement Frequency	**Sample Type**	
Flow	NA	Monitor	GPD	Continuous	Recorder	
pH (range)	NA	6.5 – 8.5	SU		Grab	
Oil and Grease	NA	15	mg/l	1	Grab	
Solids, Total Dissolved *applies only in the counties of Nassau and Suffolk	NA	1000*	mg/l	1	Grab	
Nitrogen, Total (as N) *applies only in the counties of Nassau and Suffolk	NA	10*	mg/l	1	Grab	
Foaming agents (as MBAS)	NA	1	mg/l	1	Grab	
Acenaphthene	83-32-9	20	µg/l	1	Grab	
Acetaldehyde	75-07-0	8	µg/l	1	Grab	
Acetone	67-64-1	50	µg/l	1	Grab	2
Acrolein	107-02-8	5	µg/l	1	Grab	
Acrylamide	79-06-1	5	µg/l	1	Grab	
Acrylic acid	79-10-7	50	µg/l	1	Grab	
Acrylonitrile	107-13-1	5	µg/l	1	Grab	
Alachlor	15972-60-8	0.5	µg/l	1	Grab	
Aldicarb *Refer to entry for “Aldicarb and Methomyl.”	116-06-3	0.35*	µg/l	1	Grab	2
Aldicarb sulfone	1646-88-4	2	µg/l	1	Grab	
Aldicarb sulfoxide	1646-87-3	4	µg/l	1	Grab	
Aldrin	309-00-2	ND	µg/l	1	Grab	3
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	50	µg/l	1	Grab	
Alkyl diphenyl oxide sulfonates	NA	50	µg/l	1	Grab	
Allyl chloride	107-05-1	5	µg/l	1	Grab	
Aluminum	NA	2,000	µg/l	1	Grab	
Ametryn	834-12-8	50	µg/l	1	Grab	
4-Aminobiphenyl	92-67-1	5	µg/l	1	Grab	
Aminocresols *see Phenolic compounds – total phenols	95-84-1	*	µg/l	1	Grab	
Aminomethylene phosphonic acids salts *applies to each aminothylene phosphonic acid sals individually	NA	50*	µg/l	1	Grab	
Aminopyridines *Applies to the sum of these substances	462-08-8	1*	µg/l	1	Grab	
3-Aminotoluene	108-44-1	5	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
4-Aminotoluene	106-49-0	5	µg/l	1	Grab	
Aniline	62-53-3	5	µg/l	1	Grab	2
Anthracene	120-12-7	50	µg/l	1	Grab	
Antimony	NA	6	µg/l	1	Grab	
Arsenic	NA	50	µg/l	1	Grab	
Aryltiazoles *applies to each aryltiazole individually	NA	50*	µg/l	1	Grab	
Asbestos	NA	14,000,000	fibers/L	1	Grab	
Atrazine	1912-24-9	7.5	µg/l	1	Grab	
Azinphosmethyl	86-50-0	4.4	µg/l	1	Grab	
Azobenzene	103-33-3	5	µg/l	1	Grab	
Barium	NA	2,000	µg/l	1	Grab	
Benefin	1861-40-1	35	µg/l	1	Grab	
Benz(a)anthracene	56-55-3	0.002	µg/l	1	Grab	2
Benzene	71-43-2	1	µg/l	1	Grab	
Benzidine	92-87-5	5	µg/l	1	Grab	
Benzisothiazole	271-61-4	50	µg/l	1	Grab	
Benzo(b)flouranthene	205-99-2	0.002	µg/l	1	Grab	2
Benzo(k)fluoranthene	207-08-9	0.002	µg/l	1	Grab	2
Benzo(a)pyrene	50-32-8	ND	µg/l	1	Grab	3
Beryllium	NA	3	µg/l	1	Grab	
1-1'-Biphenyl	92-52-4	5	µg/l	1	Grab	
Bis(2-chloroethoxy)methane	111-91-1	5	µg/l	1	Grab	
Bis(2-chloroethyl)ether	111-44-4	1.0	µg/l	1	Grab	
Bis(chloromethyl)ether	542-88-1	5	µg/l	1	Grab	
Bis(2-chloro-1-methylethyl)ether	108-60-1	5	µg/l	1	Grab	
Bis(2-ethylhexl)phthalate	117-81-7	5	µg/l	1	Grab	
Boric acid, Borates & Metaborates *applies as boron equivalents to the sum of these substances.	NA	125*	µg/l	1	Grab	
Boron	NA	2,000	µg/l	1	Grab	
Bromacil	314-40-9	4.4	µg/l	1	Grab	2
Bromide	NA	2,000	µg/l	1	Grab	
Bromobenzene	108-86-1	5	µg/l	1	Grab	
Bromochloromethane	74-97-5	5	µg/l	1	Grab	
Bromodichloromethane	75-27-4	50	µg/l	1	Grab	
Bromoform	75-25-2	50	µg/l	1	Grab	
Bromomethane	74-83-9	5	µg/l	1	Grab	
Butachlor	23184-66-9	3.5	µg/l	1	Grab	
n-Butanol	71-36-3	50	µg/l	1	Grab	
cis-2-Butenal	15798-64-8	5	µg/l	1	Grab	
trans-2-Butenal	123-73-9	5	µg/l	1	Grab	
cis-2-Butenenitrile	1190-76-7	5	µg/l	1	Grab	
trans-2-Butenenitrile	627-26-9	5	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Butoxyethoxyethanol	112-34-5	50	µg/l	1	Grab	
Butoxypropanol	5131-66-8	50	µg/l	1	Grab	
Butylate	2008-41-5	50	µg/l	1	Grab	
n-Butylbenzene	104-51-8	5	µg/l	1	Grab	
sec-Butylbenzene	135-98-8	5	µg/l	1	Grab	
Tert-Butylbenzene	98-06-6	5	µg/l	1	Grab	
Butyl benzyl phthalate	85-68-7	50	µg/l	1	Grab	
Butyl isopropyl phthalate	NA	50	µg/l	1	Grab	
Carbon disulfide	75-15-0	60	µg/l	1	Grab	
Cadmium	NA	10	µg/l	1	Grab	
Captan	133-06-2	18	µg/l	1	Grab	
Carbaryl	63-25-2	29	µg/l	1	Grab	
Carbofuran	1563-66-2	15	µg/l	1	Grab	
Carbon tetrachloride	56-23-5	5	µg/l	1	Grab	
Carboxin	5234-68-4	50	µg/l	1	Grab	
Chloramben *includes realted forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.	NA	50*	µg/l	1	Grab	
Chloranil	118-75-2	5	µg/l	1	Grab	
Chlordane	57-74-9	0.05	µg/l	1	Grab	
Chloride	NA	500,000	µg/l	1	Grab	
Chlorinated dibenzo-p-dioxins and Chlorinated dibenzofurans	NA	$7x10^{-7}$	µg/l	1	Grab	
2-Chloroaniline	95-51-2	5	µg/l	1	Grab	
3- Chloroaniline	108-42-9	5	µg/l	1	Grab	
4- Chloroaniline	106-7-8	5	µg/l	1	Grab	
Chlorobenzene	108-90-7	5	µg/l	1	Grab	
4-Chlorobenzotrifluoride	98-56-6	5	µg/l	1	Grab	
1-Chlorobutane	109-69-3	5	µg/l	1	Grab	
Chloroethane	75-00-3	5	µg/l	1	Grab	
Chloroform	67-66-3	7	µg/l	1	Grab	
Chloromethyl methyl ether	107-30-2	5	µg/l	1	Grab	
2-Chloronaphthalene	91-58-7	10	µg/l	1	Grab	
2-Chloronitrobenzene	88-73-3	5	µg/l	1	Grab	
3-Chloronitrobenzene	121-73-3	5	µg/l	1	Grab	
4-Chloronitrobenzene	100-00-5	5	µg/l	1	Grab	
Chloroprene	126-99-8	5	µg/l	1	Grab	
Chlorothalonil	1897-45-6	5	µg/l	1	Grab	
2-Chlorotoluene	95-49-8	5	µg/l	1	Grab	
3-Chlorotoluene	108-41-8	5	µg/l	1	Grab	
4-Chlorotoluene	106-43-4	5	µg/l	1	Grab	
4-Chloro-o-toluidine	95-69-2	5	µg/l	1	Grab	
5-Chloro-o-toluidine	95-79-4	5	µg/l	1	Grab	
3-Chloro-1,1,1-trifuoropropane	460-35-5	5	µg/l	1	Grab	
Chromium	NA	100	µg/l	1	Grab	
Chromium (hexavalent)	NA	100	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Chrysene	218-01-9	0.002	µg/l	1	Grab	2
Copper	NA	1000	µg/l	1	Grab	
Cyanide	NA	400	µg/l	1	Grab	
Cyanogen bromide	506-68-3	5	µg/l	1	Grab	
Cyanogen chloride	506-77-4	5	µg/l	1	Grab	
Dalapon *Includes related forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.	NA	50*	µg/l	1	Grab	
p,p'-DDD	72-54-8	0.3	µg/l	1	Grab	
p,p'-DDE	72-55-9	0.2	µg/l	1	Grab	
p,p'-DDT	50-29-3	0.2	µg/l	1	Grab	
Dechlorane Plus	13560-89-9	5	µg/l	1	Grab	
Diazinon	333-41-5	0.7	µg/l	1	Grab	
1,2-Dibromobenzene	583-53-9	5	µg/l	1	Grab	
1,3-Dibromobenzene	108-36-1	5	µg/l	1	Grab	
1,4-Dibromobenzene	106-37-6	5	µg/l	1	Grab	
Dibromochloromethane	124-48-1	50	µg/l	1	Grab	
1,2-Dibromo-3-chloropropane	96-12-8	0.04	µg/l	1	Grab	
Dibromodichloromethane	594-18-3	5	µg/l	1	Grab	
Dibromomethane	74-95-3	5	µg/l	1	Grab	
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	50	µg/l	1	Grab	
Di-n-butyl phthalate	84-74-2	50	µg/l	1	Grab	
Dicamba	1918-00-9	0.44	µg/l	1	Grab	
Dichlorobenzenes *applies to each dichlorobenzene individually	95-50-1; 541-73-1; 106-47-6	3*	µg/l	1	Grab	
3,3'-Dichlorobenzidine	91-94-1	5	µg/l	1	Grab	
3,4-Dichlorobenzotriflouride	328-84-7	5	µg/l	1	Grab	
cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/l	1	Grab	
trans-1,4-Dichloro-2-butene	110-57-6	5	µg/l	1	Grab	
Dichlorodifluoromethane	75-71-8	5	µg/l	1	Grab	
1,1-Dichloroethane	75-34-3	5	µg/l	1	Grab	
1,2-Dichloroethane	107-06-2	0.6	µg/l	1	Grab	
1,1-Dichloroethene	75-35-4	5	µg/l	1	Grab	
cis-1,2-Dichloroethene	156-59-2	5	µg/l	1	Grab	
Trans-1,2-Dichloroethene	156-60-5	5	µg/l	1	Grab	
Dichloroflouromethane	75-43-4	5	µg/l	1	Grab	
2,4-Dichlorophenol *see limit for Phenolic compounds (total phenols)	120-83-2	*	µg/l	1	Grab	
2,4-Dichlorophenoxyacetic acid	94-75-7	50	µg/l	1	Grab	
1,1-Dichloropropane	78-99-9	5	µg/l	1	Grab	
1,2-Dichloropropane	78-87-5	1	µg/l	1	Grab	
