NPDES Permit No. IL0003140 Notice No. LRL:12051601.daa

Public Notice Beginning Date: November 9, 2012

Public Notice Ending Date: December 10, 2102

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 Discharger:

3M Cordova 22614 Route 84 North Cordova, Illinois 61242 Name and Address of Facility:

3M Cordova 22614 Route 84 North Cordova, Illinois 61242 (Rock Island 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 Leslie Lowry at 217/782-0610.

The applicant is engaged in manufacturing specialty adhesives, coating solutions and performance fluids serving primarily as an internal supplier for other 3M locations (SIC 2899, 2816, 2834, and 2821). Plant operation results in an average discharge of 8.1 MGD of combined wastewater from outfall 001, 0.6 MGD of treated process wastewater from internal outfall A01, an intermittent discharge of stormwater runoff from outfall 002, an intermittent discharge of stormwater runoff from outfall 003, and an intermittent discharge of stormwater runoff from outfall 004.

Public Notice/Fact Sheet -- Page 2 -- NPDES Permit No. IL0003140

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

<u>Outfall</u>	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Mississippi River	41° 45' 17"	North	90° 17' 34"	West	General Use	Not Rated
002	Mississippi River	41° 44' 29"	North	90° 17' 10"	West	General Use	Not Rated
003	Mississippi River	41° 44' 42"	North	90° 17' 34"	West	General Use	Not Rated
004	Mississippi River	41° 44' 47"	North	90° 17' 41"	West	General Use	Not Rated

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

The stream segment receiving the discharge from outfalls 001, 002, 003, and 004 M-02 on the 2010 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of the Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System.*

The following parameters have been identified as the pollutants causing impairment:

Designated Use	Potential Cause
Fish Consumption and Public and Food Processing Water Supply Use	Mercury, PCBs, and Manganese

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

		ITS lbs/day (<u>DMF)</u>		CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 001:						
Flow (MGD)						
рН				6 – 9	s.u.	35 IAC 304.125
Temperature						35 IAC 303.331
BOD ₅				20	40	35 IAC 304.120
Total Suspended Solids				25	50	35 IAC 304.120
Fluoride				15	30	35 IAC 304.124
Iron (Total)				2	4	35 IAC 304.124
Nickel				1	2	35 IAC 304.124
Fecal Coliform					400/100 ml	35 IAC 302.209
Cyanide				Monitor	Only	
Mercury				Monitor Only		
Manganese				Monitor Only		
Sulfate				Monitor Only		
Ammonia Nitrogen (as N)				Monitor Only		
Perfluorobutanoic Acid				Monitor Only		

	LOAD LIMITS lbs/day <u>DAF (DMF)</u>			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 001 cont:						
Perfluoropentanoic Acid				Monito	r Only	
Perfluorohexanoic Acid				Monito	r Only	
Perfluoroheptanoic Acid				Monito	r Only	
Perfluoroctanoic Acid				Monito	r Only	
Perfluorononanoic Acid				Monito	r Only	
Perfluorodecanoic Acid				Monito	r Only	
Perfluoroundecanoic Acid				Monito	r Only	
Perfluorododecanoic Acid				Monito	r Only	
Perfluorotridecanoic Acid				Monito	r Only	
Perfluorobutanesulfonate				Monito	r Only	
Perfluorohexanesulfonate				Monitor Only		
Perfluorooctanesulfonate				Monitor Only		
Perfluorooctanesulfonamide				Monito	r Only	
Outfall A01:						
Flow (MGD)						
рН				6 – 9	s.u.	35 IAC 304.125
BOD ₅	895	1782	40 CFR 125.3 & 35 IAC 304.102	108	215	40 CFR 125.3 & 35 IAC 304.102
Total Suspended Solids	406	812	40 CFR 125.3 & 35 IAC 304.102	49	98	40 CFR 125.3 & 35 IAC 304.102
Fluoride	281	563	40 CFR 125.3 & 35 IAC 304.102	34	68	40 CFR 125.3 & 35 IAC 304.102
Iron (total)	16	33	35 IAC 304.124	2	4	35 IAC 304.124
Nickel	8	16	35 IAC 304.124	1	2	35 IAC 304.124
Barium				Monito	r Only	
Cyanide (Total)				Monitor Only		
Mercury				Monitor Only		
Manganese				Monito	r Only	
Sulfate				Monito	r Only	
Ammonia Nitrogen (as N)				Monito	r Only	

