

NPDES Permit No. IL0001929  
Notice No. SMT:15052201.smt

Public Notice Beginning Date: **August 13, 2015**

Public Notice Ending Date: **September 14, 2015**

National Pollutant Discharge Elimination System (NPDES)  
Permit Program

Draft Modified NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency  
Bureau of Water,  
Division of Water Pollution Control  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-0610

Name and Address of Discharger:

SABIC Innovative Plastics US LLC  
One Plastics Lane  
Pittsfield, MA 01201

Name and Address of Facility:

SABIC Innovative Plastics US LLC  
2148 N. 2753<sup>rd</sup> Road  
Ottawa, Illinois 61350  
(LaSalle County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Shu-Mei Tsai at 217/782-0610.

The applicant is engaged in the production of acrylonitrile-butadiene-styrene (ABS) plastic pellets and resin, butadiene latex and polytetrafluoroethylene-styrene-acrylonitrile (TSAN) resin (SIC 2821). Water is obtained from on-site wells. Wastewater is generated by periodic purging of the cooling towers and boilers when solids build-up, cleaning process equipment, leaks and spills, regenerating the demineralizer, steam condensates, groundwater collected in vaults and sumps, flushing the fire system and fire fighting training activities, hydrostatic testing activities, contact and non-contact cooling of equipment, sanitary and precipitation which contacts the site.

Plant operation results in an average discharge of 3.21 MGD of sanitary, contact and non-contact cooling water, process wastewater, plant and equipment cleaning water, cooling tower blowdown, boiler blowdown, steam condensate, demineralizer regenerant, hydrostatic test water, fire system and training water, groundwater, rail car wash water, floor wash water, and stormwater from outfall 001, 0.0114 MGD of sanitary from outfall A01, 0.91 MGD of contact and non-contact cooling water, reverse osmosis system reject water, and flush water from the sand separator from outfall B01, 2.29 MGD of plant and equipment cleaning water, cooling tower blowdown, boiler blowdown, steam condensate, demineralizer regenerant, fire system and training water, hydrostatic test water, and groundwater from outfall C01, an intermittent discharge of stormwater from outfall 002, and an intermittent discharge of stormwater from outfall 003.

The following modifications are proposed:

1. Reverse osmosis system reject water will be added as an authorized discharge at Outfall B01.
2. Flush water from the sand separator will be removed from Outfall C01 and added as an authorized discharge at Outfall B01

3. Stormwater discharge will be added as an authorized discharge at Outfall 003.

Application is made for the existing discharges which are located in LaSalle County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Illinois River	41° 19' 45"	North	88° 45' 41"	West	General Use	Not Rated
002	Illinois River	41° 19' 45"	North	88° 45' 26"	West	General Use	Not Rated
003	Illinois River	41° 19' 55"	North	88° 45' 37"	West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The stream segment D-23 receiving the discharge from outfalls 001 and 002 is on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List. The receiving water is not listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The impaired designated uses and pollutants causing impairment are tabulated below:

Designated Uses	Pollutants Causing Impairment
Fish Consumption	Mercury and Polychlorinated biphenyls (PCBs)
Primary Contact	Fecal Coliform

The discharge from the facility shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day		REGULATION	CONCENTRATION LIMITS mg/l		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Outfall: 001 Sanitary, Contact and Non-Contact Cooling Water, Plant and Equipment Cleaning Water, Cooling Tower Blowdown, Boiler Blowdown, Steam Condensate, Demineralizer Regenerant, Hydrostatic Test Water, Fire System and Training Water, Groundwater, Rail Car Wash Water, Floor Wash Water, and Stormwater (DAF = 3.21 MGD)						
Flow						
Temperature						
Total Residual Chlorine					0.05	35 IAC 302.208
Outfall: A01 Sanitary (DAF = 0.0114 MGD)						
Flow						
pH						35 IAC 304.125
BOD <sub>5</sub>				30	60	35 IAC 304.120(a)
Total Suspended Solids				30	60	35 IAC 304.120(a)
Fecal Coliform						35 IAC 304.121
Outfall: B01 Contact and Non-Contact Cooling Water, Reverse Osmosis System Water, and Flush Water from the Sand Separator (DAF=0.91 MGD)						
Flow (MGD)						
pH						35 IAC 304.125
BOD <sub>5</sub>				20	40	35 IAC 304.120(b)
Total Suspended Solids				25	50	35 IAC 304.120(b)

Acenaphthene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Acenaphthylene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Acrylonitrile	0.7	1.8	40 CFR 414.101	0.094	0.232	40 CFR 414.101
Anthracene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Benzene	0.4	1.0	40 CFR 414.101	0.057	0.134	40 CFR 414.101
Benzo(a)anthracene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
3,4-Benzofluoranthene	0.2	0.4	40 CFR 414.101	0.020	0.048	40 CFR 414.101
Benzo(k)fluoranthene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Benzo(a)pyrene	0.2	0.4	40 CFR 414.101	0.020	0.048	40 CFR 414.101
Bis(2-ethylhexyl)phthalate	0.7	2.0	40 CFR 414.101	0.095	0.258	40 CFR 414.101
Carbon Tetrachloride	1.1	2.9	40 CFR 414.101	0.142	0.380	40 CFR 414.101
Chlorobenzene	1.1	2.9	40 CFR 414.101	0.142	0.380	40 CFR 414.101
Chloroethane	0.8	2.2	40 CFR 414.101	0.11	0.295	40 CFR 414.101
Chloroform	0.8	2.5	40 CFR 414.101	0.111	0.325	40 CFR 414.101
Chrysene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Di-n-butyl phthalate	0.2	0.3	40 CFR 414.101	0.020	0.043	40 CFR 414.101
1,2-Dichlorobenzene	1.5	6.0	40 CFR 414.101	0.196	0.794	40 CFR 414.101
1,3-Dichlorobenzene	1.1	2.9	40 CFR 414.101	0.142	0.380	40 CFR 414.101
1,4-Dichlorobenzene	1.1	2.9	40 CFR 414.101	0.142	0.380	40 CFR 414.101
1,1-Dichloroethane	0.2	0.4	40 CFR 414.101	0.022	0.059	40 CFR 414.101
1,2- Dichloroethane	1.4	4.4	40 CFR 414.101	0.18	0.574	40 CFR 414.101
1,1-Dichloroethylene	0.2	0.5	40 CFR 414.101	0.022	0.060	40 CFR 414.101
1,2-trans- Dichloroethylene	0.2	0.5	40 CFR 414.101	0.025	0.066	40 CFR 414.101
1,2-Dichloropropane	1.5	6.0	40 CFR 414.101	0.196	0.794	40 CFR 414.101
1,2-Dichloropropylene	1.5	6.0	40 CFR 414.101	0.196	0.794	40 CFR 414.101
Diethyl phthalate	0.3	0.9	40 CFR 414.101	0.046	0.113	40 CFR 414.101
2,4-Dimethylphenol	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Dimethyl phthalate	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
4,6-Dinitro-o-cresol	0.6	2.1	40 CFR 414.101	0.078	0.277	40 CFR 414.101
2,4-Dinitrophenol	9.2	33	40 CFR 414.101	1.207	4.291	40 CFR 414.101
Ethylbenzene	1.1	2.9	40 CFR 414.101	0.142	0.380	40 CFR 414.101
Fluoranthene	0.2	0.4	40 CFR 414.101	0.022	0.054	40 CFR 414.101

