

NPDES Permit No. IL0002763
Notice No. MEL:12051401.bah

Public Notice Beginning Date: **September 20, 2012**

Public Notice Ending Date: **October 22, 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:

ZionSolutions, LLC
101 Shiloh Blvd.
Zion, Illinois 60099

Name and Address of Facility:

Zion Station
101 Shiloh Blvd.
Zion, Illinois 60099
(Lake 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 Mark E. Liska at 217/782-0610.

The facility was in safe-store mode and is incapable of nuclear power generation. Previously, the station operated two pressurized nuclear fission reactors (SIC 4911). The facility is currently undergoing permanent decommissioning and demolition. Plant operation results in an average discharge of 31.7 MGD which includes house service water (31.7 MGD) from either outfall 001 or outfall 002, discharges from wastewater treatment facility from outfall A01 (0.02 MGD), radwaste treatment system discharge (0.005 MGD) outfall B01, and intermittent discharge of Unit 1 and Unit 2 oil separator from outfall E01 and A02.

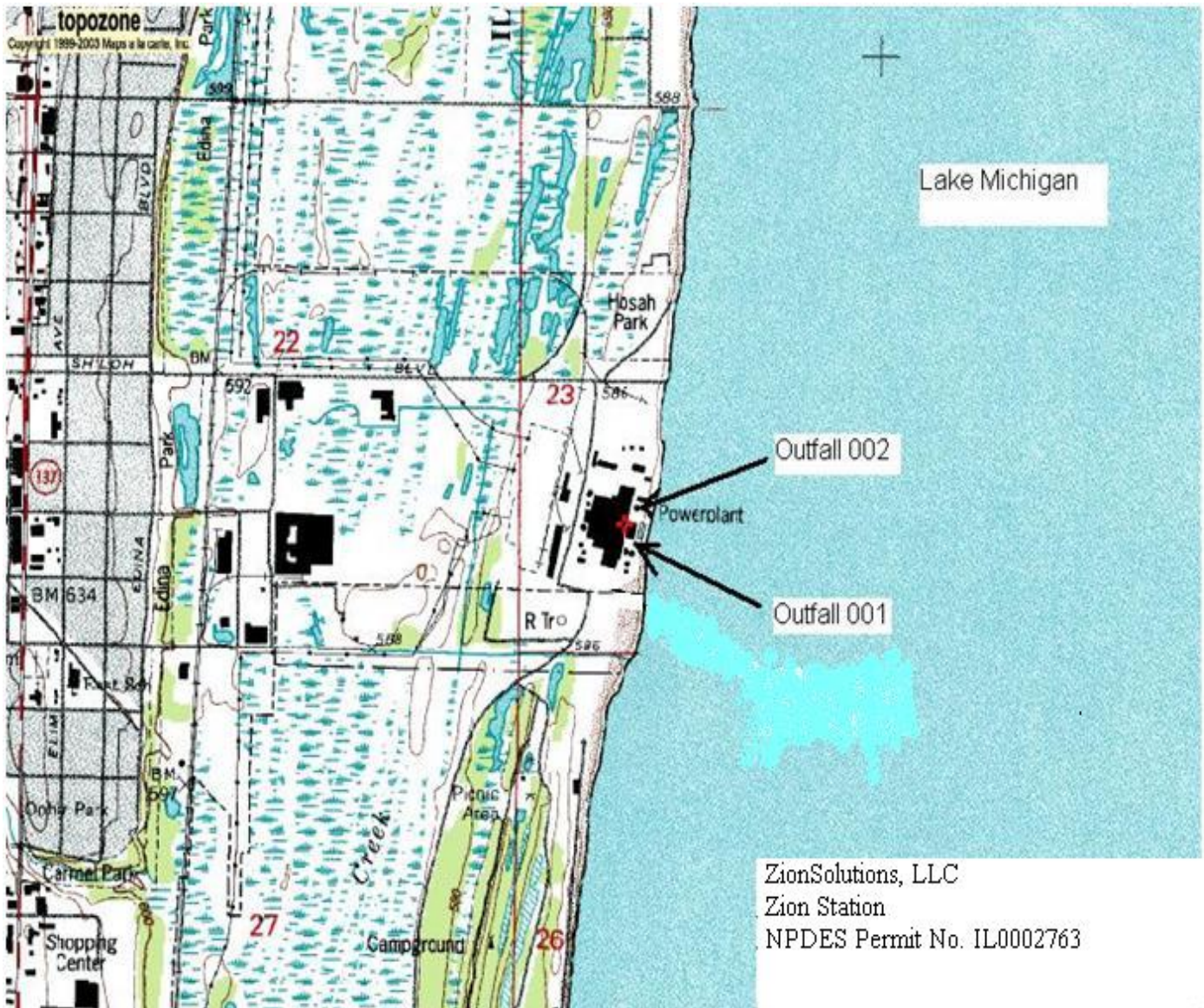
The following modification is proposed: The circulating water pump discharge from outfalls 001 and 002 have been removed, as the reactors are defueled and the condensers are no longer needed. The North and South Side Switchyard Stormwater runoff discharge from outfall A02 have been removed.