	LOAD LIMITS lbs/day <u>DAF (DMF)</u>			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall A01 cont:						
126 Priority Pollutants				Monito	r Only	
Formaldehyde				Monito	r Only	
Copper				Monito	r Only	
Lead				Monito	r Only	
Zinc				Monito	r Only	
Cobalt				Monito	r Only	
COD				Monito	r Only	
Chromium				Monitor Only		
Outfall 002:						
Flow (MGD)						
126 Priority Pollutants				Monito	r Only	
Iron (Total)				Monito	r Only	
Outfall 003:						
Flow (MGD)						
126 Priority Pollutants				Monito	r Only	
Iron (Total)				Monitor Only		
Outfall 004:						
Flow (MGD)						
126 Priority Pollutants				Monitor Only		
Iron (Total)				Monitor Only		

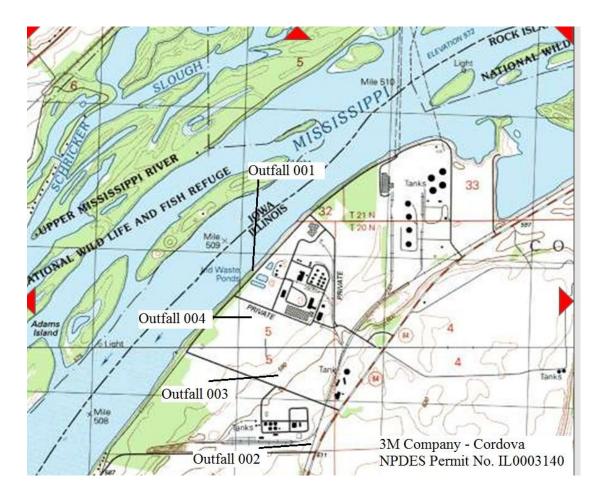
Load Limit Calculations:

Load limit calculations for the following pollutant parameters were based on a design average flow of 0.994 MGD using the formula of average flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅, Total Suspended Solids, Fluoride, Iron, and Nickel.

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, temperature, fecal coliform, stormwater, monitoring location, toxicity monitoring, best degree of treatment determination, discharge monitoring report submission, additives, 126 priority pollutants, compliance schedule for total suspended solids, treatability analysis, zone of initial dilution for ammonia and nickel, and Class K operator.



Public Notice of Draft Permit

Public Notice Number LRL:12051601.daa is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0003140 has been prepared under 40 CFR 124.6(d) for 3M Cordova, 22614 Route 84 North, Cordova, Illinois, 61242 for discharge into the Mississippi River from 3M Cordova, 22614 Highway 84 North, Cordova, Illinois 61242, Rock Island County. The applicant is engaged in manufacturing specialty adhesives, coating solutions and performance fluids serving primarily as an internal supplier for other 3M locations. Plant operation results in an average discharge of 8.1 MGD of combined wastewater from outfall 001, 0.6 MGD of treated process wastewater from internal outfall A01, an intermittent discharge of stormwater runoff from outfall 002, an intermittent discharge of stormwater runoff from outfall 003, and an intermittent discharge of stormwater runoff from outfall 004.

The application, draft permit and other documents are available for inspection and may be copied at a cost of 25 cents per page 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, stating their name and address, the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to these issues in the hearing. Such requests must be received by the Agency not later than 30 days from the date of this publication.

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.

SAK:LRL:120501601.daa

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date: Effective Date:

Name and Address of Permittee:

3M Cordova 22614 Route 84 North Cordova, Illinois 61242 Facility Name and Address:

3M Cordova 22614 Route 84 North Cordova, Illinois 61242 Rock Island County

Discharge Number and Name:

001 Combined WastewaterA01 Treated Wastewater002 Stormwater Runoff003 Stormwater Runoff004 Stormwater Runoff

Receiving Waters:

Mississippi River

Mississippi River Mississippi River Mississippi 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