Fluorene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Hexachlorobenzene	1.5	6.0	40 CFR 414.101	0.196	0.794	40 CFR 414.101
Hexachlorobutadiene	1.1	2.9	40 CFR 414.101	0.142	0.380	40 CFR 414.101
Hexachloroethane	1.5	6.0	40 CFR 414.101	0.196	0.794	40 CFR 414.101
Methyl Chloride	0.8	2.2	40 CFR 414.101	0.110	0.295	40 CFR 414.101
Methylene Chloride	0.3	1.3	40 CFR 414.101	0.036	0.170	40 CFR 414.101
Naphthalene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Nitrobenzene	17	49	40 CFR 414.101	2.237	6.402	40 CFR 414.101
2-Nitrophenol	0.5	1.8	40 CFR 414.101	0.065	0.231	40 CFR 414.101
4-Nitrophenol	1.2	4.4	40 CFR 414.101	0.162	0.576	40 CFR 414.101
Phenanthrene	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Phenol	0.1	0.4	40 CFR 414.101	0.019	0.047	40 CFR 414.101
Pyrene	0.2	0.4	40 CFR 414.101	0.020	0.048	40 CFR 414.101
Tetrachloroethylene	0.4	1.2	40 CFR 414.101	0.052	0.164	40 CFR 414.101
Toluene	0.2	0.6	40 CFR 414.101	0.028	0.074	40 CFR 414.101
Chromium	7.6	15	35 IAC 309.143	1.0	2.0	35 IAC 304.124
Copper	3.8	7.6	35 IAC 309.143	0.5	1.0	35 IAC 304.124
Cyanide	0.8	1.5	35 IAC 309.143	0.1	0.2	35 IAC 304.124
Lead	1.5	3.0	35 IAC 309.143	0.2	0.4	35 IAC 304.124
Nickel	7.6	15	35 IAC 309.143	1.0	2.0	35 IAC 304.124
Zinc	7.6	15	35 IAC 309.143	1.0	2.0	35 IAC 304.124
1,2,4-Trichlorobenzene	1.5	6.0	40 CFR 414.101	0.196	0.794	40 CFR 414.101
1,1,1-Trichloroethane	0.2	0.4	40 CFR 414.101	0.022	0.059	40 CFR 414.101
1,1,2-Trichloroethane	0.2	1.0	40 CFR 414.101	0.032	0.127	40 CFR 414.101
Trichloroethylene	0.2	0.5	40 CFR 414.101	0.026	0.069	40 CFR 414.101
Vinyl Chloride	0.7	1.3	40 CFR 414.101	0.097	0.172	40 CFR 414.101
Outfall: C01 Process Wastewater, Plant and Equipment Cleaning Water, Cooling Tower Blowdown, Boiler Blowdown, Steam Condensate, Demineralizer Regenerant, Fire System and Training Water, Hydrostatic Test Water, and Groundwater (DAF = 2.29 MGD)						
Flow (MGD)						
pH						40 CFR 414.41
BOD <sub>5</sub>				20	40	35 IAC 304.120(b)
Total Suspended Solids				25	50	35 IAC 304.120(b)
Oil and Grease				15	30	35 IAC 304.124