1,3-Dichloropropane	142-28-9	5	µg/l	1	Grab	
2,2-Dichloropropane	594-20-7	5	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
1,1-Dichloropropene	563-58-6	5	µg/l	1	Grab	
cis 1,3-Dichoropropene *applies to sum of cis- and trans- 1,3-Dichoropropene	10061-01-5	0.4*	µg/l	1	Grab	2
trans 1,3-Dichoropropene *applies to sum of cis- and trans- 1,3-Dichoropropene	10061-02-6	0.4*	µg/l	1	Grab	2
2,3-Dichlorotoluene	32768-54-0	5	µg/l	1	Grab	
2,4-Dichlorotoluene	95-73-8	5	µg/l	1	Grab	
2,5-Dichlorotoluene	19398-61-9	5	µg/l	1	Grab	
2,6-Dichlorotoluene	118-69-4	5	µg/l	1	Grab	
3,4-Dichlorotoluene	95-75-0	5	µg/l	1	Grab	
3,5-Dichlorotoluene	25186-47-4	5	µg/l	1	Grab	
Dieldrin	60-57-1	0.004	µg/l	1	Grab	2
Di(2-ethylhexyl)adipate	103-23-1	20	µg/l	1	Grab	
Diethyl phthalate	84-66-2	50	µg/l	1	Grab	
1,2-Diflouro-1,1,2,2-tetrachloroethane	76-12-0	5	µg/l	1	Grab	
1,2-Diisopropylbenzene	577-55-9	5	µg/l	1	Grab	
1,3-Diisopropylbenzene	99-62-7	5	µg/l	1	Grab	
1,4-Diisopropylbenzene	100-18-5	5	µg/l	1	Grab	
N,N-Dimethylaniline	121-69-7	1	µg/l	1	Grab	
2,3-Dimethylaniline	87-59-2	5	µg/l	1	Grab	
2,4-Dimethylaniline	95-68-1	5	µg/l	1	Grab	
2,5-Dimethylaniline	95-78-3	5	µg/l	1	Grab	
2,6-Dimethylaniline	87-62-7	5	µg/l	1	Grab	
3,4-Dimethylaniline	95-64-7	5	µg/l	1	Grab	
3,5-Dimethylaniline	108-69-0	5	µg/l	1	Grab	
3,3'-Dimethylbenzidine	119-93-7	5	µg/l	1	Grab	
4,4'-Dimethylbibemzyl	538-39-6	5	µg/l	1	Grab	
4,4'-Dimethyldiphenylmethane	4957-14-6	5	µg/l	1	Grab	
Dimethylformamide	68-12-2	50	µg/l	1	Grab	
alpha, alpha-Dimethyl phenethylanime	122-09-8	5	µg/l	1	Grab	
2,4-Dimethylphenol *see limit for Phenolic compounds (total phenols)	105-67-9	*	µg/l	1	Grab	
Dimethyl phthalate	131-11-3	50	µg/l	1	Grab	
2,4-Dinitrophenol *see limit for Phenolic compounds (total phenols)	51-28-5	*	µg/l	1	Grab	
Dimethyl tetrachloroterephthalate	1861-32-1	50	µg/l	1	Grab	
1,3-Dinitrobenzene	99-65-0	5	µg/l	1	Grab	
2,3-Dinitrotoluene	602-01-7	5	µg/l	1	Grab	
2,4-Dinitrololuene	121-14-2	5	µg/l	1	Grab	
2,5-Dinitrololuene	619-15-8	5	µg/l	1	Grab	
2,6-Dinitrololuene	606-20-2	5	µg/l	1	Grab	
3,4-Dinitrololuene	610-39-9	5	µg/l	1	Grab	
3,5-Dinitrololuene	618-85-9	5	µg/l	1	Grab	
Di-n-octyl phthalate	117-84-0	50	µg/l	1	Grab	
Dinoseb *see limit for Phenolic compounds (total phenols)	88-85-7	*	µg/l	1	Grab	
Diphenamid	957-51-7	50	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type	FN
Diphenylamine	122-39-4	5	µg/l	1	Grab	
1,1-Diphenylhydrazine	530-50-7	ND	µg/l	1	Grab	3
1,2-Diphenylhydrazine	122-66-7	ND	µg/l	1	Grab	3
Diquat	2764-72-9	20	µg/l	1	Grab	
Disulfoton *Refer to entry for "Phorate and Disulfoton"	298-04-4	ND	µg/l	1	Grab	3
Dodecylguanidine acetate and Dodecylguanidine hydrochloride *applies to the sum of these substances	2439-10-3; 13590-97-1	50*	µg/l	1	Grab	
Dyphylline	479-18-5	50	µg/l	1	Grab	
Endothall	145-73-3	50	µg/l	1	Grab	
Endrin	72-20-8	ND	µg/l	1	Grab	3
Endrin aldehyde	7421-93-4	5	µg/l	1	Grab	
Endrin ketone	53494-70-5	5	µg/l	1	Grab	
Ethylbenzene	100-41-4	5	µg/l	1	Grab	
Ethylene chlorohydrin	107-07-3	50	µg/l	1	Grab	
Ethylene dibromide	106-93-4	6×10^{-4}	µg/l	1	Grab	
Ethylene glycol	107-21-1	50	µg/l	1	Grab	
Ethylene oxide	75-21-8	0.05	µg/l	1	Grab	
Ethylenethiourea	96-45-7	ND	µg/l	1	Grab	3
Ferbam	14484-64-1	4.2	µg/l	1	Grab	
Fluometuron	2164-17-2	50	µg/l	1	Grab	
Fluoranthene	206-44-0	50	µg/l	1	Grab	
Fluorene	86-73-7	50	µg/l	1	Grab	
Fluoride	NA	3000	µg/l	1	Grab	
Formaldehyde	50-00-0	8	µg/l	1	Grab	
Folpet	133-07-3	50	µg/l	1	Grab	
Glyphosate	1071-83-6	50	µg/l	1	Grab	
Guaifenesin	93-14-1	50	µg/l	1	Grab	
Heptachlor	76-44-8	0.04	µg/l	1	Grab	
Heptachlor epoxide	1024-57-3	0.03	µg/l	1	Grab	
Hexachlorobenzene	118-74-1	0.04	µg/l	1	Grab	
Hexachlorobutadiene	87-68-3	0.5	µg/l	1	Grab	
alpha-Hexachlorocyclohexane	319-84-6	0.01	µg/l	1	Grab	
beta-Hexachlorocyclohexane	319-85-7	0.04	µg/l	1	Grab	
delta-Hexachlorocyclohexane	319-86-8	0.04	µg/l	1	Grab	
epsilon-Hexachlorohexane	6108-10-7	0.04	µg/l	1	Grab	
gamma-Hexachlorohexane	58-89-9	0.05	µg/l	1	Grab	
Hexachloropentadiene	77-47-4	5	µg/l	1	Grab	
Hexachloroethane	67-72-1	5	µg/l	1	Grab	
Hexachlorophene *see limit for Phenolic compounds (total phenols)	70-30-4	*	µg/l	1	Grab	
Hexachloropropene	1888-71-7	5	µg/l	1	Grab	
2-Hexanone	591-78-6	50	µg/l	1	Grab	
Hexazinone	51235-04-2	50	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Hydrogen sulfide *see limit for Sulfides, total	7783-04-2	*	µg/l	1	Grab	
Hydroquimone *see limit for Phenolic compounds (total phenols)	123-31-9	*	µg/l	1	Grab	
1-Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	50	µg/l	1	Grab	
2-(2-Hydroxy-3,5-di-tert-pentylphenyl)-benzotriazole *see limit for Phenolic compounds (total phenols)	25	*	µg/l	1	Grab	
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	µg/l	1	Grab	2
Iron *Also see Iron and Manganese	NA	600*	µg/l	1	Grab	
Iron and Manganese *Applies to the sum of these substances	NA	1000*	µg/l	1	Grab	
Isodrin	465-73-6	5	µg/l	1	Grab	
Isophorone	78-59-1	50	µg/l	1	Grab	
Isopropalin	33820-53-0	5	µg/l	1	Grab	
Isopropylbenzene	98-82-8	5	µg/l	1	Grab	
2-Isopropyltoluene	527-84-4	5	µg/l	1	Grab	
3-Isopropyltoluene	535-77-3	5	µg/l	1	Grab	
4-Isopropyltoluene	99-87-6	5	µg/l	1	Grab	
Kepone	143-50-0	ND	µg/l	1	Grab	3
Lead	NA	50	µg/l	1	Grab	
Magnesium	NA	35,000	µg/l	1	Grab	
Malathion	121-75-5	7	µg/l	1	Grab	
Mancozeb	8018-01-7	1.8	µg/l	1	Grab	2
Maneb	12427-38-2	1.8	µg/l	1	Grab	2
Manganese *Also see 'Iron and Manganese'	NA	600*	µg/l	1	Grab	
Mercaptobenzothiazole	149-30-4	50	µg/l	1	Grab	
Mercury	NA	1.4	µg/l	1	Grab	
Methacrylic acid	79-41-4	50	µg/l	1	Grab	
Methacrylonitrile	126-98-7	5	µg/l	1	Grab	
Methomyl *see limit for "Aldicarb and Methomyl'	16752-77-5	*	µg/l	1	Grab	
Methoxychlor	72-43-5	35	µg/l	1	Grab	
(1-Methoxyethyl) benzene	4013-34-7	50	µg/l	1	Grab	
(2-Methoxyethyl) benzene	3558-60-6	50	µg/l	1	Grab	
N-Methylaniline	100-61-8	5	µg/l	1	Grab	
Methylbenz(a)anthracenes *applies to the sum of these substances	NA	0.002*	µg/l	1	Grab	
Methyl chloride	74-87-3	5	µg/l	1	Grab	
2-Methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	0.44	µg/l	1	Grab	2
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	5	µg/l	1	Grab	
4,4'-Methylene-bis-(N-methyl)aniline	1807-55-2	5	µg/l	1	Grab	
4,4'-Methylene-bis-(N,N'-dimethyl) aniline	101-61-1	5	µg/l	1	Grab	
Methylene bisthiocyanate	6317-18-6	50	µg/l	1	Grab	
Methylene chloride	75-09-2	5	µg/l	1	Grab	
4-(1-Methylethoxy)-1-butanol	31600-69-8	50	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
2-Methylethyl-1,3-dioxolane	126-39-6	50	µg/l	1	Grab	
Methyl ethyl ketone	78-93-3	50	µg/l	1	Grab	
Methyl iodide	74-88-4	5	µg/l	1	Grab	
Methyl methacrylate	80-62-6	50	µg/l	1	Grab	
Methyl parathion *see limit for 'Parathion and Methyl parathion'	298-00-0	*	µg/l	1	Grab	
alpha-Methylstyrene	98-83-9	5	µg/l	1	Grab	
2-Methylstyrene	611-15-4	5	µg/l	1	Grab	
3-Methylstyrene	100-80-1	5	µg/l	1	Grab	
4-Methylstyrene	622-97-9	5	µg/l	1	Grab	
Methyl tert-butyl ether (MTBE)	1634-04-4	10	µg/l	1	Grab	
Metolachlor ESA	171118-09-5	50	µg/l	1	Grab	