SAK:LRL:12051601.daa

Effluent Limitations and Monitoring

	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCEN LIMITS			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 001 – Combined Waster (Average Flow = 8.1 MGD)	water					
This discharge consists of: 1. Non-Contact Cooling V 2. Treated Wastewater (3. Stormwater Runoff*						
Flow (MGD)	See Special (Condition 1.			Daily	Continuous
рН	See Special (Condition 2.			2/Week	Grab
Temperature	See Special (Condition 3.			2/Week	Single Reading
Fecal Coliform	See Special (Condition 4.		400/100 ml	1/Month	Grab
BOD₅			20	40	2/Week	Composite
Total Suspended Solids			25	50	2/Week	Composite
Fluoride			15	30	2/Week	Composite
Iron (Total)			2	4	2/Week	Composite
Nickel			1	2	2/Week	Composite
Ammonia Nitrogen (as N)			Monito	r Only	1/Month	Grab
Cyanide			Monitor Only		1/Year	Composite
Mercury			Monitor Only		1/Year	Composite
Manganese			Monitor Only		1/Year	Composite
Sulfate			Monitor Only		1/Month	Grab
Perfluorobutanoic Acid			Monitor Only		1/Quarter**	Grab
Perfluoropentanoic Acid			Monitor Only		1/Quarter**	Grab
Perfluorohexanoic Acid			Monito	r Only	1/Quarter**	Grab
Perfluoroheptanoic Acid			Monito	r Only	1/Quarter**	Grab
Perfluoroctanoic Acid			Monito	r Only	1/Quarter**	Grab
Perfluorononanoic Acid			Monito	r Only	1/Quarter**	Grab
Perfluorodecanoic Acid			Monito	r Only	1/Quarter**	Grab
Perfluoroundecanoic Acid			Monitor Only		1/Quarter**	Grab
Perfluorododecanoic Acid	Perfluorododecanoic Acid		Monitor Only		1/Quarter**	Grab
Perfluorotridecanoic Acid			Monitor Only		1/Quarter**	Grab
Perfluorobutanesulfonate			Monito	r Only	1/Quarter**	Grab

Page 2

NPDES Permit No. IL0003140

Effluent Limitations and Monitoring

	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCENTRATION <u>LIMITS mg/I</u>			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 001 cont.						
Perfluorohexanesulfonate			Monitor Only		1/Quarter**	Grab
Perfluorooctanesulfonate	Perfluorooctanesulfonate		Monitor Only		1/Quarter**	Grab
Perfluorooctanesulfonamide	rooctanesulfonamide		Monitor Only		1/Quarter**	Grab
* - See Special Condition 12. ** - Monitor during the months of						

Effluent Limitations and Monitoring

at all times as follows:		·			-	I
	LOAD LIMITS DAF (DM		CONCENT <u>LIMITS</u>			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
<u>Outfall A01</u> – Treated Wastewar (DAF = 0.994 MGD)	ter					
This discharge consists of: Utilities Boiler Blowdown Sample Tabs, Utili Sanitary Internals General Vacuum Syste Reactor Clean Product Wash Filter Line Fluv Misc. Non-Co Thermoset Resins Vacuum Syste Reactor Clean Reactor Clean Product Wash Filter Line Fluv Misc. Non-Co Thermoset Resins Vacuum Syste Reactor Clean Vacuum Syste Reactor Clean Vacuum Syste Reactor Clean Vacuum Syste Reactor Clean Vacuum Syste Reactor Clean Alkylation, Stabiliz Air Scrubbers Reactor, Equipme Vessel, Pump, and HF30 Stream Thermal Oxidizer Stream Thermal Oxidizer Stream 						
5. Building Roof Drains* Flow (MGD)	See Special	Condition 1.			Daily	Continuous
pН	See Special	Condition 2.			4/Week	Grab
BOD ₅	895	1782	108	215	4/Week	Composite
Total Suspended Solids	406	812	49	98***	4/Week	Composite
Fluoride	281	563	34	68	4/Week	Composite
Iron (Total)	16	33	2	4	4/Week	Composite
Nickel	8	16	1	2	4/Week	Composite
Barium			Monitor	Only	1/Quarter**	Composite
Cyanide (Total)	See Special	Condition 9.	Monitor Only		1/Quarter**	Composite
Mercury	See Special	Condition 9.	Monitor	Only	1/Quarter**	Composite
Manganese			Monitor	Only	1/Quarter**	Composite
Sulfate			Monitor Only		1/Month	Grab
Ammonia Nitrogen (as N)			Monitor	Only	1/Month	Grab

