NPDES Permit No. IL0001589
Notice No. SMT:12031303.bah

Public Notice Beginning Date: **October 12, 2012**

Public Notice Ending Date: **November 13, 2012**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued 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 Permittee:

CITGO Petroleum Corporation
135th Street and New Avenue
Lemont, Illinois 60439

Name and Address of Facility:

CITGO Petroleum Corporation Lemont Refinery
135th Street and New Avenue
Lemont, Illinois 60439
(Will 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 Permittee. 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 operation of a 168.6 thousand barrel per day petroleum refinery which produces gasoline, diesel fuel, turbine fuel, aromatic solvents, aliphatic solvents, molten sulfur, and miscellaneous products (SIC 2911). Waste water is generated by purging boilers and cooling towers to maintain correct water chemistry, hydrostatic testing activities, sanitary (sinks, toilets, showers), blowdown from a wet gas scrubber, treating water for plant uses using a zeolite softener and reverse osmosis and precipitation which contacts the site. Plant operation results in an average discharge of 5.79 MGD of treated refinery wastewater from outfall 001, an intermittent discharge of stormwater basin overflow from outfall 002, an average discharge of 0.027 MGD of intake screen backwash from outfall 007 and an intermittent discharge of stormwater runoff from outfalls 003, 004, 005, 006, and 008.

The following modification is proposed:

Outfall 003 will be moved approximately 350 feet to the southeast.

Application is made for existing discharges 001, 002, 003, 004, 005, 006, 007, and 008 which are located in Will 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	Chicago Sanitary and Ship Canal	41E 38' 58"	North	88E 03' 31"	West	Secondary Contact	D
002	Illinois and Michigan Canal	41E 39' 08"	North	88E 03' 20"	West	General Use	Not Rated
003	Illinois and Michigan Canal	41E 38' 34"	North	88E 03' 26"	West	General Use	Not Rated
004	Illinois and Michigan Canal	41E 38' 31"	North	88E 03' 22"	West	General Use	Not Rated
005	Illinois and Michigan Canal	41E 38' 35"	North	88E 03' 05"	West	General Use	Not Rated
006	Illinois and Michigan Canal	41E 38' 33"	North	88E 02' 56"	West	General Use	Not Rated
007	Chicago Sanitary and Ship Canal	41E 38' 55"	North	88E 03' 26"	West	Secondary Contact	D
008	Illinois and Michigan Canal	41E 39' 48"	North	88E 02' 25"	West	General Use	Not Rated

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

The stream segment GI-02 receiving the discharge from outfall(s) 001 and 007is on the draft 2010 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	Polychlorinated biphenyls (PCB's)
Aquatic Life	Iron, Oil and Grease, Dissolved Oxygen (non-pollutant) and Phosphorus

The stream segment receiving the discharge from outfall(s) 002, 003, 004, 005, 006, and 008 tributary to segment GI-02 is not on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List since it has not been assessed. 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 discharge(s) from the facility shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 001: Treated Refinery Wastewater (DAF = 5.79 MGD)						
Flow (MGD)						
pH						40 CFR 419.22(a)
Temperature						35 IAC 309.146
Total Residual Chlorine					0.05	35 IAC 302.410
BOD_5	966	1932	35 IAC 309.143			
$CBOD_5$				20	40	35 IAC 304.120(b)
Oil and Grease	536	1006	40 CFR 419.24	15	20	40 CFR 122.44(l)
Total Suspended Solids	1475	2313	40 CFR 419.24	25	50	35 IAC 304.120(b)
Phenols	5.7	24	40 CFR 419.23	0.3	0.4	40 CFR 122.44(l)
Ammonia (as N)	335	512	35 IAC 309.143	6.93	10.61	AS 08-8
Ammonia (as N)		145	35 IAC 309.143		3.0	35 IAC 304.122(b)
COD	12871	24804	40 CFR 419.23			
Chromium (Total)	6.8	19	40 CFR 419.23		1.0	40 CFR 122.44(l)
Chromium (Hexavalent)	0.5	1.2	40 CFR 419.23	0.1	0.3	35 IAC 304.124
Sulfide	9.7	22	40 CFR 419.23			
Cyanide	4.8	9.7	35 IAC 309.143	0.1	0.2	35 IAC 304.124
Outfall 002: Stormwater Basin Overflow (Intermittent)						
Flow (MGD)						
pH						35 IAC 304.125
BOD_5				20	40	35 IAC 304.120(b)
Oil and Grease				15	30	35 IAC 304.124
Total Suspended Solids				25	50	35 IAC 304.124
Phenols					0.1	35 IAC 302.208
Chromium (Total)					1.0	40 CFR 122.44(l)
Chromium (Hexavalent)				0.1	0.3	35 IAC 304.124
Fluoride					1.4	35 IAC 302.208
Ammonia (as N)				6.93	10.61	AS 08-8
Ammonia (as N) Mar-May/Sep-Oct Jun-Aug Nov-Feb					 9.1 14.7 10.9	35 IAC 302.212
Outfall 007: Intake Screen Backwash (DAF = 0.027 MGD)						
Flow (MGD)						
Total Residual Chlorine					0.05	35 IAC 302.410
Outfalls 003, 004,005,006, and 008: Stormwater Runoff (Intermittent)						