Acenaphthene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Acenaphthylene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Acrylonitrile	1.8	4.6	40 CFR 414.91	0.096	0.242	40 CFR 414.91
Anthracene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Benzene	0.7	2.6	40 CFR 414.91	0.037	0.136	40 CFR 414.91
Benzo(a)anthracene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
3,4-Benzofluoranthene	0.4	1.2	40 CFR 414.91	0.023	0.061	40 CFR 414.91
Benzo(k)fluoranthene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Benzo(a)pyrene	0.4	1.2	40 CFR 414.91	0.023	0.061	40 CFR 414.91
Bis(2-ethylhexyl)phthalate	2.0	5.3	40 CFR 414.91	0.103	0.279	40 CFR 414.91
Carbon Tetrachloride	0.3	0.7	40 CFR 414.91	0.018	0.038	40 CFR 414.91
Chlorobenzene	0.3	0.5	40 CFR 414.91	0.015	0.028	40 CFR 414.91
Chloroethane	2.0	5.1	40 CFR 414.91	0.104	0.268	40 CFR 414.91
Chloroform	0.4	0.9	40 CFR 414.91	0.021	0.046	40 CFR 414.91
2-Chlorophenol	0.6	1.9	40 CFR 414.91	0.031	0.098	40 CFR 414.91
Chrysene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Di-n-butyl phthalate	0.5	1.1	40 CFR 414.91	0.027	0.057	40 CFR 414.91
1,2-Dichlorobenzene	1.5	3.1	40 CFR 414.91	0.077	0.163	40 CFR 414.91
1,3-Dichlorobenzene	0.6	0.8	40 CFR 414.91	0.031	0.044	40 CFR 414.91
1,4-Dichlorobenzene	0.3	0.5	40 CFR 414.91	0.015	0.028	40 CFR 414.91
1,1-Dichloroethane	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
1,2- Dichloroethane	1.3	4.0	40 CFR 414.91	0.068	0.211	40 CFR 414.91
1,1-Dichloroethylene	0.3	0.5	40 CFR 414.91	0.016	0.025	40 CFR 414.91
1,2-trans- Dichloroethylene	0.4	1.0	40 CFR 414.91	0.021	0.054	40 CFR 414.91
2,4-Dichlorophenol	0.7	2.1	40 CFR 414.91	0.039	0.112	40 CFR 414.91
1,2-Dichloropropane	2.9	4.4	40 CFR 414.91	0.153	0.230	40 CFR 414.91
1,2-Dichloropropylene	0.6	0.8	40 CFR 414.91	0.029	0.044	40 CFR 414.91
Diethyl phthalate	1.5	3.9	40 CFR 414.91	0.071	0.203	40 CFR 414.91
2,4-Dimethylphenol	0.3	0.7	40 CFR 414.91	0.018	0.036	40 CFR 414.91
Dimethyl phthalate	0.4	0.9	40 CFR 414.91	0.019	0.047	40 CFR 414.91
4,6-Dinitro-o-cresol	1.5	5.3	40 CFR 414.91	0.078	0.277	40 CFR 414.91
2,4-Dinitrophenol	1.4	2.3	40 CFR 414.91	0.071	0.123	40 CFR 414.91

2,4-Dinitrotoluene	2.2	5.4	40 CFR 414.91	0.113	0.285	40 CFR 414.91
2,6-Dinitrotoluene	4.9	12	40 CFR 414.91	0.255	0.641	40 CFR 414.91
Ethylbenzene	0.6	2.1	40 CFR 414.91	0.032	0.108	40 CFR 414.91
Fluoranthene	0.5	1.3	40 CFR 414.91	0.025	0.068	40 CFR 414.91
Fluorene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Hexachlorobenzene	0.3	0.5	40 CFR 414.91	0.015	0.028	40 CFR 414.91
Hexachlorobutadiene	0.4	0.9	40 CFR 414.91	0.020	0.049	40 CFR 414.91
Hexachloroethane	0.4	1.0	40 CFR 414.91	0.021	0.054	40 CFR 414.91
Methyl Chloride	1.6	3.6	40 CFR 414.91	0.086	0.190	40 CFR 414.91
Methylene Chloride	0.8	1.7	40 CFR 414.91	0.040	0.089	40 CFR 414.91
Naphthalene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Nitrobenzene	0.5	1.3	40 CFR 414.91	0.027	0.068	40 CFR 414.91
2-Nitrophenol	0.8	1.3	40 CFR 414.91	0.041	0.069	40 CFR 414.91
4-Nitrophenol	1.4	2.4	40 CFR 414.91	0.072	0.124	40 CFR 414.91
Phenanthrene	0.4	1.1	40 CFR 414.91	0.022	0.059	40 CFR 414.91
Phenol	0.3	0.5	40 CFR 414.91	0.015	0.026	40CFR122.44(I)
Pyrene	0.5	1.3	40 CFR 414.91	0.025	0.067	40 CFR 414.91
Tetrachloroethylene	0.4	1.1	40 CFR 414.91	0.022	0.056	40 CFR 414.91
Toluene	0.5	1.5	40 CFR 414.91	0.026	0.08	40 CFR 414.91
Chromium	19	38	35 IAC 309.143	1.0	2.0	35 IAC 304.124
Copper	9.6	19	35 IAC 309.143	0.5	1.0	35 IAC 304.124
Cyanide	1.9	3.8	35 IAC 309.143	0.10	0.20	35 IAC 304.124
Lead	3.8	7.6	40 CFR 414.91	0.2	0.4	35 IAC 304.124
Nickel	19	38	35 IAC 309.143	1.0	2.0	35 IAC 304.124
Zinc	19	38	35 IAC 309.143	1.0	2.0	35 IAC 304.124
1,2,4-Trichlorobenzene	1.3	2.7	40 CFR 414.91	0.068	0.14	40 CFR 414.91
1,1,1-Trichloroethane	0.4	1.0	40 CFR 414.91	0.021	0.054	40 CFR 414.91
1,1,2-Trichloroethane	0.4	1.0	40 CFR 414.91	0.021	0.054	40 CFR 414.91
Trichloroethylene	0.4	1.0	40 CFR 414.91	0.021	0.054	40 CFR 414.91
Vinyl Chloride	2.0	5.1	40 CFR 414.91	0.104	0.268	40 CFR 414.91
Butyl Acrylate						35 IAC 309.146
Monomer						35 IAC 309.146

Antifoam – Oil Base Defoamer					35 IAC 309.146
Outfall: 002 Stormwater (Intermittent Discharge)					
Stormwater Pollution Prevention Plan					40 CFR 122.26(b)(14)(ii)

Outfall: 003 Stormwater (Intermittent Discharge)					
Stormwater Pollution Prevention Plan					40 CFR 122.26(b)(14)(ii)

Load Limit Calculations:

Production based load limits were calculated by multiplying the average production by the effluent limit contained in 40 CFR 414. Production figures utilized in these calculations for the following subcategories are as follows:

<u>Subcategory</u>	<u>Production Rate</u>
Thermoplastic Resins	0.91 MGD (40 CFR 414.101) 2.29 MGD (40 CFR 414.91)

The following sample calculation shows the methodology utilized to determine production based load limitations:

Example Calculation:

Acenaphthene Monthly Average Load Limit = Concentration Given in 40 CFR 414.91 x Flow x Unit Conversion Factor = 19 µg/L x (1 mg / 1000 µg) x 0.91 MGD x 8.34 = 0.14 rounded to 0.1 lbs/day

Acenaphthene Daily Maximum Load Limit = Concentration given in 40 CFR 414.91 x Flow x Unit Conversion Factor = 47 µg/L x (1 mg / 1000 µg) x 0.91 MGD x 8.34 = 0.36 rounded to 0.4 lbs/day

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

The special conditions clarify: flow, pH, monitoring location, DMRs, re-opener, biomonitoring, fecal coliform, treatment system operator requirement, and metals monitoring.