Metolachlor OA	152019-73-3	50	µg/l	1	Grab	
Metribuzin	21087-64-9	50	µg/l	1	Grab	
Mirex	2385-85-5	0.03	µg/l	1	Grab	2
Nabam	142-59-6	1.8	µg/l	1	Grab	2
Naphthalene	91-20-3	10	µg/l	1	Grab	
Niacinamide	98-92-0	500	µg/l	1	Grab	
Nickel	NA	200	µg/l	1	Grab	
Nitralin	4726-14-1	35	µg/l	1	Grab	
Nitrate	NA	20,000	µg/l	1	Grab	
Nitrate and Nitrite (as N)	NA	20,000	µg/l	1	Grab	
Nitrilotriacetic acid *includes related forms that convert to nitrilotriacetic acid upon acidification to a pH of 2.3 or less	NA	3*	µg/l	1	Grab	
Nitrite (as N)	NA	2,000	µg/l	1	Grab	
2-Nitroaniline	88-74-4	5	µg/l	1	Grab	
3-Nitroaniline	99-09-2	5	µg/l	1	Grab	
4-Nitroaniline	100-01-6	5	µg/l	1	Grab	
Nitrobenzene	98-95-3	0.4	µg/l	1	Grab	
N-Nitrosodiphenylamine	86-30-6	50	µg/l	1	Grab	
2-Nitrotoluene	88-72-2	5	µg/l	1	Grab	
3-Nitrotoluene	99-08-1	5	µg/l	1	Grab	
4-Nitrotoluene	99-99-0	5	µg/l	1	Grab	
5-Nitro-o-toluidine	99-55-8	5	µg/l	1	Grab	
Octachlorostyrene	29082-74-4	0.2	µg/l	1	Grab	
Organic substances, total	NA	100	µg/l	1	Grab	
Oxamyl	23135-22-0	50	µg/l	1	Grab	
Paraquat	4685-14-7	3.0	µg/l	1	Grab	
Parathion *see limit for 'Parathion and Methyl parathion'	56-38-2	*	µg/l	1	Grab	
Parathion and Methyl parathion *Applies to the sum of these substances	5638-2; 298-00-0	1.5*	µg/l	1	Grab	
Pendimethalin	40487-42-1	5	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Pentachlorobenzene	608-93-5	5	µg/l	1	Grab	
Pentachloroethane	76-01-7	5	µg/l	1	Grab	
Pentachloronitrobenzene	82-68-8	ND	µg/l	1	Grab	3
Pentachlorophenol *see limit for 'Phenolic compounds (total phenols)'	87-86-5	*	µg/l	1	Grab	
Phenanthrene	85-01-8	50	µg/l	1	Grab	
Phenol *see limit for 'Phenolic compounds (total phenols)'	108-95-2	*	µg/l	1	Grab	
Phenolic compounds (total phenols) *Applies to the sum of these substances	NA	2*	µg/l	1	Grab	2,10
Phenols, total chlorinated *see limit for 'Phenolic compounds (total phenols)'	NA	*	µg/l	1	Grab	
Phenols, total unchlorinated *see limit for 'Phenolic compounds (total phenols)'	NA	*	µg/l	1	Grab	
1,2-Phenylenediamine	95-54-5	5	µg/l	1	Grab	
1,3-Phenylenediamine	108-45-2	5	µg/l	1	Grab	
1,4-Phenylenediamine	108-45-2	5	µg/l	1	Grab	
Phenyl ether	101-84-8	10	µg/l	1	Grab	
Phenylhydrazine	100-63-0	5	µg/l	1	Grab	
Phenylpropanolamine	14838-15-4	50	µg/l	1	Grab	
3-Phenyl-1-propene	637-50-3	5	µg/l	1	Grab	
cis-1-Phenyl-1-propene	766-90-5	5	µg/l	1	Grab	
trans-1-Phenyl-1-propene	873-66-5	5	µg/l	1	Grab	
Phorate	298-02-2	ND	µg/l	1	Grab	3
Picloram *includes related forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.	NA	50*	µg/l	1	Grab	
PCB-1016	12674-11-2	0.20	µg/l	1	Grab	2,5
PCB-1221	11104-28-2	0.20	µg/l	1	Grab	2,5
PCB-1232	11141-16-5	0.20	µg/l	1	Grab	2,5
PCB-1242	53469-21-9	0.20	µg/l	1	Grab	2,5
PCB-1248	12672-29-6	0.20	µg/l	1	Grab	2,5
PCB-1254	11097-69-1	0.20	µg/l	1	Grab	2,5
PCB-1260	11096-82-5	0.20	µg/l	1	Grab	2,5
Principal organic contaminant	NA	5	µg/l	1	Grab	4
Prometon	1610-18-0	50	µg/l	1	Grab	
Propachlor	1918-16-7	35	µg/l	1	Grab	
Propanil	709-98-8	7.0	µg/l	1	Grab	
Propazine	139-40-2	16	µg/l	1	Grab	
Propham	122-42-9	50	µg/l	1	Grab	
n-Propylbenzene	103-65-1	5	µg/l	1	Grab	
Propylene glycol	57-55-6	1000	µg/l	1	Grab	
Pyrene	129-00-0	50	µg/l	1	Grab	
Pyridine	110-86-1	50	µg/l	1	Grab	
Selenium	NA	20	µg/l	1	Grab	
Silver	NA	100	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Simazine	122-34-9	0.5	µg/l	1	Grab	
Styrene	100-42-5	930	µg/l	1	Grab	
Sulfate	NA	500,000	µg/l	1	Grab	
Sulfide	NA	1,000	µg/l	1	Grab	
Tebuthiuron	34014-18-1	50	µg/l	1	Grab	
Terbacil	5902-51-2	50	µg/l	1	Grab	
Terbufos	13071-79-9	0.09	µg/l	1	Grab	
Tetrachlorobenzenes *value of 5 µg/l applies to each tetrachlorobenzene individually. Value of 10 µg/l applies to the sum of the substances.	636-66-2; 634-90-2; 95-94-3; 12408-10-5	*	µg/l	1	Grab	
1,1,1,2-Tetrachloroethane	630-20-6	5	µg/l	1	Grab	
1,1,2,2-Tetrachloroethane	79-34-5	5	µg/l	1	Grab	
Tetrachloroethene	127-18-4	5	µg/l	1	Grab	
Tetrachloroterephthalic acid	2136-79-0	50	µg/l	1	Grab	
alpha, alpha, alpha, 4-Tetrachlorotoluene	5216-25-1	5	µg/l	1	Grab	
Tetrahydrofuran	109-99-9	50	µg/l	1	Grab	
1,2,3,4-Tetramethylbenzene	488-23-3	5	µg/l	1	Grab	
1,2,3,5-Tetramethylbenzene	527-53-7	5	µg/l	1	Grab	
1,2,4,5-Tetramethylbenzene	95-93-2	5	µg/l	1	Grab	
Thallium	NA	0.5	µg/l	1	Grab	
Theophylline	58-55-9	40	µg/l	1	Grab	
Thiram	137-26-8	1.8	µg/l	1	Grab	
Toluene	108-88-3	5	µg/l	1	Grab	
Toluene-2,4-diamine	95-80-7	5	µg/l	1	Grab	
Toluene-2,5-diamine	95-70-5	5	µg/l	1	Grab	
Toluene-2,6-diamine	823-40-5	5	µg/l	1	Grab	
o-Toluidine	95-53-4	5	µg/l	1	Grab	
Tolytriazole	29385-43-1	50	µg/l	1	Grab	
Toxaphene	8001-35-2	0.06	µg/l	1	Grab	2
1,2,4-Tribromobenzene	615-54-3	5	µg/l	1	Grab	
Tributyltin oxide	56-35-9	50	µg/l	1	Grab	
2,4,6-Trichloroaniline	634-93-5	5	µg/l	1	Grab	
Trichlorobenzenes * value of 5 µg/l applies to each tetrachlorobenzene individually. Value of 10 µg/l applies to the sum of the substances.	87-61-6; 120-82-1; 108-70-3; 12002-48-1	*	µg/l	1	Grab	
1,1,1-Trichloroethane	71-55-6	5	µg/l	1	Grab	
1,1,2-Trichloroethane	79-00-5	1	µg/l	1	Grab	
Trichloroethene	79-01-6	5	µg/l	1	Grab	
Trichlorofluoromethane	75-69-4	5	µg/l	1	Grab	
2,4,5-Trichlorophenoxyacetic acid	93-76-5	35	µg/l	1	Grab	
2,4,5-Trichlorophenoxypropionic acid	93-72-1	0.26	µg/l	1	Grab	
1,1,2-Trichloropropane	598-77-6	5	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
1,2,3-Trichloropropane	96-18-4	0.04	µg/l	1	Grab	
cis-1,2,3-Trichloropropene	13116-57-9	5	µg/l	1	Grab	
trans-1,2,3-trichloropropene	13116-58-0	5	µg/l	1	Grab	
alpha,2,4-Trichlorotoluene	94-99-5	5	µg/l	1	Grab	
alpha,2,6-Trichlorotoluene	2014-83-7	5	µg/l	1	Grab	
alpha,3,4-Trichlorotoluene	102-47-6	5	µg/l	1	Grab	
alpha, alpha,2-Trichlorotoluene	88-66-4	5	µg/l	1	Grab	
alpha, alpha,4-Trichlorotoluene	13940-94-8	5	µg/l	1	Grab	
2,3,4-Trichlorotoluene	7359-72-0	5	µg/l	1	Grab	
2,3,5-Trichlorotoluene	56961-86-5	5	µg/l	1	Grab	
2,3,6-Trichlorotoluene	2077-46-5	5	µg/l	1	Grab	
2,4,5-Trichlorotoluene	6639-30-1	5	µg/l	1	Grab	
2,4,6-Trichlorotoluene	23749-65-7	5	µg/l	1	Grab	
1,1,1-Trichloro-2,2,2-trifluoethane	354-58-5	5	µg/l	1	Grab	
1,1,2-Trichloro-1,2,2-trifluoethane	76-13-1	5	µg/l	1	Grab	
Trifluralin	1582-09-8	35	µg/l	1	Grab	
1,2,3-Trimethylbenzene	526-73-8	5	µg/l	1	Grab	
1,2,4-Trimethylbenzene	95-63-6	5	µg/l	1	Grab	
1,3,5-Trimethylbenzene	108-67-8	5	µg/l	1	Grab	
2,3,6-Trimethylpyridine	1462-84-6	50	µg/l	1	Grab	
2,4,6-Trimethylpyridine	108-75-8	50	µg/l	1	Grab	
sym-Trinitrobenzene	99-35-4	5	µg/l	1	Grab	
2,3,4-Trinitrotoluene	602-29-9	5	µg/l	1	Grab	
2,3,6-Trinitrotoluene	18292-97-2	5	µg/l	1	Grab	
2,4,5-Trinitrotoluene	610-25-3	5	µg/l	1	Grab	
2,4,6-Trinitrotoluene	118-96-7	5	µg/l	1	Grab	
3,4,5-Trinitrotoluene	603-15-6	5	µg/l	1	Grab	
Triphenyl phosphate	115-86-6	50	µg/l	1	Grab	
Uranyl ion	NA	10,000	µg/l	1	Grab	
Vinyl chloride	75-01-4	2	µg/l	1	Grab	
1,2-Xylene	95-47-6	5	µg/l	1	Grab	
1,3-Xylene	108-38-3	5	µg/l	1	Grab	
1,4-Xylene	106-42-3	5	µg/l	1	Grab	
Zinc	NA	5,000	µg/l	1	Grab	
Zineb	12122-67-7	1.8	µg/l	1	Grab	
Ziram	137-30-4	4.2	µg/l	1	Grab	

