

84/SE

Application No. OH0004006

Issue Date: September 27, 1996

Effective Date: November 1, 1996

Expiration Date: March 31, 1999

## **Ohio Environmental Protection Agency Authorization to Discharge Under the National Pollutant Discharge Elimination System**

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

### **Elkem Metals Company**

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Marietta Plant wastewater treatment works located at State Route 7 approximately 4 miles south of Marietta, Ohio, Washington County

and discharging to the Ohio River and unnamed tributaries to the Ohio River

in accordance with the conditions specified in Parts I, II, III, IV, V and VI of this permit.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

I have determined that a lowering of water quality in the Ohio River and unnamed tributaries to the Ohio River as authorized by this permit is necessary. I have made this determination based upon the consideration of all public comments, and including the consideration of technical, social, and economic criteria concerning this application and its impact on waters of the state.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

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Donald R. Schregardus  
Director

Part I, A. - **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0ID00001603. See Part II, **OTHER REQUIREMENTS**, for locations of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
Reporting Code	Units	Parameter	Concentration		Loading		Meas. Max.Freq.	Sample Type
			Specified	Units	kg/day	30 day/Daily		
00530	mg/l	Total Suspended Solids	-	-	-	-	1/Week	24 Hr. Composite
00610	mg/l	Nitrogen, Ammonia (NH <sub>3</sub> )	-	-	-	-	1/Week	24 Hr. Composite
01032	µg/l	Chromium, Hexavalent (Cr +6)-	-	-	-	-	1/Week	Grab
01034	µg/l	Chromium, Total (Cr)	-	-	-	-	1/Week	24 Hr. Composite
01055	µg/l	Manganese, Total (Mn)	-	-	-	-	1/Week	24 Hr. Composite
32730	µg/l	Phenolic 4AAP, Total	-	-	-	-	1/Week	Grab
50050	MGD	Flow Rate	-	-	-	-	Daily	24 Hr. Total
99996	mg/l	Cyanide, Total	-	-	-	-	1/Week	Grab

2. The pH (Reporting Code 00400) shall be monitored 1/week by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, **OTHER REQUIREMENTS**.

Part I, A. - **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0ID00001003. See Part II, **OTHER REQUIREMENTS**, for locations of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
Reporting Code	Units	Parameter	Concentration Specified Units	30 day Daily	Max.30 day Daily	Loading kg/day	Meas. Max.Freq.	Sample Type
00010	°C	Water Temperature	-	-	-	-	3/Week	Grab
00530	mg/l	Total Suspended Solids	-	-	-	-	1/Week	Composite
01113	µg/l	Cadmium, Total Recoverable	-	-	-	-	1/Week	24 Hr. Composite
01114	µg/l	Lead, Total Recoverable	**	780	-	-	1/Week	24 Hr. Composite
50050	MGD	Flow Rate	-	-	-	-	Daily	24 Hr. Total
50060	mg/l	Chlorine, Total Residual	-	0.2*	-	-	Daily	Grab
61425	TU <sub>a</sub>	Acute Toxicity, <u>Ceriodaphnia dubia</u>	-	3.0	-	-	See Part II, Item H.	
61427	TU <sub>a</sub>	Acute Toxicity, <u>Pimephales promelas</u>	-	3.0	-	-	See Part II, Item H.	
78739	MINS	Chlorination/Bromination Duration	-	120	-	-	Daily	Measured

\* The Total Residual chlorine limit is the maximum allowed at any time at the outfall and may not be discharged for more than two hours per day. Analyses are to be performed by amperometric titration and/or Orion Residual chlorine electrode and/or the DPD-Calorimetric method. The daily grab samples for total residual chlorine shall represent the maximum concentration during chlorination.

\*\* See Part II, Item L, language regarding Lead monitoring.

2. The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored 1/week by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

Part I, A. - **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0ID00001605. See Part II, **OTHER REQUIREMENTS**, for locations of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>		
Reporting Code	Units	Parameter	Concentration Specified	Units	Loading kg/day	30 day Daily Max.	30 day Daily	Meas. Max.Freq.	Sample Type
00530	mg/l	Total Suspended Solids	-	-	-	-	-	1/Week	24 Hr. Composite
00610	mg/l	Nitrogen, Ammonia (NH <sub>3</sub> )	-	-	-	-	-	1/Week	24 Hr. Composite
01032	µg/l	Chromium, Hexavalent (Cr +6)-	-	-	-	-	-	1/Week	Grab
01034	µg/l	Chromium, Total (Cr)	-	-	-	-	-	1/Week	24 Hr. Composite
01055	µg/l	Manganese, Total (Mn)	-	-	-	-	-	1/Week	24 Hr. Composite
32730	µg/l	Phenolic 4AAP, Total	-	-	-	-	-	1/Week	Grab
50050	MGD	Flow Rate	-	-	-	-	-	Daily	24 Hr. Total
99996	mg/l	Cyanide, Total	-	-	-	-	-	1/Week	Grab

2. The pH (Reporting Code 00400) shall be monitored 1/week by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

Part I, A. - **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0ID00001006. See Part II, **OTHER REQUIREMENTS**, for locations of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
Reporting Code	Units	Parameter	Concentration		Loading*		Meas. Max.Freq.	Sample Type
			Specified	Units	kg/day	30 day Daily		
00530	mg/l	Total Suspended Solids	-	-	821	1641	1/Week	24 Hr. Composite
00610	mg/l	Nitrogen, Ammonia (NH <sub>3</sub> )***	-	-	147	295	1/Week	24 Hr. Composite
01032	µg/l	Chromium, Hexavalent (Cr +6)-	-	-	0.066	0.132	1/Week	Grab
01034	µg/l	Chromium, Total (Cr)	-	-	1.72	3.43	1/Week	24 Hr. Composite
01055	µg/l	Manganese, Total (Mn)	-	-	29.5	59.52	1/Week	24 Hr. Composite
32730	µg/l	Phenolic 4AAP, Total	-	-	0.072	0.144	1/Week	Grab
50050	MGD	Flow Rate	-	-	-	-	Daily	24 Hr. Total
99996	mg/l	Cyanide, Total**	-	-	0.35	0.661	2/Week	Grab

\* Loading values for the calculated outfall 0ID00001006 represent the sum of the loadings at internal outfalls 0ID00001603 and 0ID00001605.