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Stormwater Pollution Prevention Plan						40 CFR 122.26(b)(14)(ii)

Load Limit Calculations:

A. Load limit calculations for the following pollutant parameters were based on an average flow of 5.79 MGD and using the formula of average or maximum flow (MGD) x concentration limit (mg/l) x 8.34 = the average or maximum load limit (lbs/day): BOD_5, Total Suspended Solids, Oil and Grease, Phenols, Ammonia, Chromium (T), Chromium (Hexavalent), and Cyanide.

B. Production based load limits were calculated by multiplying the size factor by the process factor by the throughput by the effluent limit contained in 40 CFR 419. Production figures utilized in these calculations for the following subcategories are as follows:

Subcategory	Production Rate
Subpart B - Cracking	168,626 barrels/day

BOD_5, Total Suspended Solids, Oil and Grease, Phenols, Ammonia, Sulfide, Chromium (Total), and Chromium (Hexavalent) were limited using Federal production based load limits.

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

Size Factor = 1.41
Process Factor = 1.41

BOD_5 avg. = 1.41 x 1.41 x 168.6 x 5.5 = 1844 lbs/day
BOD_5 max. = 1.41 x 1.41 x 168.6 x 9.9 = 3318 lbs/day

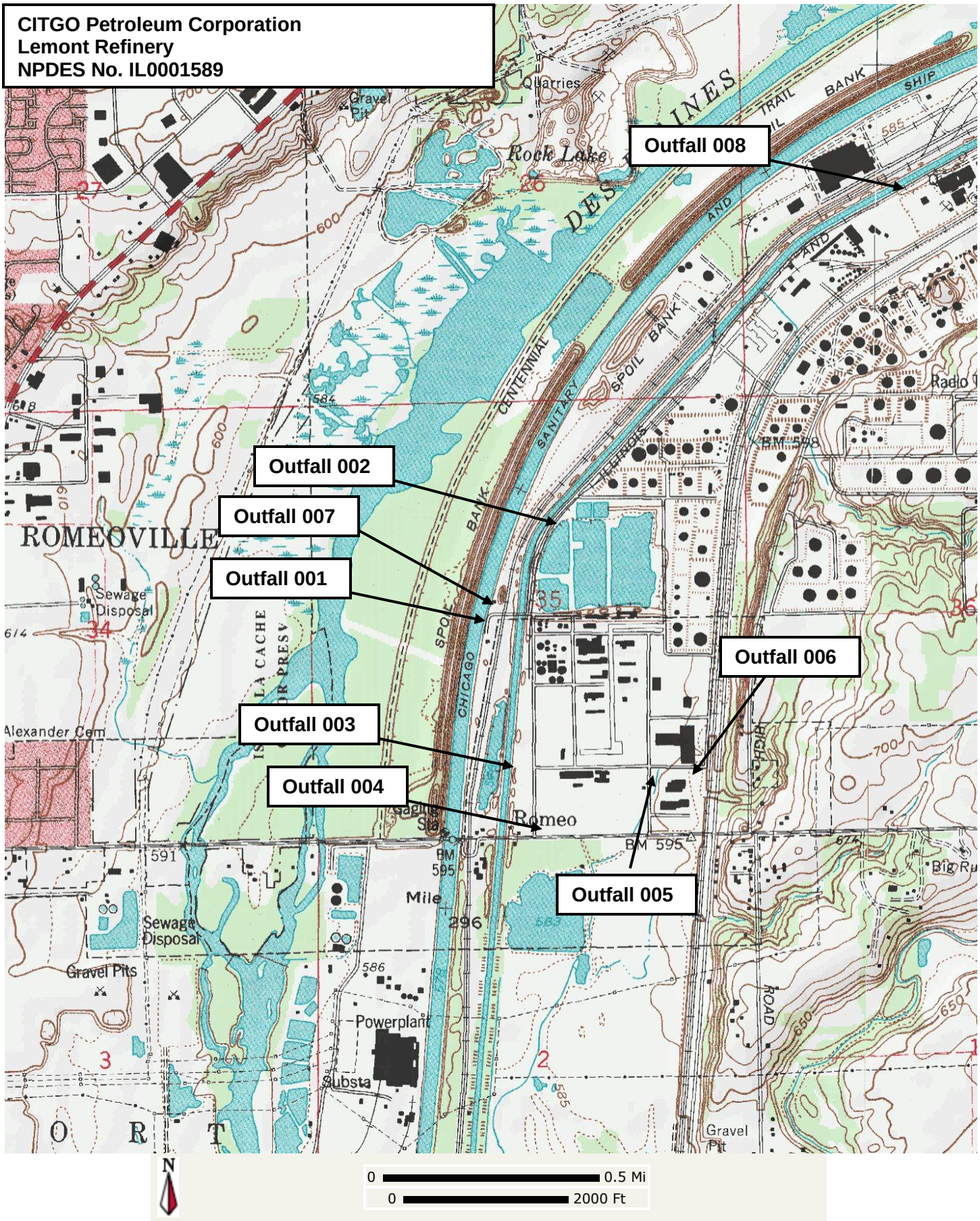
The method of calculating load limits based on 40 CFR 419, includes the calculation of various size factors, process factors, and multipliers based on the production capacity of various refining units. An example of the procedure can be found at 40 CFR 419.42(b)(2) and 40 CFR 419.42(c)(2).