Footnotes:

1. Samples must be collected prior to each discharge event. Discharge may not commence until the sample results show compliance with the above discharge limitations.

2. Discharge limit is set at the Practical Quantitation Limit (PQL). Actual groundwater effluent standard/limitation is below this limit. The most stringent USEPA approved method must be used in the analysis of this parameter.

3. ND means non-detect. The most stringent USEPA approved method must be used in the analysis of this parameter.

4. Applies to any and every individual substance to which the ambient principal organic contaminant standard applies, except any substances that has an effluent standard or limitation value listed above. See Division of Water TOGS 1.1.1 for information on determining the applicability of the ambient POC standard to individual substances.
5. For PCBs:
   a. The treatment plant operator must monitor this discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achieve a Minimum Detection Level (MDL) of 0.065 µg/l.
   b. 0.10 µg/l is the discharge goal. The treatment plant operator shall report all values above the MDL (0.065 µg/l per Aroclor). If the level of any Aroclor is above 0.10 µg/l, the treatment plant operator must evaluate the treatment system and identify the cause of the detectable level of PCBs in the discharge.
   c. If the Department determines that effluent monitoring results above 0.10 µg/l can be prevented by implementation of additional measures as proposed by the treatment plant operator in footnote 5.b above, and approved by the Department, the treatment plant operator shall implement such additional measures.

6. Only waters generated at remediation sites during sampling, pump tests, well development, or dewatering of excavations, are authorized for treatment and discharge.

7. Samples and measurements, to comply with the monitoring requirements specified above, must be taken from the holding tank prior to discharge to groundwater.

8. Discharge may not occur unless the ground is capable of accepting the treated effluent. The discharge water may not be ponded on top of saturated or frozen ground or permitted to flow across the ground surface. Also, a minimum separation distance of 100 feet must be maintained between the discharge location and any surface waters (including wetlands).

9. Discharge is not authorized until such time as an engineering submission showing the method of treatment and discharge is approved by the Department. The discharge rate may not exceed the effective treatment system or ground adsorptive capacity. All monitoring data, engineering submissions and modification requests must be submitted to the following DER contact person: _____.

10. Total phenolics must be analyzed using EPA Methods 420.1 or 420.2.

New York State Department of Environmental Conservation
Division of Water
Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233-3505
Phone: (518) 402-8111 • FAX**:** (518) 402-9029
Website: www.dec.ny.gov

MEMORANDUM

TO: Robert Schick, Director, Division of Environmental Remediation

FROM: Mark Klotz, Director, Division of Water /s/

RE: Generic Effluent Criteria for Surface Water Discharges

Date: August 28, 2013

This memo is to transmit a general authorization for short term, batch surface water discharges of water generated at remediation sites under one of the Division of Environmental Remediation's programs. These waters may be generated during sampling, pump tests, well development, or dewatering of excavations. Remedial investigations and designs have often required Division of Water (DOW) to provide rapid turnaround times to develop short term groundwater pump test and containerized well development water discharge criteria. The attached generic surface water effluent criteria and general conditions were developed by DOW staff to reduce delays in implementing these short term surface water discharges and to save staff time for both Divisions. Please have your staff pay particular attention to the footnotes listed at the end of the document.

The attached criteria are subject to the following conditions:

1. Discharges to surface waters within the New York City or City of Syracuse (Skaneateles Lake) watershed are not authorized by the attached criteria. A full DOW review is required by these discharges.

2. The criteria do not contain discharge limitations for radioactive discharges. Limitations on discharges of radiation or radioactive isotopes are addressed under Part 380 Radiation Control Permits.

3. Alternate monitoring frequencies, discharge limitations (where appropriate) or inclusion of parameters not identified in the attachment will be considered; however, a complete review by DOW staff will be required.

4. The attached parameter list is extensive and DOW's intent is for monitoring to be conducted only for those parameters which are known or suspected to be present at the site. Monitoring of parameters not present is not required by these criteria. If contaminants of concern are present at a site which do not appear on the attached list, those contaminants should be analyzed for, and DOW should be consulted if any measurable concentration of an unlisted COC is to be discharged.