Antidegradation Assessment for SABIC Innovative Plastics  
NPDES Permit No. IL0001929 LaSalle County

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This facility manufactures ABS engineering plastics. Three wastestreams combine to form Outfall 001; a sanitary waste outfall, a process wastewater outfall and a cooling water outfall. Several years ago the facility changed the process by which it produced the treated groundwater used in manufacturing. A reverse osmosis system was installed and also a groundwater sand separator was added. Reject water from the RO system and flush water from the sand separator were added to the 001 effluent. These changes were not reported to IEPA at the time they were made. The facility submitted an antidegradation assessment for these discharges as a result of an IEPA compliance action.

**Identification and Characterization of the Affected Water Body.**

Outfall 001 discharges to the Illinois River at a point where 1985 cfs of flow exists upstream during critical 7Q10 low-flow conditions. The Illinois River (segment D-23) is a General Use water. The Illinois River is listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List as an impaired water body for fish consumption and primary contact uses. Causes of fish consumption use impairment are given as mercury and PCBs. The cause of primary contact use impairment is fecal coliform bacteria. The Illinois River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System* at this locality. The Illinois River is designated as an **enhanced** water at this location pursuant to the dissolved oxygen water quality standard.

### **Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.**

Water withdrawn from wells is treated by the RO system and the dissolved solids in this source water will then be discharged to the Illinois River via Outfall 001. A chemical analysis of the RO reject water shows that the dissolved solids anions being concentrated and discharged in the effluent are chloride and sulfate. In Illinois groundwater the cations associated with these anions are sodium, calcium and magnesium. The sand separator flush water has similar dissolved solids, but is not concentrated from the source water. In each case only a small amount of additional water is discharged over that discharged under the previous system. No adverse impact is anticipated in the Illinois River as the increase in concentration of the dissolved solids is infinitesimal.

### **Fate and Effect of Parameters Proposed for Increased Loading.**

The natural groundwater chemical substances removed from the source water and discharged to the Illinois River will have no adverse impact on the river. These substances will be integrated into the Illinois River and this will have an imperceptible effect on the concentration of the constituents in the river.

### **Purpose and Anticipated Benefits of the Proposed Activity.**

The addition of the RO system will allow more efficient production of high quality water for use in plant boilers and in the manufacturing process. The sand removal system will allow more efficient removal of sand solids from the wells so that these particles do not harm the water systems at the plant. The addition of these wastewaters allows the plant to operate more efficiently, thereby preserving jobs.

### **Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.**

The facility requires ultrapure water for use in processes. This water cannot be supply by municipal water supplies. Any method of producing pure water will result in the discharge of the original constituents in the source water. Sending the wastewater from the purification process to a municipal sewage treatment plant will not result in any dissolved minerals being removed. There are no feasible alternatives to the discharge of the groundwater minerals to the Illinois River.

### **Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities**

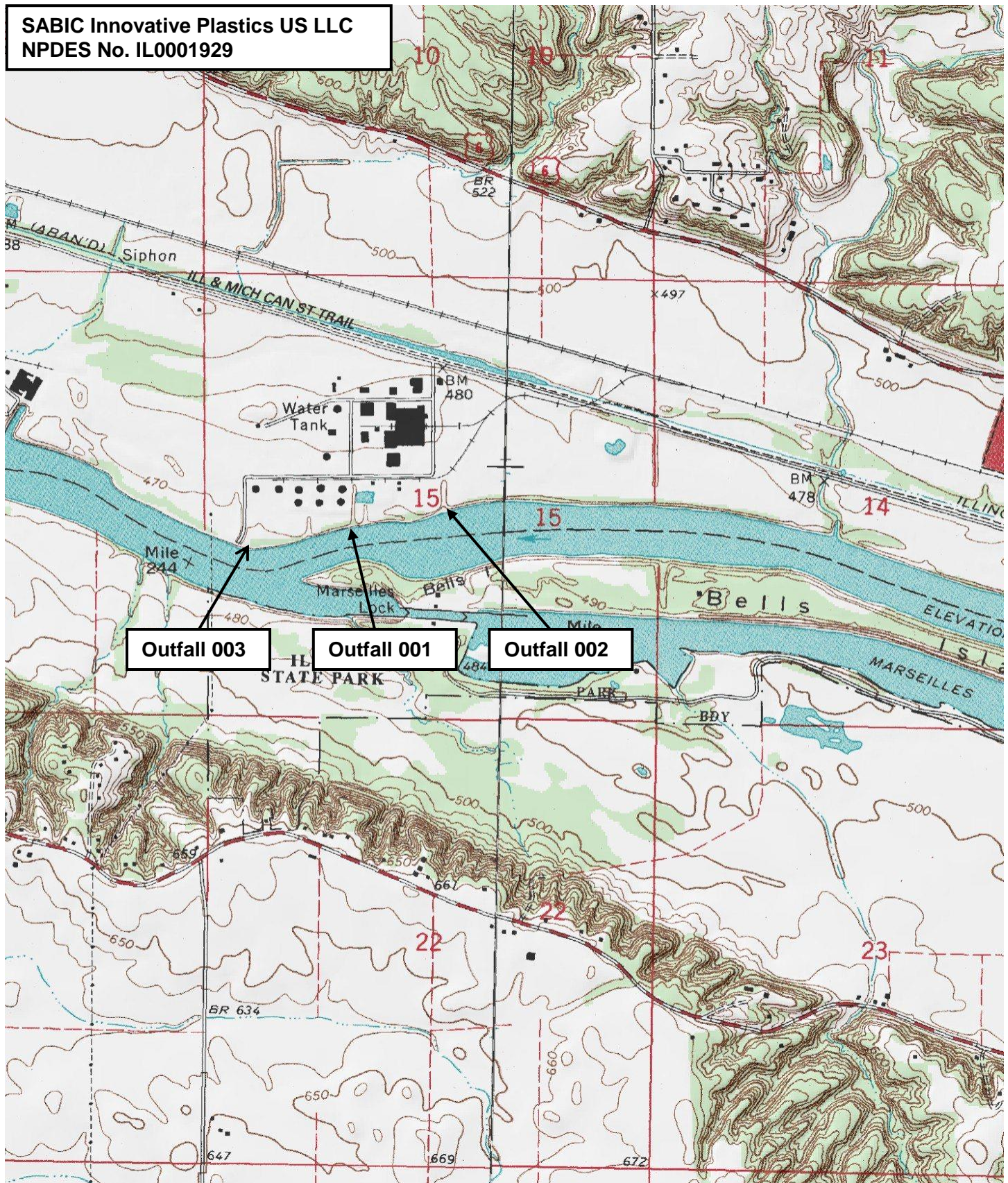
An Eco-CAT endangered species consultation in a February 18, 2015 letter from the Illinois Department of Natural Resources that indicated that impact to any threatened or endangered species was unlikely from this project and that consultation was terminated.