Effluent Limitations and Monitoring

		LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCENTRATION <u>LIMITS mg/I</u>		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall A01 cont.						
126 Priority Pollutants	See Special (Condition 9.	Monitor	Only	1/Quarter**	Grab
Formaldehyde			Monitor	Only	1/Quarter**	Grab
Copper	See Special C	Condition 9.	Monitor	Only	1/Quarter**	Composite
Lead	See Special C	Condition 9.	Monitor	⁻ Only	1/Quarter**	Composite
Zinc	See Special C	Condition 9.	Monitor	⁻ Only	1/Quarter**	Composite
Cobalt			Monitor	^r Only	1/Quarter**	Composite
COD			Monitor	⁻ Only	1/Quarter**	Composite
Chromium	See Special (Condition 9.	Monito	⁻ Only	1/Quarter**	Composite
<u>Outfall 002</u> – Stormwater Ru (Intermittent Discharge)	noff*					
Flow (MGD)	See Special C	Condition 1.			1/Quarter**	Measure
126 Priority Pollutants			Monitor Only		1/Year	Composite
Iron (Total)			Monit	or Only	1/Quarter**	Composite
 * - See Special Condition 12. ** - Monitor during the month 		September, and	December.			
<u>Outfall 003</u> – Stormwater Ru (Intermittent Discharge)	noff*					
Flow (MGD)	See Special C	Condition 1.			1/Quarter**	Measure
126 Priority Pollutants	See Special C	Condition 9.	Monite	Monitor Only		Composite
Iron (Total)			Monite	or Only	1/Quarter**	Composite
* - See Special Condition 12. ** - Monitor during the month		September, and	December.			

Page 5

NPDES Permit No. IL0003140

Effluent Limitations and Monitoring

		LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 004 – Stormwater Runoff* (Intermittent Discharge)						
Flow (MGD)	See Special Co	See Special Condition 1.			1/Quarter**	Measure
126 Priority Pollutants	See Special Co	ndition 9.	Monitor Only		1/Year	Composite
Iron (Total)				Monitor Only		Composite
* - See Special Condition 12 ** - Monitor during the month		eptember, and D	ecember.			

Special Conditions

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

<u>SPECIAL CONDITION 2.</u> 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.

<u>SPECIAL CONDITION 3</u>. 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 maximum flow of 19.432 MGD and a maximum temperature of 124° 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.

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

SPECIAL CONDITION 4. The daily maximum fecal coliform count shall not exceed 400 per 100 ml.

<u>SPECIAL CONDITION 5</u>. Samples taken in compliance with the internal monitoring requirements for Internal Outfall A01 shall be taken at a point representative of the discharge but prior to mixing with the discharge of non-contact cooling water from Outfall 001.

<u>SPECIAL CONDITION 6</u>. Samples taken in compliance with the effluent monitoring requirements for Outfalls 001, 002, 003 and 004 shall be taken at points representative of the discharges, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 7</u>. 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, registration information including 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 8. The Permittee shall conduct biomonitoring of the effluent from Outfall 001.

Biomonitoring

- 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 <u>Methods for</u> <u>Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012.</u> 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.

Special Conditions

- Testing Frequency The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Testing shall be conducted on a semiannual basis during the months of March and September. If possible, bioassay sample collection should coincide with sample collection for metals analysis or other parameters 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 Pending the completion of a mixing zone and ZID demonstration, mixing for whole effluent toxicity may be granted mixing providing effluent does not exceed 1.0 Toxic Units outside of the ZID and that toxicity only occurs in response to a regulated parameter that has been granted mixing. Should a bioassay result in greater than 1.0 Toxic Units outside of the ZID, or in the absence of a mixing zone and ZID demonstration should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment due to an unknown toxicant, 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 greater than 1.0 Toxic Units outside of the ZID, or in the absence of a mixing zone and ZID demonstration should greater than 1.0 Toxic Units exist in the 100% effluent treatment, the Permittee may wish to contact the IEPA to request the discontinuance of further sampling at which time the IEPA may require the Permittee to begin the toxicity reduction evaluation and identification as outlined below.
- 5. Toxicity Reduction Evaluation As described above, the IEPA may require, upon notification, that the Permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall be developed in accordance with <u>Toxicity Reduction Evaluation</u> <u>Guidance for Municipal Wastewater Treatment Plants</u>, EPA/833B-99/002, and 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.