Additionally, for excavation dewatering:

1. Prior to beginning work, DER will review and approve the methods plan and equipment list of the proposed water treatment and handling system(s). The approved method plan will include provisions that fully comply with the conditions in this memo. This approval will be limited in duration to the term specified in the construction contract.

2. Approval for each batch discharge from temporary storage tanks (21,000 gallon tanks, approximately) will be granted based upon review and approval of sampling results by the Department and Engineer demonstrating that the treatment and management practices have achieved compliance with the specified discharge criteria for site specific contaminants of concern. Representative samples shall be collected after approved water treatment has been completed and before it enters the temporary storage tank at a frequency of 1 sample per 7000 gallons treated. If any sample fails to meet the discharge criteria, it shall be assumed that the entire storage volume does not meet the discharge criteria. In such cases, the water will require re-treatment and re-sampling as specified above, demonstrating compliance before discharge will be allowed. Discharge rate limitations and energy dissipation devices may be required to protect against erosion and fluctuations in stream flow due to discharges.

Division of Environmental Remediation (DER) will be responsible for ensuring compliance with the attached effluent criteria and approval of all engineering submissions. **Footnote 7** requires identification of the DER contact person who will receive all effluent results, engineering submissions and modification requests. The Regional Water Engineer should be kept appraised of the status of this discharge and sent copy of the effluent results for informational purposes.

Long term surface water and both short and long term groundwater discharges are not addressed in the attached criteria. A complete review of these proposed discharge scenarios will still require full DOW review. The attached criteria may be used as a planning tool by your staff, consultants and PRPs determining the most feasible discharge option. All long term groundwater and surface water discharge requests and modifications of the short term groundwater discharge criteria should be directed to the Director of the Bureau of Water Permits in DOW.

If you have any questions, please call Brian Baker at 402-8124 or Shayne Mitchell at 402-8125.

Attachments

c: Regional Water Engineers
Koon Tang, DOW

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning: with the start of each discharge event

and lasting until: 7 days from the start of the discharge.

The discharges from the treatment facility to **Surface water** shall be limited and monitored by the operator as specified below:

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	**CAS No.**	**Limitations Daily Max.**	**Units**	**Minimum Monitoring Requirements**		**FN**
				Measurement Frequency	**Sample Type**	
Flow	NA	Monitor	GPD	Continuous	Recorder	
pH (range)	NA	6.5 – 8.5	SU	1	Grab	
Oil and Grease	NA	15	mg/l	1	Grab	
BOD, 5-day	NA	5	mg/l	1	Grab	
Solids, Total Suspended	NA	10	mg/l	1	Grab	
Solids, Total Dissolved	NA	200	mg/l	1	Grab	
Acenaphthene	83-32-9	5.3	µg/l	1	Grab	
Acenaphthylene	208-96-8	10	µg/l	1	Grab	
Acetaldehyde	75-07-0	8	µg/l	1	Grab	
Acetone	67-64-1	100	µg/l	1	Grab	2
Acrolein	107-02-8	5	µg/l	1	Grab	
Acrylamide	79-06-1	5	µg/l	1	Grab	
Acrylic acid	79-10-7	50	µg/l	1	Grab	
Acrylonitrile	107-13-1	2	µg/l	1	Grab	2
Alachlor	15972-60-8	0.5	µg/l	1	Grab	
Aldicarb	116-06-3	7	µg/l	1	Grab	2
Aldicarb sulfone	1646-88-4	2	µg/l	1	Grab	
Aldicarb sulfoxide	1646-87-3	4	µg/l	1	Grab	
Aldrin	309-00-2	0.02	µg/l	1	Grab	2
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	50	µg/l	1	Grab	
Alkyl diphenyl oxide sulfonates	NA	50	µg/l	1	Grab	
Allyl chloride	107-05-1	5	µg/l	1	Grab	
Aluminum, ionic	NA	100	µg/l	1	Grab	
Ametryn	834-12-8	50	µg/l	1	Grab	
4-Aminobiphenyl	92-67-1	5	µg/l	1	Grab	
Aminocresols *see Phenolic compounds – total phenols	95-84-1; 2835-95-2; 2835-99-6	*	µg/l	1	Grab	
Aminomethylene phosphonic acids salts * applies to each aminomethylene phosphonic acid salt individually	NA	50*	µg/l	1	Grab	
Aminopyridines * applies to sum of these substances	462-08-8; 504-24-5; 504-29-0; 26445-05-6	1*	µg/l	1	Grab	
3-Aminotoluene	108-44-1	5	µg/l	1	Grab	
4-Aminotoluene	106-49-0	5	µg/l	1	Grab	
Ammonia, Total (as NH_3)	7664-41-7	660	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Ammonia and Ammonium (NH_3 + NH_4^+ as N)	7664-41-7; NA	2200	µg/l	1	Grab	
Aniline	62-53-3	10	µg/l	1	Grab	2
Anthracene	120-12-7	3.8	µg/l	1	Grab	
Antimony	NA	10	µg/l	1	Grab	2
Arsenic	NA	50	µg/l	1	Grab	
Aryltiazoles * applies to each aryltiazole individually	NA	50*	µg/l	1	Grab	
Asbestos	NA	7,000,000	Fibers/L	1	Grab	
Atrazine	1912-24-9	8	µg/l	1	Grab	2
Azinphosmethyl	86-50-0	0.6	µg/l	1	Grab	2
Azobenzene	103-33-3	0.5	µg/l	1	Grab	
Barium	NA	1,000	µg/l	1	Grab	
Benz(a)anthracene	56-55-3	0.05	µg/l	1	Grab	2
Benzene	71-43-2	1	µg/l	1	Grab	
Benzidine	92-87-5	0.3	µg/l	1	Grab	2
Benzisothiazole	271-61-4	50	µg/l	1	Grab	
Benzo(b)flouranthene	205-99-2	0.07	µg/l	1	Grab	2
Benzo(k)fluoranthene	207-08-9	0.02	µg/l	1	Grab	2
Benzo(a)pyrene	50-32-8	0.09	µg/l	1	Grab	2
Benzo(ghi)perylene	191-24-2	10	µg/l	1	Grab	
Beryllium	NA	3	µg/l	1	Grab	
1-1'-Biphenyl	92-52-4	5	µg/l	1	Grab	
Bis(2-chloroethoxy)methane	111-91-1	5	µg/l	1	Grab	
Bis(2-chloroethyl)ether	111-44-4	0.03	µg/l	1	Grab	
Bis(chloromethyl)ether	542-88-1	5	µg/l	1	Grab	
Bis(2-chloro-1-methylethyl)ether	108-60-1	5	µg/l	1	Grab	
Bis(2-ethylhexl)phthalate	117-81-7	8	µg/l	1	Grab	2
Boric acid, Borates & Metaborates * apply to the sum of these substances	NA	125*	µg/l	1	Grab	
Boron	NA	1,000	µg/l	1	Grab	
Bromide	NA	2,000	µg/l	1	Grab	
Bromobenzene	108-86-1	5	µg/l	1	Grab	
Bromochloromethane	74-97-5	5	µg/l	1	Grab	
Bromodichloromethane	75-27-4	50	µg/l	1	Grab	
Bromoform	75-25-2	50	µg/l	1	Grab	
Bromomethane	74-83-9	5	µg/l	1	Grab	
n-Butanol	71-36-3	50	µg/l	1	Grab	
cis-2-Butenal	15798-64-8	5	µg/l	1	Grab	
trans-2-Butenal	123-73-9	5	µg/l	1	Grab	
cis-2-Butenenitrile	1190-76-7	5	µg/l	1	Grab	
trans-2-Butenenitrile	627-26-9	5	µg/l	1	Grab	
Butoxyethoxyethanol	112-34-5	50	µg/l	1	Grab	
Butoxypropanol	5131-66-8	50	µg/l	1	Grab	
Butylate	2008-41-5	50	µg/l	1	Grab	
n-Butylbenzene	104-51-8	5	µg/l	1	Grab	
sec-Butylbenzene	135-98-8	5	µg/l	1	Grab	
Tert-Butylbenzene	98-06-6	5	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Butyl benzyl phthalate	85-68-7	50	µg/l	1	Grab	
Butyl isopropyl phthalate	NA	50	µg/l	1	Grab	
Cadmium	NA	1.2	µg/l	1	Grab	
Carbofuran	1563-66-2	1.0	µg/l	1	Grab	
Carbon disulfilde	75-15-0	60	µg/l	1	Grab	
Carbon tetrachloride	56-23-5	0.5	µg/l	1	Grab	2
Carboxin	5234-68-4	50	µg/l	1	Grab	
Chloramben	NA	50	µg/l	1	Grab	
Chloranil	118-75-2	5	µg/l	1	Grab	
Chlordane	57-74-9	0.05	µg/l	1	Grab	
Chloride	NA	250,000	µg/l	1	Grab	
Chlorinateddibenzo-p-dioxins and Chlorinated dibenzofurans	NA	0.008	µg/l	1	Grab	2
Chlorine, Total Residual	NA	13	µg/l	1	Grab	
2-Chloroaniline	95-51-2	5	µg/l	1	Grab	
3- Chloroaniline	108-42-9	5	µg/l	1	Grab	
4- Chloroaniline	106-7-8	5	µg/l	1	Grab	
Chlorobenzene	108-90-7	5	µg/l	1	Grab	
4-Chlorobenzotrifluoride	98-56-6	5	µg/l	1	Grab	
1-Chlorobutane	109-69-3	5	µg/l	1	Grab	
Chloroethane	75-00-3	5	µg/l	1	Grab	
Chloroform	67-66-3	7	µg/l	1	Grab	
Chloromethyl methyl ether	107-30-2	5	µg/l	1	Grab	
2-Chloronaphthalene	91-58-7	10	µg/l	1	Grab	
2-Chloronitrobenzene	88-73-3	5	µg/l	1	Grab	
3-Chloronitrobenzene	121-73-3	5	µg/l	1	Grab	
4-Chloronitrobenzene	100-00-5	5	µg/l	1	Grab	
Chloroprene	126-99-8	5	µg/l	1	Grab	
Chlorothalonil	1897-45-6	5	µg/l	1	Grab	
2-Chlorotoluene	95-49-8	5	µg/l	1	Grab	
3-Chlorotoluene	108-41-8	5	µg/l	1	Grab	
4-Chlorotoluene	106-43-4	5	µg/l	1	Grab	
4-Chloro-o-toluidine	95-69-2	5	µg/l	1	Grab	
5-Chloro-o-toluidine	95-79-4	0.7	µg/l	1	Grab	
3-Chloro-1,1,1-trifuoropropane	460-35-5	5	µg/l	1	Grab	
Chromium	NA	50	µg/l	1	Grab	
Chromium (hexavalent)	NA	30	µg/l	1	Grab	2
Chrysene	218-01-9	0.6	µg/l	1	Grab	2
Cobalt	NA	5	µg/l	1	Grab	
Copper *Limit is 4.8 ug/l except in New York/New Jersey Harbor where it is 7.9 ug/l	NA	*	µg/l	1	Grab	
Cyanide (PQL) Sum of HCN and CN^- expressed as CN	NA	1.0	µg/l	1	Grab	
Cyanogen bromide	506-68-3	5	µg/l	1	Grab	
Cyanogen chloride	506-77-4	5	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Dalapon * Includes related forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid	NA	50*	µg/l	1	Grab	
p,p'-DDD	72-54-8	0.02	µg/l	1	Grab	2
p,p'-DDE	72-55-9	0.01	µg/l	1	Grab	2
p,p'-DDT	50-29-3	0.05	µg/l	1	Grab	2
Dechlorane Plus	13560-89-9	5	µg/l	1	Grab	
Demton FN: apply to the sum of these substances	8065-48-3; 298-03-3; 126-75-0	0.1				
Diazinon	333-41-5	0.08	µg/l	1	Grab	
Dibenzo(a,h) anthracene	53-70-3	0.1	µg/l	1	Grab	2
1,2-Dibromobenzene	583-53-9	5	µg/l	1	Grab	
1,3-Dibromobenzene	108-36-1	5	µg/l	1	Grab	
1,4-Dibromobenzene	106-37-6	5	µg/l	1	Grab	
Dibromochloromethane	124-48-1	10	µg/l	1	Grab	
1,2-Dibromo-3-chloropropane	96-12-8	0.04	µg/l	1	Grab	
Dibromodichloromethane	594-18-3	5	µg/l	1	Grab	
Dibromomethane	74-95-3	5	µg/l	1	Grab	
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	50	µg/l	1	Grab	
Di-n-butyl phthalate	84-74-2	50	µg/l	1	Grab	
Dichlorobenzenes * applies to each isomer (1,2-, 1,3- and 1,4-dichlorobenzene) individually.	95-50-1; 541-73-1; 106-46-7	3*	µg/l	1	Grab	
3,3'-Dichlorobenzidine	91-94-1	5	µg/l	1	Grab	
3,4-Dichlorobenzotriflouride	328-84-7	5	µg/l	1	Grab	
cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/l	1	Grab	
trans-1,4-Dichloro-2-butene	110-57-6	5	µg/l	1	Grab	
Dichlorodifluoromethane	75-71-8	5	µg/l	1	Grab	
1,1-Dichloroethane	75-34-3	5	µg/l	1	Grab	
1,2-Dichloroethane	107-06-2	0.6	µg/l	1	Grab	
1,1-Dichloroethene	75-35-4	0.5	µg/l	1	Grab	
cis-1,2-Dichloroethene	156-59-2	5	µg/l	1	Grab	
trans-1,2-Dichloroethene	156-60-5	5	µg/l	1	Grab	
Dichloroflouromethane	75-43-4	5	µg/l	1	Grab	
2,4-Dichlorophenol *See limit for Phenolic compounds (total phenols)	120-83-2	*	µg/l	1	Grab	
2,4-Dichlorophenoxyacetic acid	94-75-7	10	µg/l	1	Grab	
1,1-Dichloropropane	78-99-9	5	µg/l	1	Grab	
1,2-Dichloropropane	78-87-5	0.5	µg/l	1	Grab	
1,3-Dichloropropane	142-28-9	5	µg/l	1	Grab	
2,2-Dichloropropane	594-20-7	5	µg/l	1	Grab	
1,1-Dichloropropene	563-58-6	5	µg/l	1	Grab	
1,3-Dichoropropene FN: applies to the sum of cis- and trans- 1,3-Dichoropropene, CAS Nos. 10061-01-5 and 10061-02-6 respectively	542-75-6	0.4*	µg/l	1	Grab	