### **Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community by allowing the facility to remain competitive and preserve jobs. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.



**SABIC Innovative Plastics US LLC**  
**NPDES No. IL0001929**



### Public Notice of Draft Permit

Public Notice Number SMT:15052201.smt is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0001929 has been prepared under 40 CFR 124.6(d) for SABIC Innovative Plastics US LLC, One Plastics Lane, Pittsfield, MA 01201, (LaSalle County) for discharge into the Illinois River.

The applicant is engaged in the production of acrylonitrile-butadiene-styrene (ABS) plastic pellets and resin, butadiene latex and polytetrafluoroethylene-styrene-acrylonitrile (TSAN) resin (SIC 2821) Water is obtained from on-site wells. Wastewater is generated by periodic purging of the cooling towers and boilers when solids build-up, cleaning process equipment, leaks and spills, regenerating the demineralizer, steam condensates, groundwater collected in vaults and sumps, flushing the fire system and fire fighting training activities, hydrostatic testing activities, contact and non-contact cooling of equipment, sanitary and precipitation which contacts the site.

Plant operation results in an average discharge of 3.21 MGD of sanitary, process wastewater, contact and non-contact cooling water, plant and equipment cleaning water, cooling tower blowdown, boiler blowdown, steam condensate, demineralizer regenerant, hydrostatic test water, fire system and training water, groundwater, rail car wash water, and floor wash water from outfall 001, 0.0114 MGD of sanitary from outfall A01, 0.91 MGD of contact and non-contact cooling water, reverse osmosis system reject water, and flush water from the sand separator from outfall B01, 2.29 MGD of plant and equipment cleaning water, cooling tower blowdown, boiler blowdown, steam condensate, demineralizer regenerant, fire system and training water, and hydrostatic test water from outfall C01, an intermittent discharge of stormwater from outfall 002, and an intermittent discharge of stormwater from outfall 003.

The application, draft permit and other documents are available for inspection and may be copied at the Agency between 9:30 a.m. and 3:30 p.m. Monday through Friday. A Fact Sheet containing more detailed information is available at no charge. For further information, call the Public Notice Clerk at 217/782-0610.

Interested persons are invited to submit written comments on the draft permit to the Agency at the above address. The NPDES Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 30 days from the date of this publication shall be considered in making the final decision regarding permit issuance.

Any interested person may submit written request for a public hearing on the draft

If written comments and/or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing.

NPDES Permit No. IL0001929

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified (NPDES) Permit

Expiration Date: August 31, 2018

Issue Date: August 19, 2013  
Effective Date: September 1, 2013  
Modification Date: January 23, 2015  
2<sup>nd</sup> Modification Date:

Name and Address of Permittee:

SABIC Innovative Plastics US LLC  
One Plastics Lane  
Pittsfield, MA 01201

Facility Name and Address:

SABIC Innovative Plastics US LLC  
2148 North 2753<sup>rd</sup> Road  
Ottawa, Illinois 61350  
(LaSalle County)

Discharge Number and Name:	Receiving Waters:
001 Sanitary, Contact and Non-Contact Cooling Water, Plant and Equipment Cleaning Water, Cooling Tower Blowdown, Boiler Blowdown, Steam Condensate, Demineralizer Regenerant, Hydrostatic Test Water, Fire System and Training Water, Groundwater, Rail Car Wash Water, Floor Wash Water, and Stormwater	Illinois River
A01 Sanitary	
B01 Contact and Non-Contact Cooling Water, Reverse Osmosis System Reject Water, and Flush Water from the Sand Separator	
C01 Process Wastewater, Plant and Equipment Cleaning Water, Cooling Tower Blowdown, Boiler Blowdown, Steam Condensate, Demineralizer Regenerant, Fire System and Training Water, Hydrostatic Test Water, and Groundwater	
002 Stormwater	Illinois River
003 Stormwater	Illinois River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

NPDES Permit No. IL0001929

Effluent Limitations and Monitoring

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 001 Sanitary, Process Wastewater, Contact and Non-Contact Cooling Water, Plant and Equipment Cleaning Water, Cooling Tower Blowdown, Boiler Blowdown, Steam Condensate, Demineralizer Regenerant, Hydrostatic Test Water, Fire System and Training Water, Groundwater, Rail Car Wash Water, Floor Wash Water, and Stormwater (DAF = 3.21 MGD)

PARAMETER	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCENTRATION <u>LIMITS mg/l</u>		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Daily	Continuous
Temperature	See Special Condition 3				1/Week	Single Reading
Total Residual Chlorine	See Special Condition 5			0.05	*	Grab

Stormwater shall be managed in accordance with Special Condition 13.