The following explain the conditions of the proposed permit:

The Agency in its Best Professional Judgment has determined that the design of the cooling water intake structure at Lemont Refinery met the equivalent of Best Technology Available at the time of construction. The Agency is not aware of any adverse impacts associated with the operation of the intake structure. Special Condition 14 was added to the permit to require the submittal of update information regarding the operation of the intake structure. The permit may be modified based on the Agency review of the update information. Such a modification of the permit, will include public notice and opportunity for comment.

The discharger was granted relief from the ammonia standards of 35 Ill. Adm. Code 304.122(b) for outfall 001 in AS 08-8 until December 31, 2013. Until December 31, 2013 the ammonia limits of 6.93 mg/l and 335 lbs per day shall apply whenever the monthly average discharge exceeds 100 lbs per day and a daily max of 10.61 mg/l and 512 lbs per day shall apply whenever the daily discharge exceeds 200 lbs per day of ammonia in place of the ammonia standards of 35 Ill. Adm. Code 304.122(b). After December 31, 2013 the discharge from outfall 001 must comply with the ammonia standards of 35 Ill. Adm. Code 304.122(b), unless the existing relief is extended or renewed, or new relief is granted.

Special Condition include the descriptions of flow, pH, DMR's, , re-opener, storm water pollution prevention plan requirements, total residual chlorine, upset and bypass provisions.


CITGO Petroleum Corporation
Lemont Refinery
NPDES No. IL0001589
Outfall 008
Outfall 002
Outfall 007
Outfall 001
Outfall 006
Outfall 003
Outfall 004
Outfall 005
ROMEOVILLE
Romeo
Rock Lake
Quarries
Gravel Pit
Sewage Disposal
Alexander Cem
Gravel Pits
Powerplant
Substa
Mile
296
BM 595
Radio
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2000 Ft