Application is made for the new and existing discharge(s) which is/are located in Lake County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Lake Michigan	42E° 26' 45" North	87E° 48' 06" West	Lake Michigan Basin	Not Rated
002	Lake Michigan	42E° 26' 45" North	87E° 48' 06" West	Lake Michigan Basin	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 outfall(s) 001 and 002 is not on the 2010 303(d) list of impaired waters and is not a biologically significant stream on the 2010 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.



ZionSolutions, LLC
 Zion Station
 NPDES Permit No. IL0002763

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

Outfall: 001

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/L		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Flow (MGD)						35 IAC 309.146
pH	Shall be in the range of 6.5-9.0					35 IAC 302.204
Copper				Monitor Only		35 IAC 309.146
Outfall: A01						
Flow (MGD)						35 IAC 309.146
pH	Shall be in the range of 6.5-9.0					35 IAC 302.204
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423.12
PCBs				No Discharge		40 CFR 423.12(b)(2)
Outfall: B01						
Flow (MGD)						35 IAC 309.146
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423.12
PCBs				No Discharge		40 CFR 423.12(b)(2)
Outfalls: A02 and E01						
Flow (MGD)						35 IAC 309.146
Total Suspended Solids				30	100	40 CFR 423.12
Oil and Grease				15	20	40 CFR 423.12

The following explain the conditions of the proposed permit:

Special Conditions will require monthly DMR submission, explain PCB and copper limits, explain the zebra mussel control system, and explain the BAT/BCT requirements.

Public Notice of Draft Permit

Public Notice Number MEL:12051401.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 IL000276302763 has been prepared under 40 CFR 124.6(d) for ZionSolutions, LLC, 101 Shiloh Blvd., Zion, Illinois 60099 for discharge into Lake Michigan from the Zion Station, 101 Shiloh Blvd., Zion, Illinois 60099 (Lake County). Plant operation results in an average discharge of 3.6 MGD of house service water from outfall 001 or 002, 0.02 MGD wastewater treatment facility discharge from A01, 0.005 MGD of Radwaste treatment system discharge outfall B01, and intermediate discharge of Unit 1 and Unit 2 oil separator from outfall E01 and A02. The Zion Station was in safe-store mode and is incapable of nuclear power generation. The facility managers, ZionSolutions LLC, have started the permanent decommissioning and demolition of the site. House service water is drawn from Lake Michigan.

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. IL0002763

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:

Facility Name and Address:

ZionSolutions, LLC
101 Shiloh Blvd.
Zion, Illinois 60099

Zion Station
101 Shiloh Blvd.
Zion, Illinois 60099
(Lake County)

Discharge Number and Name:	Receiving Waters:
001 Unit 1 House Service Water	Lake Michigan
A01 Miscellaneous Wastewater Treatment Facility Discharge	Internal Outfall
B01 Radwaste Treatment System Discharge	Internal Outfall
E01 South Area Stormwater Runoff	Internal Outfall
002 Unit 2 House Service Water	Lake Michigan
A02 North Area Stormwater Runoff	Internal Outfall