\*\* See Part II, Item M.

\*\*\* See Part II, Item N.

2. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

Part I, A. - **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0ID00001602. See Part II, **OTHER REQUIREMENTS**, for locations of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
Reporting Code	Units	Parameter	Concentration		Loading		Meas. Max.Freq.	Sample Type
			Specified	Units	kg/day	30 day Daily		
00530	mg/l	Total Suspended Solids	30	45	11.4	17	2/Week	24 Hr. Composite
31616	#/100ml	Fecal Coliform (Summer Only)	200	400	-	-	1/Week	Grab
50050	MGD	Flow Rate	-	-	-	-	1/Week	24 Hr. Total
80082	mg/l	CBOD <sub>5</sub>	25	40	9.5	15	1/Week	24 Hr. Composite

2. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

Part I, A. - **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0ID00001007. See Part II, **OTHER REQUIREMENTS**, for locations of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
Reporting Code	Units	Parameter	Concentration Specified	Loading kg/day	Meas. Max.Freq.	Sample Type
			30 day Daily Max.	30 day Daily		

This outfall shall be limited to storm runoff free from industrial or process related contaminants produced due to plant operations. See Part IV, V and VI for stormwater requirements associated with industrial activities.

Part I, A. - **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0ID00001008. See Part II, **OTHER REQUIREMENTS**, for locations of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
Reporting Code	Units	Parameter	Concentration Specified	Units	Loading	kg/day	Meas. Max.	Sample Freq. Type
			30 day	Daily	Max.	30 day	Daily	
00530	mg/l	Total Suspended Solids	30.0	100.0	-	-	3/Week	Grab
00719	mg/l	Cyanide, Free*	-	-	-	-	Quarterly	Grab
00978	µg/l	Arsenic, Total Recoverable	-	-	-	-	Quarterly	Grab
00981	µg/l	Selenium, Total Recoverable	-	-	-	-	Quarterly	Grab
00998	µg/l	Beryllium, Total Recoverable	-	-	-	-	Quarterly	Grab
01032	µg/l	Chromium, Dissolved Hexavalent (Cr +6)	-	-	-	-	Quarterly	Grab
01074	µg/l	Nickel, Total Recoverable	-	-	-	-	Quarterly	Grab
01079	µg/l	Silver, Total Recoverable	-	-	-	-	Quarterly	Grab
01094	µg/l	Zinc, Total Recoverable	-	-	-	-	Quarterly	Grab
01113	µg/l	Cadmium, Total Recoverable	-	-	-	-	Quarterly	Grab
01114	µg/l	Lead, Total Recoverable	-	-	-	-	Quarterly	Grab
01118	µg/l	Chromium, Total Recoverable	-	-	-	-	Quarterly	Grab
01119	µg/l	Copper, Total Recoverable	-	-	-	-	Quarterly	Grab
50050	MGD	Flow Rate	-	-	-	-	Daily	24 Hr. Estimate
71901	µg/l	Mercury, Total Recoverable	-	-	-	-	Quarterly	Grab

\* See Part II, Item K.

2. The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored 1/week by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

Part I, B. - **ADDITIONAL MONITORING REQUIREMENTS**

1. Sludge. The permittee shall monitor the treatment works' final sludge at Station Number 0ID00001589, and report to the Ohio EPA in accordance with the following table. See Part II, **OTHER REQUIREMENTS**, for location of sludge sampling.

<u>CHARACTERISTIC</u>			<u>MONITORING REQUIREMENTS*</u>	
Reporting Code	Units	Parameter	Measurement Frequency	Sample Type
00627	mg/kg	Nitrogen, Total Kjeldahl	Semi-Annually(1)	Grab
01028	mg/kg	Cadmium	Semi-Annually(2)	Grab
01029	mg/kg	Chromium	Semi-Annually(2)	Grab
01043	mg/kg	Copper	Semi-Annually(2)	Grab
01052	mg/kg	Lead	Semi-Annually(2)	Grab
01068	mg/kg	Nickel	Semi-Annually(2)	Grab
01093	mg/kg	Zinc	Semi-Annually(2)	Grab
70316	Dry Tons	Sludge Weight**	1/Month(1)	Total
70318	%	Sludge Solids, Percent Total	1/Month(1)	Grab
70322	%	Sludge Solids, Percent Volatile	1/Month(1)	Grab
71921	mg/kg	Mercury	Semi-Annually(2)	Grab
99991	mg/kg	Ammonia, Nitrogen	Semi-Annually(1)	Grab

\* Calculated total.

\*\* Sludge from the Imhoff Tank or sludge being dewatered on the drying beds. Does not include stockpiled sludge that has already been analyzed, except that one (1) representative sample of the sludge currently stockpiled shall be analyzed within one (1) month of the effective date of this permit.

- (1) When sludge is removed from the wastewater treatment facility and disposed of. When sludge is not removed from the wastewater treatment facility for disposal enter "AH" on the report and explain in the "Additional Remarks" section of the report.
- (2) A representative sample of the sludge\*\* shall be analyzed 1/6 months regardless of whether or not sludge was removed from the treatment plant for disposal.