Public Notice of Draft Permit

Public Notice Number SMT:12031303.bah 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 01589 has been prepared under 40 CFR 124.6(d) for CITGO Petroleum Corporation Lemont Refinery, 135th Street and New Avenue, Lemont, Illinois 60439 for discharge into Illinois and Michigan Canal and Chicago Sanitary and Ship Canal from the CITGO Petroleum Corporation Lemont Refinery, 135th Street and New Avenue, Lemont, Illinois 60439, (Will County). The applicant is engaged in the operation of a 168.6 thousand barrel per day petroleum refinery which produces gasoline, diesel fuel, turbine fuel, aromatic solvents, aliphatic solvents, molten sulfur, and miscellaneous products (SIC 2911). Waste water is generated by purging boilers and cooling towers to maintain correct water chemistry, hydrostatic testing activities, sanitary (sinks, toilets, showers), blowdown from a wet gas scrubber, treating water for plant uses using a zeolite softener and reverse osmosis and precipitation which contacts the site. Plant operation results in an average discharge of 5.79 MGD of treated refinery wastewater from outfall 001, an intermittent discharge of stormwater basin overflow from outfall 002, an average discharge of 0.027 MGD of intake screen backwash from outfall 007 and an intermittent discharge of stormwater runoff from outfalls 003, 004, 005, 006, and 008.

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 permit to the Agency at the above address. The NPDES Permit and joint public notice 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.

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. IL0001589

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

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

CITGO Petroleum Corporation
135th Street and New Avenue
Lemont, Illinois 60439

Facility Name and Address:

CITGO Petroleum Corporation Lemont Refinery
135th Street and New Avenue
Lemont, Illinois 60439
(Will County)

Discharge Number and Name:		Receiving Waters:
001	Process Wastewater, Non-Process Wastewater, Sanitary Wastewater, Miscellaneous Wastewater	Chicago Sanitary and Ship Canal
002	Stormwater Retention Basin	Illinois and Michigan Canal
003	Stormwater	Illinois and Michigan Canal
004	Stormwater	Illinois and Michigan Canal
005	Stormwater	Illinois and Michigan Canal
006	Stormwater	Illinois and Michigan Canal
007	Intake Screen Backwash	Chicago Sanitary and Ship Canal
008	Stormwater	Illinois and Michigan Canal

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

SAK: SMT:12031303.bah

NPDES Permit No. IL0001589

Effluent Limitations and Monitoring

1. From the effective 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 Treated Refinery Wastewater (DAF = 5.79 MGD)

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Contributory Waste Streams: 1) Process Wastewater 2) Cooling Tower Blowdown 3) Non-Process Wastewater, Stormwater, Utility Water, Boiler Blowdown 4) Sanitary Waste Water 5) Hydrostatic Test Water 6) Chemical Cleaning 7) Seneca, Oxbow, Linde Process Water 8) Scrubber Wastewater						
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				2/Week	Grab
Temperature					2/Week	Single Reading
Total Residual Chlorine				0.05	2/Week	Grab
BOD_5	966	1932			2/Week	Composite
$CBOD_5$			20	40	2/Week	Composite
Oil and Grease	536	1006	15	20	2/Week	Grab
Total Suspended Solids	1475	2414	15	30	2/Week	Composite
Phenols	6	24	0.3	0.6	2/Week	Composite
Ammonia (as N)*	335	512	6.93	10.61	2/Week	Composite
Ammonia (as N)*		145		3.0	2/Week	Composite
COD	12871	24804			2/Week	Composite
Chromium (Total)	6.8	19		1.0	2/Week	Composite
Chromium (Hexavalent)	0.5	1.2	0.1	0.3	2/Week	Grab
Sulfide	9.7	22			2/Week	Composite
Cyanide	2	4	0.1	0.2	2/Week	Composite

The monthly maximum temperature shall be reported on the DMR form.

* The ammonia limits of 6.93 mg/l and 335 lbs per day shall apply whenever the monthly average discharge exceeds 100 lbs per day and a daily max of 10.61 mg/l and 512 lbs per day shall apply whenever the daily discharge exceeds 200 lbs per day of ammonia in accordance with IPCB AS 08-8. If new relief is not granted or extended by December 31, 2013, the April-Oct and Nov – Mar limits for ammonia shall apply following that date.