Outfall and Parameters Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
2,3-Dichlorotoluene	32768-54-0	5	µg/l	1	Grab	
2,4-Dichlorotoluene	95-73-8	5	µg/l	1	Grab	
2,5-Dichlorotoluene	19398-61-9	5	µg/l	1	Grab	
2,6-Dichlorotoluene	118-69-4	5	µg/l	1	Grab	
3,4-Dichlorotoluene	95-75-0	5	µg/l	1	Grab	
3,5-Dichlorotoluene	25186-47-4	5	µg/l	1	Grab	
Dieldrin	60-57-1	0.005	µg/l	1	Grab	2
Di(2-ethylhexyl)adipate	103-23-1	20	µg/l	1	Grab	
Diethyl phthalate	84-66-2	50	µg/l	1	Grab	
1,2-Diflouro-1,1,2,2-tetrachloroethane	76-12-0	5	µg/l	1	Grab	
1,2-Diisopropylbenzene	577-55-9	5	µg/l	1	Grab	
1,3-Diisopropylbenzene	99-62-7	5	µg/l	1	Grab	
1,4-Diisopropylbenzene	100-18-5	5	µg/l	1	Grab	
N,N-Dimethylaniline	121-69-7	1	µg/l	1	Grab	
2,3-Dimethylaniline	87-59-2	5	µg/l	1	Grab	
2,4-Dimethylaniline	95-68-1	5	µg/l	1	Grab	
2,5-Dimethylaniline	95-78-3	5	µg/l	1	Grab	
2,6-Dimethylaniline	87-62-7	5	µg/l	1	Grab	
3,4-Dimethylaniline	95-64-7	5	µg/l	1	Grab	
3,5-Dimethylaniline	108-69-0	5	µg/l	1	Grab	
3,3'-Dimethylbenzidine	119-93-7	5	µg/l	1	Grab	
4,4'-Dimethylbibemzyl	538-39-6	5	µg/l	1	Grab	
4,4'-Dimethyldiphenylmethane	4957-14-6	5	µg/l	1	Grab	
Dimethylformamide	68-12-2	50	µg/l	1	Grab	
alpha, alpha-Dimethyl phenethylanime	122-09-8	5	µg/l	1	Grab	
2,4-Dimethylphenol *See limit for Phenolic compounds (total phenols)	105-67-9	*	µg/l	1	Grab	
Dimethyl phthalate	131-11-3	50	µg/l	1	Grab	
Dimethyl tetrachloroterephthalate	1861-32-1	50	µg/l	1	Grab	
1,3-Dinitrobenzene	99-65-0	5	µg/l	1	Grab	
2,4-Dinitrophenol *See limit for Phenolic compounds (total phenols)	51-28-5	*	µg/l	1	Grab	
2,3-Dinitrotoluene	602-01-7	5	µg/l	1	Grab	
2,4-Dinitrololuene	121-14-2	5	µg/l	1	Grab	
2,5-Dinitrololuene	619-15-8	5	µg/l	1	Grab	
2,6-Dinitrololuene	606-20-2	5	µg/l	1	Grab	
3,4-Dinitrololuene	610-39-9	5	µg/l	1	Grab	
3,5-Dinitrololuene	618-85-9	5	µg/l	1	Grab	
Di-n-octyl phthalate	117-84-0	50	µg/l	1	Grab	
Dinoseb *See limit for Phenolic compounds (total phenols)	88-85-7	*	µg/l	1	Grab	
Dioxin *See Chlorinated dibenzo-9-dioxins and Chlorinated dibenzofurans	NA	*	µg/l	1	Grab	
Diphenamid	957-51-7	50	µg/l	1	Grab	
Diphenylamine	122-39-4	5	µg/l	1	Grab	
1,2-Diphenylhydrazine	122-66-7	10	µg/l	1	Grab	2