Part II, **OTHER REQUIREMENTS**

A. Description of the location of the required sampling stations are as follows:

<u>Sampling Station</u>	<u>Description of Location</u>
0ID00001602	Discharge from sewage treatment plant after disinfection and prior to combining with outfall 0ID00001003. (Lat: 39° 21' 52"; Long: 81° 31' 12")
0ID00001603	(Formerly 0ID00001001) Discharge from process sludge settling ponds prior to combining with other wastewaters tributary to outfall 0ID00001003; samples to be taken from Manhole #492. (Lat: 39° 21' 38"; Long: 81° 31' 43")
0ID00001002	Deleted. Process leachate now goes to 0ID00001603 and uncontaminated storm water run off to 0ID00001003.
0ID00001605	(Formerly 0ID00001005) Discharge from sludge storage impoundment prior to combining with other wastewaters tributary to outfall 0ID00001003; samples to be taken at Manhole #497. (Lat: 39° 22' 40"; Long: 81° 31' 19")
0ID00001003	(Formerly noncontact cooling only) Combined discharge of storm water, noncontact cooling, treated process and sanitary wastewaters (outfalls 602, 603, and 605) to Ohio River. (Lat: 39° 21' 51"; Long: 81° 31' 12")
0ID00001006	Calculated (not physical) outfall which sums the loadings of outfalls 603 and 605.
0ID00001007	Discharge from Elkem fly ash disposal area surface runoff to Ohio River. (Lat: 39° 21' 58"; Long: 81° 30' 48")
0ID00001008	Discharge from Elkem fly ash disposal area leachate treatment system prior to mixing with AMP Ohio's bottom ash pond discharge via drainage way to the Ohio River. (Lat: 39° 21' 51"; Long: 81° 30' 55")
0ID00001589	Sludge removed from the sanitary waste water treatment plant for final disposal.

B. This permit shall be modified, or alternative, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under section 301(b)(2) (C), and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

- (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- (2) Controls any pollutant not limited in the permit

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

C. In the event that the permittee's operation requires the use of cooling or boiler water treatment additives that are discharged to surface waters of the state, written permission must be obtained from the director of the Ohio EPA prior to use. Reporting and testing requirements to apply for permission to use additives can be obtained from the Ohio EPA Central Office, Division of Surface Water, Water Resource Management Section. Reported information will be used to evaluate whether the use of the additive(s) at concentrations expected in the final discharge will be harmful or inimical to aquatic life.

Part II, **OTHER REQUIREMENTS** (continued)

- D. Within six (6) months of the effective date of this permit, the permittee shall submit to the Southeast District Office of Ohio EPA an updated Sludge Management Plan. This plan shall describe in detail the method or methods the entity intends to employ for the disposal or reuse of the sewage sludge generated by the facility. This plan shall also include an outline of all past and present sludge disposal practices.
- E. Permit limitations may be revised in order to meet water quality standards after a stream use determination and waste load allocation are completed and approved. This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable water quality effluent limitations.
- F. Composite samples shall be comprised of a series of grab samples collected over a 24 hour period and proportionate in volume to the flow rate at the time of sampling. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance.
- G. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's performance.
- H. **Biomonitoring Program Requirements**

As soon as possible but not later than three months after the effective date of this permit, the entity shall initiate an effluent biomonitoring program to determine the toxicity of the effluent from outfall 0ID00001003.

General Requirements

All toxicity testing conducted as required by this permit shall be done in accordance with Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency (hereinafter, the "biomonitoring guidance"), Ohio EPA, 1991 (or current revision). The Standard Operating Procedures (SOP) or verification of SOP submittal, as described in Section 1.B. of the biomonitoring guidance shall be submitted no later than three months after the effective date of this permit. If the laboratory performing the testing has modified its protocols, a new SOP is required.

Testing Requirements

1. Acute Bioassays

For the life of the permit, the permittee shall conduct quarterly definitive acute toxicity tests using *Ceriodaphnia dubia* and fathead minnows (*Pimephales promelas*) on effluent samples from outfall 0ID00001003. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance.

2. Testing of Ambient Water

In conjunction with the acute toxicity tests, upstream control water shall be collected at a point outside the zone of effluent and receiving water interaction at station 0ID00001801. Testing of ambient waters shall be done in accordance with Section 2 of the biomonitoring guidance.

Part II, **OTHER REQUIREMENTS** (continued)

H. Continued

3. Data Review

a. Reporting

Following completion of each quarterly bioassay requirement, the permittee shall report results of the tests in accordance with Sections 2.H.1. and 2.H.2.a. of the biomonitoring guidance. Based on Ohio EPA's evaluation of the results, this permit may be modified to require additional biomonitoring, require a toxicity reduction evaluation, and/or contain whole effluent toxicity limits.

b. Definitions

$$TU_a = \text{Acute Toxic Units} = \frac{100}{LC50} \text{ or } \frac{100}{EC50}$$

I. Best Management practices Plan

By April 24, 1996, the permittee has submitted to the Ohio EPA an updated Best Management Practices plan (BMP) for the control of toxic pollutants, oils and other unauthorized pollutants that may be discharged from the outfalls. For purposes of this section toxic pollutants means any pollutants listed as toxic under Section 307(a)(1) of the Clean Water Act, or any pollutant listed as hazardous under Section 311 of the Clean Water Act.

The permittee shall maintain a copy of the BMP plan at the facility and shall make the copy available to the Director upon request.

The permittee shall amend the BMP plan whenever there is a change in facility design, construction, operation, or maintenance which materially affects the facility's potential for discharge of significant amounts of unauthorized or hazardous or toxic pollutants into the waters of the State.

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of significant amount of unauthorized or toxic or hazardous pollutants to those waters, then the permit and/or BMP plan shall be subject to modification to incorporate revised BMP requirements.

- J. It is understood by Ohio EPA that, at the time permit 0ID00001\*ED becomes effective, an analytical method is not approved under 40 CFR 136 to evaluate compliance with the free cyanide effluent limitations contained in the permit. The permittee shall utilize method 4500-CN I contained in the 17th edition of Standard Methods (method 412H, 16th edition) until U.S. EPA promulgates a method for analyzing free cyanide under 40 CFR 136. As long as the permittee complies with the previous provision, Ohio EPA will consider all analytical results properly reported as below detection to be zeros for compliance and enforcement purposes.