\*Total Residual Chlorine shall be monitored on a once per week basis. Following 12 consecutive samples with results below the analytical detection limit, the sampling frequency may be reduced to one per month.

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Effluent Limitations and Monitoring

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: A01 Sanitary (DAF = 0.0114 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				1/Month	
pH	See Special Condition 2				1/Month	Grab
BOD <sub>5</sub>			30	60	1/Month	Grab
Total Suspended Solids			30	60	1/Month	Grab
Fecal Coliform	See Special Condition 4			400/100 ml	1/Month	Grab

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Effluent Limitations and Monitoring

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: B01 Contact and Non-Contact Cooling Water, Reverse Osmosis System Reject Water, and Flush Water from the Sand Separator (DAF = 0.91 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				2/Month	Grab
BOD <sub>5</sub>			20	40	2/Month	Grab
Total Suspended Solids			25	50	2/Month	Grab
Acenaphthene	0.1	0.4	0.019	0.047	2/Year*	Grab
Acenaphthylene	0.1	0.4	0.019	0.047	2/Year*	Grab
Acrylonitrile	0.7	1.8	0.094	0.232	2/Year*	Grab
Anthracene	0.1	0.4	0.019	0.047	2/Year*	Grab
Benzene	0.4	1.0	0.057	0.134	2/Year*	Grab
Benzo(a)anthracene	0.1	0.4	0.019	0.047	2/Year*	Grab
3,4-Benzofluoranthene	0.2	0.4	0.020	0.048	2/Year*	Grab
Benzo(k)fluoranthene	0.1	0.4	0.019	0.047	2/Year*	Grab
Benzo(a)pyrene	0.2	0.4	0.020	0.048	2/Year*	Grab
Bis(2-ethylhexyl)phthalate	0.7	2.0	0.095	0.258	2/Year*	Grab
Carbon Tetrachloride	1.1	2.9	0.142	0.380	2/Year*	Grab
Chlorobenzene	1.1	2.9	0.142	0.380	2/Year*	Grab
Chloroethane	0.8	2.2	0.11	0.295	2/Year*	Grab
Chloroform	0.8	2.5	0.111	0.325	2/Year*	Grab
Chrysene	0.1	0.4	0.019	0.047	2/Year*	Grab
Di-n-butyl phthalate	0.2	0.3	0.020	0.043	2/Year*	Grab
1,2-Dichlorobenzene	1.5	6.0	0.196	0.794	2/Year*	Grab
1,3-Dichlorobenzene	1.1	2.9	0.142	0.380	2/Year*	Grab
1,4-Dichlorobenzene	1.1	2.9	0.142	0.380	2/Year*	Grab
1,1-Dichloroethane	0.2	0.4	0.022	0.059	2/Year*	Grab

1,2- Dichloroethane	1.4	4.4	0.18	0.574	2/Year*	Grab
1,1-Dichloroethylene	0.2	0.5	0.022	0.060	2/Year*	Grab
1,2-trans- Dichloroethylene	0.2	0.5	0.025	0.066	2/Year*	Grab
1,2-Dichloropropane	1.5	6.0	0.196	0.794	2/Year*	Grab
1,2-Dichloropropylene	1.5	6.0	0.196	0.794	2/Year*	Grab
Diethyl phthalate	0.3	0.9	0.046	0.113	2/Year*	Grab
2,4-Dimethylphenol	0.1	0.4	0.019	0.047	2/Year*	Grab
Dimethyl phthalate	0.1	0.4	0.019	0.047	2/Year*	Grab
4,6-Dinitro-o-cresol	0.6	2.1	0.078	0.277	2/Year*	Grab
2,4-Dinitrophenol	9.2	33	1.207	4.291	2/Year*	Grab
Ethylbenzene	1.1	2.9	0.142	0.380	2/Year*	Grab
Fluoranthene	0.2	0.4	0.022	0.054	2/Year*	Grab
Fluorene	0.1	0.4	0.019	0.047	2/Year*	Grab
Hexachlorobenzene	1.5	6.0	0.196	0.794	2/Year*	Grab
Hexachlorobutadiene	1.1	2.9	0.142	0.380	2/Year*	Grab
Hexachloroethane	1.5	6.0	0.196	0.794	2/Year*	Grab
Methyl Chloride	0.8	2.2	0.110	0.295	2/Year*	Grab
Methylene Chloride	0.3	1.3	0.036	0.170	2/Year*	Grab
Naphthalene	0.1	0.4	0.019	0.047	2/Year*	Grab
Nitrobenzene	17	49	2.237	6.402	2/Year*	Grab
2-Nitrophenol	0.5	1.8	0.065	0.231	2/Year*	Grab
4-Nitrophenol	1.2	4.4	0.162	0.576	2/Year*	Grab
Phenanthrene	0.1	0.4	0.019	0.047	2/Year*	Grab
Phenol	0.1	0.4	0.019	0.047	2/Year*	Grab
Pyrene	0.2	0.4	0.020	0.048	2/Year*	Grab
Tetrachloroethylene	0.4	1.2	0.052	0.164	2/Year*	Grab
Toluene	0.2	0.6	0.028	0.074	2/Year*	Grab
Chromium	7.6	15	1.0	2.0	2/Year*	Composite
Copper	3.8	7.6	0.5	1.0	2/Year*	Composite
Cyanide	0.8	1.5	0.1	0.2	2/Year*	Composite
Lead	1.5	3.0	0.2	0.4	2/Year*	Composite
Nickel	7.6	15	1.0	2.0	2/Year*	Composite
Zinc	7.6	15	1.0	2.0	2/Year*	Composite
1,2,4-Trichlorobenzene	1.5	6.0	0.196	0.794	2/Year*	Grab

1,1,1-Trichloroethane	0.2	0.4	0.022	0.059	2/Year*	Grab
1,1,2-Trichloroethane	0.2	1.0	0.032	0.127	2/Year*	Grab
Trichloroethylene	0.2	0.5	0.026	0.069	2/Year*	Grab
Vinyl Chloride	0.7	1.3	0.097	0.172	2/Year*	Grab

\*The Permittee shall monitor the parameters once per year for the calendar years 2014, 2015, and 2016, and shall monitor twice per year for the calendar years 2017 and 2018.