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Diquat * Applies to the concentration of diquat ion whether free or as an undissociated salt.	2764-72-9	20*	µg/l	1	Grab	
Dodecylguanidine acetate and Dodecylguanidine hydrochloride * Applies to the sum of these substances	2439-10-3; 13590-97-1	50*	µg/l	1	Grab	
Dyphylline	479-18-5	50	µg/l	1	Grab	
Endosulfan	115-29-7	.001	µg/l	1	Grab	
Endothall	145-73-3	50	µg/l	1	Grab	
Endrin	72-20-8	0.05	µg/l	1	Grab	2
Endrin aldehyde	7421-93-4	5	µg/l	1	Grab	
Endrin ketone	53494-70-5	5	µg/l	1	Grab	
Ethylbenzene	100-41-4	4.5	µg/l	1	Grab	
Ethylene chlorohydrin	107-07-3	50	µg/l	1	Grab	
Ethylene dibromide	106-93-4	6×10^{-4}	µg/l	1	Grab	
Ethylene glycol	107-21-1	50	µg/l	1	Grab	
Ethylene oxide	75-21-8	0.05	µg/l	1	Grab	
Fluometuron	2164-17-2	50	µg/l	1	Grab	
Fluoranthene	206-44-0	50	µg/l	1	Grab	
Fluorene	86-73-7	50	µg/l	1	Grab	
Fluoride	NA	1500	µg/l	1	Grab	
Formaldehyde	50-00-0	8	µg/l	1	Grab	
Glyphosate	1071-83-6	50	µg/l	1	Grab	
Guaifenesin	93-14-1	50	µg/l	1	Grab	
Heptachlor	76-44-8	0.01	µg/l	1	Grab	2
Heptachlor epoxide	1024-57-3	0.2	µg/l	1	Grab	2
Hexachlorobenzene	118-74-1	0.2	µg/l	1	Grab	2
Hexachlorobutadiene	87-68-3	1	µg/l	1	Grab	2
alpha-Hexachlorocyclohexane	319-84-6	0.01	µg/l	1	Grab	2
beta-Hexachlorocyclohexane	319-85-7	0.02	µg/l	1	Grab	2
delta-Hexachlorocyclohexane	319-86-8	0.04	µg/l	1	Grab	2
epsilon-Hexachlorohexane	6108-10-7	0.02	µg/l	1	Grab	2
gamma-Hexachlorohexane	58-89-9	0.02	µg/l	1	Grab	2
Hexachloropentadiene	77-47-4	2.0	µg/l	1	Grab	2
Hexachloroethane	67-72-1	0.6	µg/l	1	Grab	
Hexachlorophene * See limit for Phenolic Compounds (total phenols)	70-30-4	*	µg/l	1	Grab	
Hexachloropropene	1888-71-7	5	µg/l	1	Grab	
2-Hexanone	591-78-6	50	µg/l	1	Grab	
Hexazinone	51235-04-2	50	µg/l	1	Grab	
Hydrazine	302-01-2	5	µg/l	1	Grab	
Hydrogen sulfide	7783-04-2	2	µg/l	1	Grab	
Hydroquinone * See limit for Phenolic Compounds (total phenols)	123-31-9	*	µg/l	1	Grab	
1-Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	50	µg/l	1	Grab	
2-(2-Hydroxy-3,5-di-tert-pentylphenyl)-benzotriazole * See limit for Phenolic Compounds (total phenols)	25973-55-1	*	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Indeno(1,2,3-cd)pyrene	193-39-5	0.2	µg/l	1	Grab	2
Iron	NA	300	µg/l	1	Grab	
Isodecyl diphenyl phosphate	29761-21-5	1.7	µg/l	1	Grab	
Isodrin	465-73-6	5	µg/l	1	Grab	
Isophorone	78-59-1	50	µg/l	1	Grab	
Isopropalin	33820-53-0	5	µg/l	1	Grab	
Isopropylbenzene	98-82-8	2.6	µg/l	1	Grab	
2-Isopropyltoluene	527-84-4	5	µg/l	1	Grab	
3-Isopropyltoluene	535-77-3	5	µg/l	1	Grab	
4-Isopropyltoluene	99-87-6	5	µg/l	1	Grab	
Isothiazolones, total (isothiazolinones) (includes 5-chloro-2-methyl-4-isothiazolin-3-one & 2-methyl-4-isothiazolin-3-one)	NA	1	µg/l	1	Grab	
Lead	NA	4	µg/l	1	Grab	
Linear alkyl benzene sulfonates (LAS)	NA	40	µg/l	1	Grab	
Magnesium	NA	35,000	µg/l	1	Grab	
Malathion	121-75-5	0.6	µg/l	1	Grab	2
Manganese	NA	300	µg/l	1	Grab	
Mercaptobenzothiazole	149-30-4	50	µg/l	1	Grab	
Mercury	NA	5×10^{-2}	µg/l	1	Grab	4
Methacrylic acid	79-41-4	50	µg/l	1	Grab	
Methacrylonitrile	126-98-7	5	µg/l	1	Grab	
Methoxychlor	72-43-5	0.4	µg/l	1	Grab	2
(1-Methoxyethyl) benzene	4013-34-7	50	µg/l	1	Grab	
(2-Methoxyethyl) benzene	3558-60-6	50	µg/l	1	Grab	
N-Methylaniline	100-61-8	5	µg/l	1	Grab	
Methylbenz(a)anthracenes * Applies to the sum of these substances	NA	0.002*	µg/l	1	Grab	
Methyl chloride	74-87-3	5	µg/l	1	Grab	
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	5	µg/l	1	Grab	
4,4'-Methylene-bis-(N-methyl)aniline	1807-55-2	5	µg/l	1	Grab	
4,4'-Methylene-bis-(N,N'-dimethyl) aniline	101-61-1	5	µg/l	1	Grab	
Methylene bisthiocyanate	6317-18-6	50	µg/l	1	Grab	
Methylene chloride	75-09-2	5	µg/l	1	Grab	
4-(1-Methylethoxy)-1-butanol	31600-69-8	50	µg/l	1	Grab	
2-Methylethyl-1,3-dioxolane	126-39-6	50	µg/l	1	Grab	
Methyl ethyl ketone	78-93-3	50	µg/l	1	Grab	
Methyl iodide	74-88-4	5	µg/l	1	Grab	
2-Methylnapthalene	91-57-6	4.2	µg/l	1	Grab	
Methyl parathion * see Parathion and Methyl parathion	298-00-0	*	µg/l	1	Grab	
alpha-Methylstyrene	98-83-9	5	µg/l	1	Grab	
2-Methylstyrene	611-15-4	5	µg/l	1	Grab	
3-Methylstyrene	100-80-1	5	µg/l	1	Grab	
4-Methylstyrene	622-97-9	5	µg/l	1	Grab	
Methyl tert-butyl ether (MTBE)	1634-04-4	10	µg/l	1	Grab	
Metolachlor ESA	171118-09-5	50	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Metolachlor OA	152019-73-3	50	µg/l	1	Grab	
Metribuzin	21087-64-9	50	µg/l	1	Grab	
Mirex	2385-85-5	0.4	µg/l	1	Grab	2
Naphthalene	91-20-3	10	µg/l	1	Grab	
Niacinamide	98-92-0	500	µg/l	1	Grab	
Nickel	NA	8.2	µg/l	1	Grab	
Nitrate	NA	10,000	µg/l	1	Grab	
Nitrate and Nitrite (as N)	NA	10,000	µg/l	1	Grab	
Nitrilotriacetic acid *Includes realted forms that convert to nitrilotriacetic acid upon acidification to a pH of 2.3 or less	NA	3*	µg/l	1	Grab	
Nitrite (as N)	NA	1,000	µg/l	1	Grab	
2-Nitroaniline	88-74-4	5	µg/l	1	Grab	
3-Nitroaniline	99-09-2	5	µg/l	1	Grab	
4-Nitroaniline	100-01-6	5	µg/l	1	Grab	
Nitrobenzene	98-95-3	0.4	µg/l	1	Grab	
N-Nitrosodiphenylamine	86-30-6	50	µg/l	1	Grab	
2-Nitrotoluene	88-72-2	5	µg/l	1	Grab	
3-Nitrotoluene	99-08-1	5	µg/l	1	Grab	
4-Nitrotoluene	99-99-0	5	µg/l	1	Grab	
5-Nitro-o-toluidine	99-55-8	5	µg/l	1	Grab	
Octachlorostyrene	29082-74-4	6×10^{-6}	µg/l	1	Grab	
Oxamyl	23135-22-0	50	µg/l	1	Grab	
Parathion	56-38-2	0.065	µg/l	1	Grab	
Parathion and Methyl parathion ** Applies to the sum of these substances. For the waters of the Great Lakes System, the Department will substitute a guidance value for the aquatic Type standard if so determined under 702.15 (c).	5638-2; 298-00-0	0.008**	µg/l	1	Grab	
Pendimethalin	40487-42-1	5	µg/l	1	Grab	
Pentachlorobenzene	608-93-5	5	µg/l	1	Grab	
Pentachloroethane	76-01-7	5	µg/l	1	Grab	
Pentachlorophenol * See limit for Phenolic Compounds (total phenols)	87-86-5	*	µg/l	1	Grab	
Phenanthrene	85-01-8	1.5	µg/l	1	Grab	
Phenol * See limit for Phenolic Compounds (total phenols)	108-95-2	*	µg/l	1	Grab	
Phenolic compounds – Total Phenols * Applies to the sum of these substances	NA	8	µg/l	1	Grab	2,8
Phenols, total chlorinated * See limit for Phenolic Compounds (total phenols)	NA	*	µg/l	1	Grab	
Phenols, total unchlorinated * See limit for Phenolic Compounds (total phenols)	NA	*	µg/l	1	Grab	
1,2-Phenylenediamine	95-54-5	5	µg/l	1	Grab	
1,3-Phenylenediamine	108-45-2	5	µg/l	1	Grab	
1,4-Phenylenediamine	108-45-2	5	µg/l	1	Grab	
Phenyl ether	101-84-8	10	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Phenylhydrazine	100-63-0	5	µg/l	1	Grab	
Phenylpropanolamine	14838-15-4	50	µg/l	1	Grab	
3-Phenyl-1-propene	637-50-3	5	µg/l	1	Grab	
cis-1-Phenyl-1-propene	766-90-5	5	µg/l	1	Grab	
trans-1-Phenyl-1-propene	873-66-5	5	µg/l	1	Grab	
Phosphorus	NA	20	µg/l	1	Grab	
Picloram	NA	50	µg/l	1	Grab	
Polybrominated biphenyls *Applies to each congener individually	NA	5*	µg/l	1	Grab	
PCB-1016	12674-11-2	0.20	µg/l	1	Grab	2,3
PCB-1221	11104-28-2	0.20	µg/l	1	Grab	2,3
PCB-1232	11141-16-5	0.20	µg/l	1	Grab	2,3
PCB-1242	53469-21-9	0.20	µg/l	1	Grab	2,3
PCB-1248	12672-29-6	0.20	µg/l	1	Grab	2,3
PCB-1254	11097-69-1	0.20	µg/l	1	Grab	2,3
PCB-1260	11096-82-5	0.20	µg/l	1	Grab	2,3
Prometon	1610-18-0	50	µg/l	1	Grab	
Propham	122-42-9	50	µg/l	1	Grab	
n-Propylbenzene	103-65-1	5	µg/l	1	Grab	
Propulene glycol	57-55-6	1000	µg/l	1	Grab	
Pyrene	129-00-0	4.6	µg/l	1	Grab	
Pyridine	110-86-1	50	µg/l	1	Grab	
Quaternary ammonium compounds (including dimethyl benzyl ammonium chloride & dimethyl ethyl benzyl ammonium chloride) *Applies to the sum of these substances	NA	10*	µg/l	1	Grab	
Selenium	NA	4.6	µg/l	1	Grab	
Silver, Total	NA	50	µg/l	1	Grab	
Simazine	122-34-9	0.5	µg/l	1	Grab	
Styrene	100-42-5	5	µg/l	1	Grab	
Sulfate	NA	250,000	µg/l	1	Grab	
Sulfides, Total	NA	50	µg/l	1	Grab	
Tebuthiuron	34014-18-1	50	µg/l	1	Grab	
Terbufos	13071-79-9	100	µg/l	1	Grab	2
Tetrachlorobenzenes * Applies to the sum of 1,2,3,4-, 1,2,3,5- and 1,2,4,5-tetrachlorobenzene.	636-66-2; 634-90-2; 95-94-3; 12408-10-5	5*	µg/l	1	Grab	
1,1,1,2-Tetrachloroethane	630-20-6	5	µg/l	1	Grab	
1,1,2,2-Tetrachloroethane	79-34-5	0.2	µg/l	1	Grab	
Tetrachloroethene	127-18-4	0.7	µg/l	1	Grab	
alpha, alpha, alpha, 4-Tetrachlorotoluene	5216-25-1	5	µg/l	1	Grab	
Tetrahydrofuran	109-99-9	50	µg/l	1	Grab	
1,2,3,4-Tetramethylbenzene	488-23-3	5	µg/l	1	Grab	
1,2,3,5-Tetramethylbenzene	527-53-7	5	µg/l	1	Grab	
1,2,4,5-Tetramethylbenzene	95-93-2	5	µg/l	1	Grab	
Thallium	NA	0.5	µg/l	1	Grab	
Theophylline	58-55-9	40	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Toluene	108-88-3	5	µg/l	1	Grab	
Toluene-2,4-diamine	95-80-7	5	µg/l	1	Grab	
Toluene-2,5-diamine	95-70-5	5	µg/l	1	Grab	
Toluene-2,6-diamine	823-40-5	5	µg/l	1	Grab	
o-Toluidine	95-53-4	0.6	µg/l	1	Grab	
Tolytriazole	29385-43-1	50	µg/l	1	Grab	
Toxaphene	8001-35-2	1	µg/l	1	Grab	2
1,2,4-Tribromobenzene	615-54-3	5	µg/l	1	Grab	
Tributyltin oxide	56-35-9	50	µg/l	1	Grab	
2,4,6-Trichloroaniline	634-93-5	5	µg/l	1	Grab	
Trichlorobenzenes *Applies to the sum of 1,2,3-, 1,2,4- and 1,3,5-trichlorobenzene	87-61-6; 120-82-1; 108-70-3; 12002-48-1	5*	µg/l	1	Grab	
1,1,1-Trichloroethane	71-55-6	5	µg/l	1	Grab	
1,1,2-Trichloroethane	79-00-5	1	µg/l	1	Grab	
Trichloroethene	79-01-6	5	µg/l	1	Grab	
Trichlorofluoromethane	75-69-4	5	µg/l	1	Grab	
2,4,5-Trichlorophenoxypropionic acid	93-72-1	10	µg/l	1	Grab	
1,1,2-Trichloropropane	598-77-6	5	µg/l	1	Grab	
1,2,3-Trichloropropane	96-18-4	0.04	µg/l	1	Grab	
cis-1,2,3-Trichloropropene	13116-57-9	5	µg/l	1	Grab	
trans-1,2,3-trichloropropene	13116-58-0	5	µg/l	1	Grab	
alpha,2,4-Trichlorotoluene	94-99-5	5	µg/l	1	Grab	
alpha,2,6-Trichlorotoluene	2014-83-7	5	µg/l	1	Grab	
alpha,3,4-Trichlorotoluene	102-47-6	5	µg/l	1	Grab	
alpha, alpha,2-Trichlorotoluene	88-66-4	5	µg/l	1	Grab	
alpha, alpha,4-Trichlorotoluene	13940-94-8	5	µg/l	1	Grab	
2,3,4-Trichlorotoluene	7359-72-0	0.34	µg/l	1	Grab	
2,3,5-Trichlorotoluene	56961-86-5	0.34	µg/l	1	Grab	
2,3,6-Trichlorotoluene	2077-46-5	0.34	µg/l	1	Grab	
2,4,5-Trichlorotoluene	6639-30-1	0.34	µg/l	1	Grab	
2,4,6-Trichlorotoluene	23749-65-7	0.34	µg/l	1	Grab	
1,1,1-Trichloro-2,2,2-trifluoethane	354-58-5	5	µg/l	1	Grab	
1,1,2-Trichloro-1,2,2-trifluoethane	76-13-1	5	µg/l	1	Grab	
1,2,3-Trimethylbenzene	526-73-8	5	µg/l	1	Grab	
1,2,4-Trimethylbenzene	95-63-6	5	µg/l	1	Grab	
1,3,5-Trimethylbenzene	108-67-8	5	µg/l	1	Grab	
2,3,6-Trimethylpyridine	1462-84-6	50	µg/l	1	Grab	
2,4,6-Trimethylpyridine	108-75-8	50	µg/l	1	Grab	
sym-Trinitrobenzene	99-35-4	5	µg/l	1	Grab	
2,3,4-Trinitrotoluene	602-29-9	5	µg/l	1	Grab	
2,3,6-Trinitrotoluene	18292-97-2	5	µg/l	1	Grab	
2,4,5-Trinitrotoluene	610-25-3	5	µg/l	1	Grab	
2,4,6-Trinitrotoluene	118-96-7	5	µg/l	1	Grab	
3,4,5-Trinitrotoluene	603-15-6	5	µg/l	1	Grab	
Triphenyl phosphate	115-86-6	4	µg/l	1	Grab	
Vanadium	NA	14	µg/l	1	Grab	