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: MEL:12051401.bah

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:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Outfall: 001 House Service Water = (DAF = 31.7 MGD)						
Outfall 001 includes: <ol style="list-style-type: none"> 1. Unit 1 or 2 House Service Water* (DAF = 31.7 MGD) 2. Unit 1 Oil Separator Effluent (Intermittent Discharge) 3. Wastewater Treatment Facility Discharge* (DAF = 0.02 MGD) 4. Radwaste Treatment System Discharge* (DAF = 0.005 MGD) 5. Cribhouse Sump discharge* (Intermittent Discharge) 6. Storage Tank Atmospheric Condensation* (Intermittent Discharge) *These waste streams may be discharged via outfall 001 and/or outfall 002.						
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				3/Week	Grab
Copper	See Special Condition 3				2/Month	Grab
Outfall: A01 – Miscellaneous Wastewater Treatment Facility Discharge						
Outfall A01 includes: <ol style="list-style-type: none"> 1. Wastewater Treatment Facility (DAF = 0.02 MGD) 2. Fire Sump Discharge (DAF = 0.01 MGD) 3. Heater Bay roof Drain (Intermittent) 4. Spent Fuel Pool cooling Tower Blowdown (DAF = 0.01 MGD) 5. Spent Fuel Nuclear Island Floor Drains (Intermittent Discharge) 6. Portable Demineralizer Reject (Intermittent Discharge) 						
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				2/Week	Grab
Total Suspended Solids			15	30	1/Week	24-Hour Composite
Oil and Grease			15	30	1/Month	Grab
PCBs	See Special Condition 4				Quarterly	8-Hour Composite

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:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Outfall: B01 – Radwaste Treatment System Discharge						
Outfall B01 Consist of: <ol style="list-style-type: none"> 1. Radwaste Treatment Discharge (DAF = 0.02 MGD) 2. Laboratory and Sample Drains (DAF – 50 GPD) 3. Containment and Auxiliary Building Floor and Equipment Drains (Intermittent Discharge) 4. Radwaste Shower Drains (Intermittent Discharge) 						
Flow (MGD)	See Special Condition 1				Daily	Continuous
Total Suspended Solids			15	30	Once per Batch Discharge	Grab
Oil and Grease			15	30	Once per Batch Discharge	Grab
PCBs	See Special Condition 4				Quarterly	Grab
Outfall: E01 – South Area Stormwater Runoff						
Outfall E01 includes: <ol style="list-style-type: none"> 1. South Side General Yard Storm Drain (Intermittent Discharge) 2. Stormwater Runoff from South Side transformer Areas (Intermittent Discharge) 3. South Side Roof Drains (Intermittent Discharge) 4. Parking Lot Runoff (Intermittent Discharge) 5. Unit 1 Service Water (Intermittent Discharge) 6. Unit 1 Turbine Oil Tank Drains (Intermittent Discharge) 7. Fire Sump Discharge**** (DAF = 0.01 MD) (Alternate Route) 						
****See Special Condition 6 for alternate limits and sampling requirements when Fire Sump discharge is routed to Outfall E01.						
Flow (MGD)	See Special Condition 1				1/Week	Estimate
Total Suspended Solids**			30	100	1/Week	8-Hour Composite
Oil and Grease**			15	20	1/Week	Grab
*See Special Condition 5. **See Special Condition 16 for Stormwater.						

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:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Outfall: 002 – Unit 2 House Service Water (DAF = 31.7 MGD)						
Outfall 002 includes: <ol style="list-style-type: none"> 1. Unit 1 or 2 House Service Water***** (DAF = 31.7 MGD) 2. Unit 2 Oil Separator Effluent (Intermittent Discharge) 3. Radwaste Treatment System Discharge***** (DAF = 0.005 MGD) 4. Wastewater Treatment Facility Discharge***** (DAF = 0.02 MGD) 5. Cribhouse Sump Discharge***** (Intermittent Discharge) 6. Storage Tank Atmospheric (Intermittent Discharge) *****These waste streams may discharge via Outfall 001 and/or Outfall 002.						
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				3/Week	Grab
Copper	See Special Condition 3				2/Month	Grab
Outfall: A02 – North Area Stormwater Runoff						
Outfall A02 consists of: <ol style="list-style-type: none"> 1. North Area Stormwater Runoff (Intermittent Discharge) 2. North Side General Yard Storm Ditch (Intermittent Discharge) 3. Storm Runoff From North Side Transformer Area (Intermittent Discharge) 4. North Side Roof Drains (Intermittent Discharge) 5. North and South Switch Yard Storm Runoff (Intermittent Discharge) 6. Unit 2 Service Water (Intermittent Discharge) 7. Stormwater Runoff from Oil Storage Areas (Intermittent Discharge) 						
Flow (MGD)	See Special Condition 1				1/Week	Estimate
Total Suspended Solids*			30	100	1/Week	8-Hour Composite
Oil and Grease			15	20	1/Week	Grab
*See also Special Condition 5. **See Special Condition 16 for Stormwater.						