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Effluent Limitations and Monitoring

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: C01 Process Wastewater, Plant and Equipment Cleaning Water, Cooling Tower Blowdown, Boiler Blowdown, Steam Condensate, Demineralizer Regenerant, Fire System and Training Water, Hydrostatic Test Water, and Groundwater (DAF = 2.29 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				2/Month	Grab
BOD <sub>5</sub>			20	40	2/Month	Composite
Total Suspended Solids			25	50	2/Month	Composite
Oil and Grease			15	30	2/Month	Grab
Ammonia			3.0	6.0	2/Month	Grab
Acenaphthene	0.4	1.1	0.022	0.059	2/Year*	Grab
Acenaphthylene	0.4	1.1	0.022	0.059	2/Year*	Grab
Acrylonitrile	1.8	4.6	0.096	0.242	2/Year*	Grab
Anthracene	0.4	1.1	0.022	0.059	2/Year*	Grab
Benzene	0.7	2.6	0.037	0.136	2/Year*	Grab
Benzo(a)anthracene	0.4	1.1	0.022	0.059	2/Year*	Grab
3,4-Benzofluoranthene	0.4	1.2	0.023	0.061	2/Year*	Grab
Benzo(k)fluoranthene	0.4	1.1	0.022	0.059	2/Year*	Grab
Benzo(a)pyrene	0.4	1.2	0.023	0.061	2/Year*	Grab
Bis(2-ethylhexyl)phthalate	2.0	5.3	0.103	0.279	2/Year*	Grab
Carbon Tetrachloride	0.3	0.7	0.018	0.038	2/Year*	Grab
Chlorobenzene	0.3	0.5	0.015	0.028	2/Year*	Grab
Chloroethane	2.0	5.1	0.104	0.268	2/Year*	Grab
Chloroform	0.4	0.9	0.021	0.046	2/Year*	Grab
2-Chlorophenol	0.6	1.9	0.031	0.098	2/Year*	Grab
Chrysene	0.4	1.1	0.022	0.059	2/Year*	Grab
Di-n-butyl phthalate	0.5	1.1	0.027	0.057	2/Year*	Grab
1,2-Dichlorobenzene	1.5	3.1	0.077	0.163	2/Year*	Grab

1,3-Dichlorobenzene	0.6	0.8	0.031	0.044	2/Year*	Grab
1,4-Dichlorobenzene	0.3	0.5	0.015	0.028	2/Year*	Grab
1,1-Dichloroethane	0.4	1.1	0.022	0.059	2/Year*	Grab
1,2- Dichloroethane	1.3	4.0	0.068	0.211	2/Year*	Grab
1,1-Dichloroethylene	0.3	0.5	0.016	0.025	2/Year*	Grab
1,2-trans- Dichloroethylene	0.4	1.0	0.021	0.054	2/Year*	Grab
2,4-Dichlorophenol	0.7	2.1	0.039	0.112	2/Year*	Grab
1,2-Dichloropropane	2.9	4.4	0.153	0.230	2/Year*	Grab
1,2-Dichloropropylene	0.6	0.8	0.029	0.044	2/Year*	Grab
Diethyl phthalate	1.5	3.9	0.071	0.203	2/Year*	Grab
2,4-Dimethylphenol	0.3	0.7	0.018	0.036	2/Year*	Grab
Dimethyl phthalate	0.4	0.9	0.019	0.047	2/Year*	Grab
4,6-Dinitro-o-cresol	1.5	5.3	0.078	0.277	2/Year*	Grab
2,4-Dinitrophenol	1.4	2.3	0.071	0.123	2/Year*	Grab
2,4-Dinitrotoluene	2.2	5.4	0.113	0.285	2/Year*	Grab
2,6-Dinitrotoluene	4.9	12	0.255	0.641	2/Year*	Grab
Ethylbenzene	0.6	2.1	0.032	0.108	2/Year*	Grab
Fluoranthene	0.5	1.3	0.025	0.068	2/Year*	Grab
Fluorene	0.4	1.1	0.022	0.059	2/Year*	Grab
Hexachlorobenzene	0.3	0.5	0.015	0.028	2/Year*	Grab
Hexachlorobutadiene	0.4	0.9	0.020	0.049	2/Year*	Grab
Hexachloroethane	0.4	1.0	0.021	0.054	2/Year*	Grab
Methyl Chloride	1.6	3.6	0.086	0.190	2/Year*	Grab
Methylene Chloride	0.8	1.7	0.040	0.089	2/Year*	Grab
Naphthalene	0.4	1.1	0.022	0.059	2/Year*	Grab
Nitrobenzene	0.5	1.3	0.027	0.068	2/Year*	Grab
2-Nitrophenol	0.8	1.3	0.041	0.069	2/Year*	Grab
4-Nitrophenol	1.4	2.4	0.072	0.124	2/Year*	Grab
Phenanthrene	0.4	1.1	0.022	0.059	2/Year*	Grab
Phenol	0.3	0.5	0.015	0.026	2/Year*	Grab
Pyrene	0.5	1.3	0.025	0.067	2/Year*	Grab
Tetrachloroethylene	0.4	1.1	0.022	0.056	2/Year*	Grab

Toluene	0.5	1.5	0.026	0.08	2/Year*	Grab
Chromium	19	38	1.0	2.0	2/Year*	Composite
Copper	9.6	19	0.5	1.0	2/Year*	Composite
Cyanide	1.9	3.8	0.10	0.20	2/Year*	Composite
Lead	3.8	7.6	0.2	0.4	2/Year*	Composite
Nickel	19	38	1.0	2.0	2/Year*	Composite
Zinc	19	38	1.0	2.0	2/Year*	Composite
1,2,4-Trichlorobenzene	1.3	2.7	0.068	0.14	2/Year*	Grab
1,1,1-Trichloroethane	0.4	1.0	0.021	0.054	2/Year*	Grab
1,1,2-Trichloroethane	0.4	1.0	0.021	0.054	2/Year*	Grab
Trichloroethylene	0.4	1.0	0.021	0.054	2/Year*	Grab
Vinyl Chloride	2.0	5.1	0.104	0.268	2/Year*	Grab
Butyl Acrylate			Monitoring Only		2/Year*	Grab
Monomer			Monitoring Only		2/Year*	Grab
Antifoam – Oil Base Defoamer			Monitoring Only		2/Year*	Grab

\*The Permittee shall monitor the parameters once per year for the calendar years 2014, 2015, and 2016, and shall monitor twice per year for the calendar years 2017 and 2018.