<u>SPECIAL CONDITION 9</u>. The permittee shall perform chemical specific testing on the effluent from Outfalls A01, 002, 003, and 004 for 126 priority pollutants (see 40 CFR 136 Appendix A, Methods 624 and 625). Samples shall be handled, prepared, and analyzed by GC/MS in accordance with 40 CFR 136 Methods 624 and 625 (October 26, 1984 Federal Register). GC/MS procedures for direct injection of water samples using appropriate GC columns such as 10% carbowax 20M shall be used for compounds not amenable to extraction by the above methods (base neutral/acid technique).

All sample collection, preservation, and storage times shall conform to 40 CFR 136 or other approved USEPA procedures and requirements. Detection limits for USEPA Methods, or alternative methods, shall be comparable with the method detection limit in 40 CFR 136 regulations. The detection limit for the direct injection protocol shall be as sensitive as possible, utilizing sound laboratory practices.

<u>SPECIAL CONDITION 10</u>. The Agency has determined that the effluent limitations for outfall A01 contained in this permit constitute BAT/BCT for stormwater which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such stormwater. 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 stormwater discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated stormwater 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.

<u>SPECIAL CONDITION 11</u>. If an applicable standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) and that effluent standard or limitation is more stringent than any limitation in the permit or controls a pollutant not limited in the permit, this permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation. Modification under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 12.

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

Special Conditions

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.

Page 9

NPDES Permit No. IL0003140

Special Conditions

- 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 cleanup 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.

Special Conditions

- 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 for 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.

Special Conditions

- 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 there under, 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 there under.
- 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.
- 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.

Special Conditions

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.

<u>SPECIAL CONDITION 13</u>. The effluent limitations for Total Suspended Solids, BOD, and Fluoride at Outfall A01 are based upon a determination of Best Degree of Treatment pursuant to 35 III. Adm. Code 304.102.

The permittee must submit to the Agency 2.5 years from the issuance date of this permit a treatability analysis of their existing Wastewater Treatment Plant. This document would include an analysis of wastewater sources and characteristics, and an evaluation of treatment technologies which are available which may improve the performance of the facility's wastewater treatment plant. The evaluation should include analysis of the technical feasibility of various treatment technologies as well as a cost analysis of those found to be technically feasible. The cost analysis should be performed to demonstrate if a treatment technology is economically reasonable.

SPECIAL CONDITION 14. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

<u>SPECIAL CONDITION 15</u>. This permit authorizes the use of water treatment additives that were requested as part of this renewal. The use of any new additives such as chlorine or bromine, or change in those previously approved by the Agency, or if the permittee increases the feed rate or quantity of the additives used beyond what has been approved by the Agency, the permittee shall request a modification of this permit in accordance with the Standard Conditions - Attachment H.

<u>SPECIAL CONDITION 16.</u> From the effective date of this Permit, the Total Suspended Solids daily maximum limit for outfall A01 shall be 150 mg/l and 1243 lbs/day. A Total Suspended Solids daily maximum limit for outfall A01 of 98 mg/l and 812 lbs/day shall become effective on October 1, 2013.

The Permittee shall construct a Hydrocarbon and Salt Reduction Facility or some alternative means of compliance in accordance with the following schedule:

- 1. Progress Report 6 months from the effective date
- 2. Obtain Operation Level

October 1, 2013

Compliance dates set out in this Permit may be superseded or supplemented by compliance dates in judicial orders, or Pollution Control Board orders. This Permit may be modified, with Public Notice, to include such revised compliance dates.

The Permittee shall operate the hydrocarbon and salt reduction system or an alternative means of compliance in a manner to ensure continuous compliance with the Total Suspended Solids limit, not to the extent that will result in violations of other permitted effluent characteristic, or water quality standards.

REPORTING

The Permittee shall submit a report no later than fourteen (14) days following the completion dates indicated above for each numbered item in the compliance schedule, indicating, a) the date the item was completed, or b) that the item was not completed, the reason for non-completion, and the anticipated completion date

<u>SPECIAL CONDITION 17.</u> A zone of initial dilution (ZID) is recognized for ammonia and nickel with dimension of 100 feet across the width of the river from the end-of-pipe and 8 feet downstream from this point. Within the ZID, 7:1 dilution is afforded. A mixing zone is recognized with dimensions extending 100 feet across the width of the river and 20 feet downstream. Within the mixing zone 18:1 dilution is afforded.