Special Conditions

SPECIAL CONDITION 1. Flow shall be reported as a monthly average and a daily maximum in million gallons per day on the DMR form.

SPECIAL CONDITION 2. The pH shall be in the range 6.5 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. The permittee shall monitor Outfall(s) 001 and/or 002 for copper twice per month during operation of the copper ion zebra mussel control system. A representative grab sample shall be taken during normal operation of the system. Results of the copper ion monitoring shall be reported on the monthly discharge monitoring report forms. This permit may be modified to include limits and monitoring for copper should analytical results so justify. Modification of the permit shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 4. There shall be no discharge of polychlorinated biphenyl compounds. To verify compliance, the permittee shall monitor Outfalls A01 and B01 for PCBs and submit the results on the DMRs.

SPECIAL CONDITION 5. The limits for total suspended solids and oil and grease will be applicable to Outfalls E01 and A02 unless DMRs for these outfalls indicate that house service water and, for E01 and Unit 1 turbine oil tank drains, were not discharged from these outfalls during the month covered by the report.

SPECIAL CONDITION 6. For each week that there is a discharge from the fire sump to the South Area Runoff, the following limits and monitoring shall replace the limits and monitoring for total suspended solids and oil and grease at Outfall E01.

PARAMETER	Concentration Limits (mg/L DAF (DMF))		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM		
pH	Shall be in the range of 6.5 to 9.0		1/Week	Grab
Total Suspended Solids	15	30	1/Week	24-Hour Composite
Oil and Grease	15	20	1/Week	Grab

Monitoring for flow and PCBs shall remain in effect during fire sump discharges to Outfall E01.

SPECIAL CONDITION 7. 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 8. 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 Conditions

SPECIAL CONDITION 9. 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 10. This permit incorporates by reference the "upset" defense provisions listed under 40 CFR 122.41(n).

SPECIAL CONDITION 11. The permittee shall notify IEPA Des Plaines office and IEPA Springfield Office (Compliance Section), at least 48-hours in advance, of its intention to discharge any contaminants not listed in the permit application.

SPECIAL CONDITION 12. The permittee shall notify IEPA Des Plaines office and IEPA Springfield Office (Compliance Section) within 24 hours of occurrence of any spills or leaks of contaminants resulting in a discharge into any one of the plant outfalls. Additionally, the permittee shall submit a detailed written report indicating the time of discharge, the amount and type of contaminants discharged, the events leading to the discharge and the measures taken to prevent reoccurrence. This report shall be included with that month's Discharge Monitoring Report as an attachment.

SPECIAL CONDITION 13. If, during monitoring and testing, the effluent concentration exceeds the effluent limits for total suspended solids at Outfalls E01 and A02, the permittee will have the opportunity to show no violation exists by demonstrating that 35 Ill. Adm. Code 304.103 applies to the discharge during the sampling period. In addition, the permittee must demonstrate that the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water. For this Permit, Section 304.103 will apply and no violation will exist when the effluent concentration is higher than the effluent limit but it does not exceed the influent concentration. Discharge monitoring reports should indicate such a situation, and include the results of influent monitoring.

SPECIAL CONDITION 14. There shall be no discharge of metal cleaning wastes unless this permit is modified to include the new discharge.

SPECIAL CONDITION 15. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 16. (This special condition applies to Outfalls E01 and A02) 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 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.