If a method(s) for analyzing free cyanide is promulgated by U.S. EPA during the period when this permit is effective, the permittee shall, within twelve months after promulgation, adopt an approved procedure for monitoring compliance with the free cyanide effluent limits contained in the permit. During this twelve month interim period, the permittee shall perform analyses utilizing both the approved procedure and the previous procedure for comparison purposed while reporting only the results of the previous procedure for compliance purposes.

Part II, **OTHER REQUIREMENTS** (continued)

J. Continued.

Utilization of both types of analysis shall begin within six months of promulgation of the approved procedure allowing a six month evaluation period.

K. The parameters listed below have had effluent limitations established that are below the practical quantification level (PQL) of the 40 CFR 136 promulgated analytical procedures for those parameters. In accordance with ORC 6111.13, if a discharge limit is set below the PQL, any analytical result reported at or below the PQL shall be considered to be in compliance with that limit. All analytical results, even those below the PQL, shall be reported. Analytical results below the method detection limit shall be reported as below detection using reporting code "AA".

<u>Parameter</u>	<u>PQL</u>
Total Cyanide	0.025 mg/l
Hexavalent Chromium	0.050 mg/l

L. The water quality-based effluent limitations for Total Recoverable lead for outfall 0ID00001003 were based on ambient water quality data for the Ohio River obtained by ORSANCO for the period 1976 through 1986. The data were obtained at ORSANCO Ohio River sampling stations located from river miles 161.9 to 279.2. These data show the Lead concentration in the Ohio River was about 10 ug/l during that period. These data may not represent current water quality in the Ohio River in the vicinity of outfall 0ID00001003. The permittee may collect Lead data for the Ohio River by monitoring the quality of its non-contact cooling water obtained from the River and outfall 0ID00001003 for the purpose of determining whether water quality-based effluent limitations for Lead for outfall 0ID00001003 are warranted. As a minimum, the permittee shall collect 25 samples at each location over a three month period with the incoming river samples as grabs and the outfall 0ID00001003 discharge samples as composites. Based upon the results of this study, the agency will determine whether any effluent limitations or monitoring requirements are necessary for Lead at outfall 0ID00001003.

M. These are Best Available Technology Economically Achievable (BAT) effluent limits determined using Best Professional Judgement (BPJ) by considering the information available to Ohio EPA at the time of issuing this permit. If after implementing what is considered BAT Technology for reduction of cyanide from furnace scrubber wastewater, Elkem demonstrates that these limits cannot be met, Ohio EPA will consider relaxing these limits by another BPJ analysis.

N. Elkem Metals is committed to reducing its generation of specific waste materials including, but not limited to, ammonia, manganese and hexavalent chromium by process changes from calculated outfall 0ID00001006. After spending a significant amount of money in laboratory testing of these possible process changes, Elkem Metals is now scaling the lab processes into pilot plant scale. Elkem Metals shall complete the pilot plant project on or before December 31, 1996. Elkem Metals shall report the results of the project to Ohio EPA (Attn: Group Leader, Permit Section, Southeast District office) within sixty (60) days of completion of the project. Upon successful implementation of pilot test results into its manufacturing process, Elkem Metals estimates by the year 2000, reduction of ammonia discharge by up to 50%, or alternatively as much as feasibly possible. During the permit renewal, Ohio EPA reserves the right to include permit limits based on actual reduction of ammonia discharge loadings.

### **PART III - GENERAL CONDITIONS**

#### **1. DEFINITIONS**

"daily load limitations" is the total discharge by weight during any calendar day. If only one sample is taken during a day, the weight of pollutant discharge calculated from it is the daily load.

"daily concentration limitation" means the arithmetic average (weighted by flow) of all the determinative daily concentration made during the day. If only one sample is taken during the day, its concentration is the daily concentration. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"7-day load limitation" is the total discharge by weight during any 7-day period divided by the number of days in that 7-day period that the facility was in operation. If only one sample is taken in a 7-day period, the weight of pollutant discharge calculated from it is the 7-day load. If more than one sample is taken during the 7-day period, the 7-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 7-day period, and dividing by the number of days sampled.

"7-day concentration limitation" means the arithmetic average (weighted by flow) of all the determinative daily concentration limitation made during the 7-day period. If only one sample is taken during the 7-day period, its concentration is the 7-day concentration limitation for that 7-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"30-day load limitation" is the total discharge by weight during any 30-day period divided by the number of days in the 30-day period that the facility was in operation. If only one sample is taken in a 30-day period, the weight of pollutant discharge calculated from it is the 30-day load. If more than one sample is taken during one 30-day period, the 30-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 30-day period and dividing by the number of days sampled.

"30-day concentration limitation" means the arithmetic average (weighted by flow) of all the determinative daily concentration made during the 30-day period. If only one sample is taken during the 30-day period, its concentration is the 30-day concentration for that 30-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"85 percent removal limitations" means the arithmetic mean of the values for effluent samples collected during a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"Net load" shall mean the difference between the load of a given substance as calculated from a sample of the discharge and the load of the same substance in a sample taken at the intake which supplies water to the process. For purposes of this definition, samples that are taken to determine the net loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly sampling frequency" means the sampling shall be done in the months of March, June, August, and December.

"Yearly sampling frequency" means the sampling shall be done in the month of September.

"Semi-annual sampling frequency" means the sampling shall be done during the months of June and December.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

**PART III - GENERAL CONDITIONS (continued)**

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or inattentive operation.