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Effluent Limitations and Monitoring

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 002 Stormwater (Intermittent Discharge)

See Special Condition 13.

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Effluent Limitations and Monitoring

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 003 Stormwater (Intermittent Discharge)

See Special Condition 13.

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Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum value on the monthly Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. This facility meets the allowed mixing criteria for thermal discharges pursuant to 35 IAC 302.102. No reasonable potential exists for the discharge to exceed thermal water quality standards. This determination is based a design average flow of 3.2 MGD and a temperature range of 60 °F to 90 °F. The permittee shall monitor the flow and temperature of the discharge prior to entry into the receiving water body. Monitoring results shall be reported on the monthly Discharge Monitoring Report. This permit may be modified to include formal temperature limitations should the results of the monitoring show that there is reasonable potential to exceed a thermal water quality standard. Modification of this permit shall follow public notice and opportunity for comment.

There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions. The normal daily and seasonal temperature fluctuations which existed before the addition of heat due to other than natural causes shall be maintained.

SPECIAL CONDITION 4. For Outfall A01, the daily maximum fecal coliform count shall not exceed 400 per 100 ml.

SPECIAL CONDITION 5. All samples for total residual chlorine (TRC) shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.

SPECIAL CONDITION 6. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 7. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit NetDMR instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 28<sup>th</sup> day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 8. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 9. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 10. In the event that the permittee must request a change in the use of water treatment additives, the permittee must request a change in this permit in accordance with Standard Conditions - - Attachment H.

SPECIAL CONDITION 11. The Permittee shall monitor the effluent from outfall 001 for the following parameters on a semi-annual basis. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results

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Special Conditions

shall be submitted to the address in special condition 7 in June and December. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

STORET CODE	PARAMETER	Minimum reporting limit
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab) (weak acid dissociable)	5.0 ug/L
00720	Cyanide (grab not to exceed 24 hours) (total)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

\*1.0 ng/L = 1 part per trillion.

\*\*Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

SPECIAL CONDITION 12. The Permittee shall conduct biomonitoring of the effluent from Outfall 001.

## Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:
  - a. Fish - 96 hour static LC50 Bioassay using fathead minnows (*Pimephales promelas*).
  - b. Invertebrate 48-hour static LC50 Bioassay using *Ceriodaphnia*.
2. Testing Frequency - The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18<sup>th</sup>, 15<sup>th</sup>, 12<sup>th</sup>, and 9<sup>th</sup> month prior to the expiration date of this permit. When possible, bioassay sample collection should coincide with sample collection for metals analysis and other parameters (e.g. TDS, ammonia) that may contribute to effluent toxicity.
3. Reporting - Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory.
4. Toxicity – Other than toxicity attributed to parameters that meet secondary contact water quality standards or have been granted relief by the Illinois Pollution Control Board, should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within one (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification and reduction evaluation process as outlined below.

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5. Toxicity Identification and Reduction Evaluation - Should any of the additional bioassays result in toxicity to  $\geq 50\%$  of organisms tested in the 100% effluent treatment, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification evaluation process in accordance with Methods for Aquatic Toxicity Identification Evaluations, EPA/600/6-91/003. The IEPA may also require, upon notification, that the Permittee prepare a plan for toxicity reduction evaluation to be developed in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, which shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 13.STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.
1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.  
  
Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.
  2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act  
  
For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.
- B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.  
  
Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.
- C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.
- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:
1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.
  2. A site map showing:



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- i. The storm water conveyance and discharge structures;
  - ii. An outline of the storm water drainage areas for each storm water discharge point;
  - iii. Paved areas and buildings;
  - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
  - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
  - vi. Surface water locations and/or municipal storm drain locations
  - vii. Areas of existing and potential soil erosion;
  - viii. Vehicle service areas;
  - ix. Material loading, unloading, and access areas.
  - x. Areas under items iv and ix above may be withheld from the site for security reasons.
3. A narrative description of the following:
- i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
  - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
  - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
  - iv. Industrial storm water discharge treatment facilities;
  - v. Methods of onsite storage and disposal of significant materials.
4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
  2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
  3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
  4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
  5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants

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from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered but are not required to be implemented:

- i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.
  - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.
  - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.
  - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
  - v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment of activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.
  - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
  - vii. Storm Water Reduction - Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspire runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.
6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.
  7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
  8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. Non-Storm Water Discharge - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.
- H. Quarterly Visual Observation of Discharges - The requirements and procedures of quarterly visual observations are applicable to all outfalls covered by this condition.
1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.
  2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the

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parameter or the list of pollutants in Part E.4.

3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
  4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
  5. Representative Outfalls - If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).
  6. The visual observation documentation shall be made available to the Agency and general public upon written request.
- I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
  - J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.
  - K. The plan is considered a report that shall be available to the public at any reasonable time upon request.
  - L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
  - M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

- N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights thereunder.
- O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
- P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
- Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

- R. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s)

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who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.

- S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.
- U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be submitted to the following email and office addresses: [epa.npdes.inspection@illinois.gov](mailto:epa.npdes.inspection@illinois.gov)

Illinois Environmental Protection Agency  
Bureau of Water  
Compliance Assurance Section  
Annual Inspection Report  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

- V. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.