NPDES Permit No. IL0001589

Effluent Limitations and Monitoring

1. From the effective 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 Retention Basin (Intermittent Discharge)

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Contributory Waste Streams: 1) Refinery Stormwater 2) Treated Process Water (Fire Water) 3) Utility Water 4) Boiler Blowdown 5) Tank Farm Stormwater 6) Hydrostatic Test Water 7) Biomass 8) Off Site Stormwater Runoff 9) Exxon Mobil Terminal Stormwater 10) Oxbow Stormwater 11) Oneok Stormwater 12) Linde Stormwater 13) Seneca Stormwater						
Flow (MGD)	See Special Condition 1				Daily When Discharging	
pH	See Special Condition 2				Daily When Discharging	Grab
BOD_5			20	40	Daily When Discharging	Grab
Oil and Grease			15	30	Daily When Discharging	Grab
Total Suspended Solids			25	50	Daily When Discharging	Grab
Phenols				0.1	Daily When Discharging	Grab
Chromium (Total)				1.0	Daily When Discharging	Grab
Chromium (Hexavalent)			0.1	0.3	Daily When Discharging	Grab
Fluoride				1.4	Daily When Discharging	Grab
Ammonia (as N)*			6.93	10.61	Daily When Discharging	Grab
Ammonia (as N)* Mar-May/Sep-Oct Jun-Aug Nov-Feb				 9.1 14.7 10.9	Daily When Discharging	Grab

* The ammonia limits of 6.93 mg/l shall apply whenever the monthly average discharge exceeds 100 lbs per day and a daily max of 10.61 mg/l shall apply whenever the daily discharge exceeds 200 lbs per day of ammonia in accordance with IPCB AS 08-8. If new relief is not granted or extended by December 31, 2013, the Mar-May/Sep-Oct, Jun-Aug, and Nov – Feb limits for ammonia shall apply following that date.

NPDES Permit No. IL0001589

Effluent Limitations and Monitoring

1. From the effective 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: 007 Intake Screen Backwash (DAF = 0.027 MGD)

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow (MGD)	See Special Condition 1				1/Week	
Total Residual Chlorine	See Special Condition 5			0.05	Daily when Chlorinating	Grab

Effluent Limitations and Monitoring

From the effective 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:

Outfalls: 003, 004, 005, 006, and 008 Stormwater Runoff (Intermittent Discharge)

See Special Condition 13.

NPDES Permit No. IL0001589

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 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. 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 4. 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 5. All samples for Total Residual Chlorine 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. 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 electronic DMRs (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/edmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using eDMRs 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 7. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 8. 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 9. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities tributary to outfalls 001 and 002 for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 10. The Permittee shall monitor the effluent from outfall 001 and 002 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 shall be submitted to the address in special condition 6 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

Special Conditions

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
00940	Chloride	1.0 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
00945	Sulfate	1.0 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 11. The bypass provisions of 40 CFR 122.41(m) and upset provisions of 40 CFR 122.41(n) are hereby incorporated by reference. The permittee shall identify all causes of upsets from; mechanical malfunctions in the production process or in the wastewater treatment plant, situations in which organic loading to the WWTP exceeds the aeration capabilities of the treatment plant or wastewater streams which may inhibit nitrification and develop an upset prevention/mitigation plan for each cause. The plan must be submitted to the Agency within 180 days of the effective date of the permit, and updated annually thereafter.

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 LC_{50} Bioassay using fathead minnows (Pimephales promelas).

   b. Invertebrate 48-hour static LC_{50} Bioassay using Ceriodaphnia.

2. Testing Frequency - The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Sample collection and testing must be conducted once per year. 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.

Special Conditions

5. Toxicity Identification and Reduction Evaluation - Should any of the additional bioassays result in toxicity to ≥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 tributary to outfalls 003, 004, 005, 006, and 008. 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:

      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 from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:

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 evapotranspirate 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 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) 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.

Special Conditions

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 mailed to the following address:

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.

SPECIAL CONDITION 14 . In order for the Agency to evaluate the potential impacts of cooing water intake structure operation pursuant to 40 CFR 125.90(b), the permittee shall prepare and submit information to the Agency outlining current intake structure conditions at this facility, including a detailed description of the current intake structure operation and design, description of any operational or structural modifications from original design parameters, source waterbody flow information, or other information as necessary.

The information shall also include a summary of historical 316(b) related intake impingement and / or entrainment studies, if any, as well as current impingement mortality and/or entrainment characterization data; and shall be submitted to the Agency within twelve (12) months of the permit's effective date.

Upon the receipt and review of this information, the permit may be modified to require the submittal of additional information based on a Best Professional Judgment review by the Agency. This permit may also be revised or modified in accordance with any laws, regulations, or judicial orders issued pursuant to Section 316(b) of the Clean Water Act.