2. GENERAL EFFLUENT LIMITATIONS

The effluent shall, at all times, be free of substances:

- A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;
- B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;
- C. In amounts that will alter the natural color or odor of the receiving water to such degree as to constitute a nuisance;
- D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;
- E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growth becomes inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;
- F. In amounts that will impair designated instream or downstream water uses.

3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

- A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires operation of back-up or auxiliary facilities or similar systems which are installed by a permittee when the operation is necessary to achieve compliance with conditions of the permit.
- B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.
- C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by the Ohio EPA as specified in the Paragraph in this PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

- A. Monitoring data required by this permit shall be reported on the Ohio EPA report form (4500) on a monthly basis. Individual reports for each sampling station for each month are to be received no later than the 15th day of the next month. The original plus first copy of the report form must be signed and mailed to:

Ohio Environmental Protection Agency  
Division of Surface Water  
Enforcement Section, ES/MOR  
P.O. Box 1049  
Columbus, Ohio 43266-0149

- B. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified below, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.
- C. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall be reported on Ohio EPA report form (4500) but records shall be retained as specified in the paragraph entitled "RECORDS RETENTION".

5. SAMPLING AND ANALYTICAL METHODS

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements.

**PART III - GENERAL CONDITIONS (continued)**

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- A. The exact place and date of sampling; (time of sampling not required on EPA 4500)
- B. The person(s) who performed the sampling or measurements;
- C. The date the analyses were performed on those samples;
- D. The person(s) who performed the analyses;
- E. The analytical techniques or methods used; and
- F. The results of all analyses and measurements.

7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years, including:

- A. All sampling and analytical records (including internal sampling data not reported);
- B. All original recordings for any continuous monitoring instrumentation;
- C. All instrumentation, calibration and maintenance records;
- D. All plant operation and maintenance records;
- E. All reports required by this permit; and
- F. Records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period for retention of records shall start from the date of sample, measurement, report, or application.

8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Ohio Code Section 6111.99.

9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director requests to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. RIGHT OF ENTRY

The permittee shall allow the Director, or an authorized representative upon presentation of credentials and other documents as may be required by law to:

- A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, where records must be kept under the conditions of this permit.
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

- A. Bypassing or diverting of wastewater from the treatment works is prohibited unless:
  1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

**PART III - GENERAL CONDITIONS (continued)**

2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
3. The permittee submitted notices as required under paragraph D. of this section.
- B. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.
- C. The Director may approve an unanticipated bypass, after considering its adverse effects, if the Director determines that it has met the three conditions listed in paragraph 11.A. of this section.
- D. The permittee shall submit notice of an unanticipated bypass as required in section 12.
- E. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided that the bypass is for essential maintenance to assure efficient operation.

**12. NONCOMPLIANCE NOTIFICATION**

- A. The permittee shall by telephone report any of the following within twenty-four (24) hours of discovery at (toll free) 1-800-282-9378:
  1. Any noncompliance which may endanger health or the environment;
  2. Any unanticipated bypass which exceeds any effluent limitation in the permit; or
  3. Any upset which exceeds any effluent limitation in the permit.
  4. Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit.
- B. For the telephone reports required by Part 12.A., the following information must be included:
  1. The times at which the discharge occurred, and was discovered;
  2. The approximate amount and the characteristics of the discharge;
  3. The stream(s) affected by the discharge;
  4. The circumstances which created the discharge;
  5. The names and telephone numbers of the persons who have knowledge of these circumstances;
  6. What remedial steps are being taken; and
  7. The names and telephone numbers of the persons responsible for such remedial steps.
- C. These telephone reports shall be confirmed in writing within five days of the discharge and submitted to the appropriate Ohio EPA district office. The report shall include the following:
  1. The limitation(s) which has been exceeded;
  2. The extent of the exceedance(s);
  3. The cause of the exceedance(s);
  4. The period of the exceedance(s) including exact dates and times;
  5. If uncorrected, the anticipated time the exceedance(s) is expected to continue, and
  6. Steps being taken to reduce, eliminate, and/or prevent recurrence of the exceedance(s).
- D. Compliance Schedule Events:

If the permittee is unable to meet any date for achieving an event, as specified in the schedule of compliance, the permittee shall submit a written report to the appropriate district office of the Ohio EPA within 14 days of becoming aware of such situation. The report shall include the following:

  1. The compliance event which has been or will be violated;
  2. The cause of the violation;
  3. The remedial action being taken; and
  4. The probable date by which compliance will occur; and

**PART III - GENERAL CONDITIONS (continued)**

5. The probability of complying with subsequent and final events as scheduled.

E. The permittee shall report all instances of noncompliance not reported under paragraphs A, B, or C of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraphs B and C of this section.

F. Where the permittee becomes aware that it failed to submit any relevant application or submitted incorrect information in a permit application or in any report to the director, it shall promptly submit such facts or information.

13. RESERVED

14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

15. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 307 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;
2. The addition of any new significant industrial discharge; and
3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges will result in significant new or increased discharges of pollutants.

C. For non-publicly owned treatment works, any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

D. In addition to the reporting requirements under 40 CFR 122.41(1) and per 40 CFR 122.42(a), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

**PART III - GENERAL CONDITIONS (continued)**

18. PERMIT MODIFICATION OR REVOCATION

- A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA whole or in part during its term for cause including, but not limited to, the following:
1. violation of any terms or conditions of this permit;
  2. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  3. change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- B. Pursuant to rule 3745-33-06, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification shall be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms provided by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

This permit cannot be transferred or assigned nor shall a new owner or successor be authorized to discharge from this facility, until the following requirements are met:

- A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty days prior to the proposed date of transfer;
- B. A written agreement containing a specific date for transfer of permit responsibility and coverage by both the current and new permittee (including acknowledgement that the existing permittee is liable for any violations up to that date, and that the new permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;
- C. The Director does not exercise his right within thirty days after receipt of the written agreement to notify the current permittee and the new permittee of his or her intent to modify or revoke the permit and to require that a new application be filed; and
- D. The new owner or successor receives written confirmation and approval of the transfer from the Director of the Ohio EPA.