Outfall and Parameters **Outfall 001 – Containerized Well Development Water and/or Pump Test Water**	CAS No.	Limitations Daily Max.	Units	Minimum Monitoring Requirements		FN
				Measurement Frequency	Sample Type	
Vinyl chloride	75-01-4	2	µg/l	1	Grab	
1,2-Xylene	95-47-6	5	µg/l	1	Grab	
1,3-Xylene	108-38-3	5	µg/l	1	Grab	
1,4-Xylene	106-42-3	5	µg/l	1	Grab	
Zinc	NA	66	µg/l	1	Grab	

Footnotes:

1. Samples must be collected prior to each discharge event. Discharge may not commence until the sample results show compliance with the above discharge limitations.

2. Discharge limit is set at the Practical Quantitation Limit (PQL). Actual surface water effluent standard/limitation is below this limit. Analysis of this parameter shall be of the most stringent USEPA approved method in accordance with 40 CFR 136.

3. For PCBs:
    a. The treatment plant operator must monitor this discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achieve a Minimum Detection Level (MDL) of 0.065 µg/l.
    b. 0.065 µg/l is the discharge goal. The treatment plant operator shall report all values above the MDL (0.065 µg/l per Aroclor). If the level of any Aroclor is above 0.65 µg/l, the treatment must evaluate the treatment system and identify the cause of the detectable level of PCBs in the discharge.
    c. If the Department determines that effluent monitoring results above can be prevented by implementation of additional measures as proposed by the treatment plant operator in footnote 3.b 9above, and approved by the Department, the treatment plant operator shall implement such additional measures.

4. The water quality based effluent limit for mercury is 7×10^{-4} µg/l. The enforceable limit is set at 0.05 µg/l for the purposes of compliance. The enforceable limit maybe revised in the future if DEC determines another limit is more appropriate. Mercury must be analyzed using USEPA Method 1631.

5. Only waters generated at remediation sites during sampling, pump tests, well development, or dewatering of excavations are authorized for treatment and discharge.

6. Samples and measurements, to comply with the monitoring requirements specified above, must be taken from the holding tank prior to discharge to the receiving waterbody.

7. Discharge is not authorized until such time as an engineering submission showing the method of treatment and discharge is approved by the Department. The discharge rate may not exceed the effective treatment system or ground adsorptive capacity. All monitoring data, engineering submissions and modification requests must be submitted to the following DER contact person: _____.

8. Total phenolics must be analyzed using EPA Methods 420.1 or 420.2.

9. Discharge to a surface waterbody within the New York City Watershed is not authorized by these effluent criteria. Separate review of any proposed discharge to surface water within the New York City Watershed is required.