At anytime during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit.

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

21. SOLIDS DISPOSAL

Collected screenings, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state. For publicly owned treatment works, these shall be disposed in accordance with the approved Ohio EPA Sludge Management Plan.

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable statute or regulation under authority preserved by Section 510 of the Act.

**PART III - GENERAL CONDITIONS (continued)**

25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or exclusive privileges, nor does it authorize any injury to private property or any invasion of personal nor any infringement of federal, state, or local laws or regulations.

26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part 1, DEFINITIONS.

27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

28. SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22(b) and (c).

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22(b) and (c).

29. OTHER INFORMATION

- A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.
- B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate a monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000 per violation.
- C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation.
- D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042., 6111.05., or division of Section 6111.07 of the Revised Code shall be fined not more than twenty-five thousand dollars or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

**Part IV. STORM WATER POLLUTION PREVENTION PLANS**

A storm water pollution prevention plan (plan) shall be developed to address each outfall that discharges to of the state that contains storm water associated with industrial activity. Storm water pollution prevention shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from 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. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

**A. Deadlines for Plan Preparation and Compliance.**

1. The plan for a storm water discharge associated with industrial activity:
  - a. shall be prepared within six months of the effective date of this permit (and updated as appropriate);
  - b. shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.
2. Upon a showing of good cause, the Director may establish a later date for preparing and compliance plan for a storm water discharge associated with industrial activity.

**B. Signature and Plan Review.**

1. The plan shall be signed in accordance with Part VI, and be retained on-site at the facility which generates the storm water discharge.
2. The permittee shall make plans available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system the operator of the municipal system.
3. The Director may notify the permittee at any time that the plan does not meet one or more of the requirements of this Part. Within 30 days of such notification from the Director, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that requested changes have been made.
4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. The permittee may choose to fulfill such requests by allowing viewing of the plan at its facilities, or choosing to copy the plan and sending to the party making the request. The permittee may charge the party making the request a reasonable fee for copying the plan. The permittee may claim any portion of a storm water pollution plan as confidential in accordance with 40 CFR Part 2 and does not have to release any portion of the plan describing facility security measures (such as provided for in Part IV.D.7.b.(8) of this permit).

**C. Keeping Plans Current.**

The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the water of the State or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.2 of this permit, or otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.B above.

**D. Contents of Plan.** The plan shall include, at a minimum, the following items:

1. Pollution Prevention Team - Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
2. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially add significant pollutant sources. Each plan shall include, at a minimum:
  - a. Drainage.
    - (1) A site map indicating an outline of the drainage area of each storm water outfall, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part IV.D.2.c of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, ve

**Part IV. STORM WATER POLLUTION PREVENTION PLANS** (continued)

D. (continued)

and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

- (2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Flows with a significant potential for causing erosion shall be identified.
  - b. Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structures and non-structural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives.
  - c. Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility after the date of three years prior to the effective date of this permit.
  - d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.
  - e. Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources at the following areas: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generation processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant parameter (e.g. biochemical oxygen demand, etc.) of concern shall be identified.
3. Measures and Controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, in a schedule for implementing such controls:
- a. Good Housekeeping - Good housekeeping requires the maintenance of a clean, orderly facility.
  - b. Preventive Maintenance - A preventive maintenance program shall involve inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins) as well as inspection and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
  - c. Spill Prevention and Response Procedures - Areas where potential spills can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.
  - d. Inspections - In addition to or as part of the comprehensive site evaluation required under Part I of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspection. Records of inspections shall be maintained.
  - e. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
  - f. Recordkeeping and Internal Reporting Procedures - A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
  - g. Non-Storm Water Discharges
    - (1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of

**Part IV. STORM WATER POLLUTION PREVENTION PLANS** (continued)

D. (continued)

test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria, the testing method used, the date of any testing and/or evaluation, and the on-site drainage point that were directly observed during the test. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution prevention plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger who is unable to provide the certification required by this paragraph must notify in accordance with Part IV.A of this permit.

- (2) Except for flows from fire fighting activities, sources of non-storm water listed in Part VI of this permit that are combined with storm water discharges associated with industrial activity shall be identified in the plan. The plan shall identify and ensure the implementation of appropriate storm water pollution prevention measures for the non-storm water component(s) of the discharge.
  - h. Sediment and Erosion Control - The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit soil erosion.
  - i. Management of Runoff - The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the source of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures determined to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Parts IV.D.2.(b), (d) and (e) of this permit) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: including vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and detention/retention devices.
4. Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph IV.D.4.d, in no case less than once a year. Such evaluations shall provide:
    - a. Material handling areas and other potential sources of pollution identified in the plan in accordance with paragraph IV.D.2 of this permit shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be inspected to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
    - b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.2 of this permit and pollution prevention measures and controls identified in the plan in accordance with paragraph IV.D.3 of this permit shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.
    - c. A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.b of the permit shall be made and retained as part of the storm water pollution prevention plan for at least three years. The report shall be signed in accordance with Part VI.B of this permit.
  5. Additional requirements for storm water discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more.

In addition to the applicable requirements of this permit, facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's storm water discharge, provided the discharger has been notified of such conditions.
  6. Consistency with other plans. Storm water pollution prevention plans may reflect requirements for Storm Water Pollution Prevention Control and Countermeasure (SPCC) plans developed for the facility under section 311 of the Clean Water Act or Best Management Practices (BMP) Programs otherwise required by a NPDES permit for the facility as long as such requirement is incorporated into the storm water pollution prevention plan.
  7. Additional requirements for storm water discharges associated with industrial activity from facilities subject to SARA Title III, Section 313 requirements. In addition to the requirements of Parts IV.D.1 through 4 of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under SARA Title III, Section 313 for chemical pollutants are classified as "Section 313 water priority chemicals" in accordance with the definition in Part VI of this permit, shall describe and ensure the implementation of practices which are necessary to provide conformance with the following guidelines:

**Part IV. STORM WATER POLLUTION PREVENTION PLANS** (continued)

D. (continued)

- a. In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:
  - (1) Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize potential for storm water run-on to come into contact with significant sources of pollutants;
  - (2) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind blowing.
- b. In addition to the minimum standards listed under Part IV.D.7.a of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:
  - (1) Liquid storage areas where storm water comes into contact with any equipment, tank, container or other vessel used for Section 313 water priority chemicals.
    - (a) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored under the conditions of storage such as pressure and temperature, etc.
    - (b) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.
  - (2) Material storage areas for Section 313 water priority chemicals other than liquids. Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind blowing shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.
  - (3) Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.
  - (4) In facility areas where Section 313 water priority chemicals are transferred, processed or otherwise handled. Processing equipment and materials handling equipment shall be operated as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall be designed as described in paragraphs (a), (b) and (c) of this section. Additional protection such as covers or guards to prevent wind blowing, spraying releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system, and overhangs or door skirts to enclose trailer ends at loading/unloading docks shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.
  - (5) Discharges from areas covered by paragraphs (1), (2), (3) or (4).
    - (a) Drainage from areas covered by paragraphs (1), (2), (3) or (4) of this part should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.
    - (b) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-closed design.
    - (c) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.
    - (d) Records shall be kept of the frequency and estimated volume (in gallons) of discharge from containment areas.

**Part IV. STORM WATER POLLUTION PREVENTION PLANS** (continued)

D. (continued)

- (6) Facility site runoff other than from areas covered by (1), (2), (3) or (4). Other areas of the facility (those not addressed in paragraphs (1), (2), (3) or (4)), from which runoff may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.
  - (7) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bin pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or non-containment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to the drainage system, corrective action shall be immediately taken or the unit or process shut down until corrective action can be taken. When a leak or non-containment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.
  - (8) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.
  - (9) Training. Facility employees and contractor personnel using the facility shall be trained and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution prevention control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.
  - (10) Engineering Certification. No storm water pollution prevention plan for facilities subject to SARA Title III, Section 313 requirements for chemicals which are classified as 'Section 313 water priority chemicals' shall be effective to satisfy the requirements of part IV.D.7 of this permit unless it has been reviewed by a Registered Professional Engineer and certified by such Professional Engineer. A Registered Professional Engineer shall recertify the plan every three years thereafter. By means of these certifications the engineer, having examined the plan, facility and being familiar with the provisions of this part, shall attest that the storm water pollution prevention plan has been prepared in accordance with good engineering practices. Such certifications shall in no way relieve the owner or operator of a facility covered by this plan of their duty to prepare and fully implement such plan.
8. Additional Requirements for Salt Storage. Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to a waters of the United States shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile within two years of the effective date of this permit. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the State.

**Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**A. Coal Pile Runoff Effluent Limitations.** Any discharge of coal pile runoff is authorized to discharge as of the effective date of this permit and shall comply with the following effluent limitations as expeditiously as practicable, but no later than three years after the effective date of this permit. Coal pile runoff shall be diluted with storm water or other flow in order to meet these limitations.

<u>Units</u>	<u>Parameter</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>
mg/l	Total Suspended Solids	-	50
S.U.	pH	6.0	9.0

Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24-hour rainfall event shall not be subject to the limitation on total suspended solids. It is the permittee's responsibility to demonstrate to the Ohio EPA that a 10 year, 24-hour rainfall event has occurred and the volume of the overflow to which the Total Suspended Solids effluent limitation does not apply.

**B. Monitoring Requirements.** Only the activities described in the following matrix and associated definition are required to conduct monitoring. The monitoring required in the following matrix shall be conducted annually. Monitoring shall be initiated within twelve months of the effective date of this permit and henceforth on an annual basis, weather conditions permitting. A permittee may, in lieu of annual monitoring, certify that industrial materials are not exposed to storm water; such certification shall be submitted to the Ohio EPA on the request of the Director.

1. MONITORING REQUIREMENTS MATRIX

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a <sup>1</sup>	b <sup>2</sup>	c	d	e	f	g	h	i <sup>3</sup>	j	k	l <sup>4</sup>
mg/l	Oil and Grease	X	X	X	X	X	X	X	X	X	X	X	X
mg/l	5-day Biochemical Oxygen Demand	X	X							X		X	
mg/l	Chemical Oxygen Demand	X	X	X	X	X	X		X	X			X
mg/l	Total Suspended Solids	X	X		X	X	X	X	X	X	X	X	X
mg/l	Total Kjeldahl Nitrogen	X		X								X	
mg/l	Phosphorus	X										X	
S.U.	pH	X	X	X	X	X	X	X	X	X	X	X	X
TU <sub>15</sub>	Acute Toxicity	X	X <sup>4</sup>	X	X	X							
Hours	Duration of Storm Event	X	X	X	X	X	X	X	X	X	X	X	X
Inches	Precipitation	X	X	X	X	X	X	X	X	X	X	X	X
Hours	Duration Between Storm Events*	X	X	X	X	X	X	X	X	X	X	X	X
Gallons	Volume (est)	X	X	X	X	X	X	X	X	X	X	X	X
mg/l	Nitrate-Nitrogen												
mg/l	Nitrite-Nitrogen												
µg/l	Lead, Total		X	X					X				
µg/l	Cadmium, Total		X <sup>4</sup>	X									
µg/l	Copper, Total		X <sup>4</sup>				X	X	X		X		
µg/l	Arsenic, Total		X <sup>4</sup>	X			X						
µg/l	Chromium, Total		X <sup>4</sup>	X			X						
mg/l	Ammonia												
µg/l	Magnesium, Total			X									

**Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)**

B. (continued)

Reporting Units	Parameter	INDUSTRIAL ACTIVITY CATEGORIES											
		a <sup>1</sup>	b <sup>2</sup>	c	d	e	f	g	h	i <sup>3</sup>	j	k	l <sup>4</sup>
µg/l	Magnesium, Dissolved			X									
mg/l	Total Dissolved Solids			X									
mg/l	Total Organic Carbon			X									
µg/l	Barium, Total			X									
mg/l	Cyanide, Total			X									
µg/l	Mercury, Total			X									
µg/l	Selenium, Total			X									
µg/l	Silver, Total			X									
µg/l	Pentachlorophenol				X								
µg/l	Nickel, Total							X			X		
µg/l	Zinc, Total							X			X		
#/100ml	Fecal Coliform											X	

\* Time between the storm event when sampling is being conducted and the last storm event producing rainfall greater than 0.1 inches.

- (1) and any Section 313 water priority chemical for which the facility is subject to reporting requirements under Section 313 of the Emergency Planning and Community Right to Know Act of 1986.
- (2) and any pollutant limited in an effluent guideline or categorical pretreatment standard which the facility is subject.
- (3) and the primary ingredient used in the deicing materials used at the site (e.g., ethylene glycol, etc.).
- (4) Facilities that are classified as SIC 33 only because they manufacture pure silicon and/or semiconductor grade silicon are not required to monitor for this parameter.

2. Industrial Activity Categories Definitions

- a. Section 313 of SARA Title III Facilities. In addition to any monitoring required by Parts V.B.2.b through 1., facilities with storm water discharges associated with industrial activity that are subject to requirements to report releases into the environment under Section 313 of SARA Title III for chemicals which are classified as 'Section 313 water priority chemicals' are required to monitor storm water that is discharged from the facility that comes into contact with any equipment, tank, container or other vessel or area used for storage of a Section 313 water priority chemical, or located at a port or rail car loading or unloading area where a Section 313 water priority chemical is handled.
- b. Primary Metal Industries. Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility.
- c. Land Disposal Units/Incinerators/BIFs. Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application sites or open dump with stabilized final cover that has received any industrial wastes from a facility with a Standard Industrial Classification (SIC) of between 20-39 (manufacturing); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor such storm water that is discharged from the facility.
- d. Wood Treatment Using Chlorophenolic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.
- e. Wood Treatment Using Creosote Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.

**Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** (continued)

B. (continued)

- treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.
- f. Wood Treatment Using Chromium-Arsenic Formulations. Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility.
- g. Coal Pile Runoff. Facilities with storm water discharges associated with industrial activity from pile runoff are required to monitor such storm water that is discharged from the facility.
- h. Battery Reclaimers. Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility.
- i. Airports. At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility.
- j. Coal-fired Steam Electric Facilities. Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 CFR 411 - which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility.
- k. Animal Handling / Meat Packing. Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils, are required to monitor such storm water that is discharged from the facility.
- l. Additional Facilities. Facilities with storm water discharges associated with industrial activity from the following are required to monitor such storm water that is discharged from the facility:
- (1) come in contact with storage piles for solid chemicals used as raw materials that are exposed to precipitation at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);
  - (2) are from those areas at automobile junkyards with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 500 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;
  - (3) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;
  - (4) are from oil handling sites at oil fired steam electric power generating facilities;
  - (5) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 CFR 411 - which are not eligible for coverage under this permit);
  - (6) are from ready-mixed concrete facilities; or
  - (7) are from ship building and repairing facilities; are required to monitor such storm water discharged from the facility.
3. Sample Type. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for both a grab sample and a composite sample. All such samples shall be collected from the discharge resulting from a storm event which is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measured (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first thirty minutes of the discharge. If the collection of a grab sample during the first thirty minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first thirty minutes is impracticable. The composite sample shall either be flow-weighted or time-weighted. Composite samples shall be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in an hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. Only grab samples must be collected and analyzed for the determination of pH, cyanide, whole effluent toxicity, and oil and grease.

**Part V. NUMERIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** (continued)

B. (continued)

4. Sampling Waiver. When a discharger is unable to collect samples due to adverse climatic conditions, discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
5. Representative Discharge. When a facility has two or more outfalls that, based on a consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

**C. Toxicity Testing.** Permittees that are required to monitor for acute whole effluent toxicity shall initiate a series of tests described below within 365 days of approval from the Director of coverage under this general permit. In lieu of toxicity testing, a facility may analyze its storm water for priority pollutants if it has reason to believe have the potential to discharge through an industrial outfall.

1. Test Procedures

The permittee shall conduct acute 24 hour static toxicity tests on both *Ceriodaphnia dubia* and fathead minnow (*Pimephales promelas*).

- a. All test organisms, procedures and quality assurance criteria used shall be in accordance with Method for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA/600/4-90-027 (Rev. September 1991). EPA has proposed to establish regulations regarding these methods (December 4, 1989, 53 FR 50216).
  - b. Tests shall be conducted annually (once per year) on a grab sample of the discharge at 100% strength (dilution) and a control consisting of either receiving water or synthetic dilution water. Results of all tests conducted with any species shall be reported according to EPA/600/4-90-027 (Rev. September 1991), Section 12, Report Preparation, and the report retained. The permittee shall report "0" if there is no statistical difference between the control mortality and the effluent mortality. If there is a statistical difference (exhibits toxicity), the permittee shall report "1". The data shall be submitted to the Ohio EPA upon request by the Director, or his authorized representative.
2. If acute whole effluent toxicity (statistically significant difference between the 100% dilution and control) is detected in storm water discharges collected three years from the effective date, the permittee shall review the storm water pollution prevention plan and make appropriate modifications to assist in identifying the source(s) of toxicity and to reduce the toxicity of their storm water discharges. A copy of the review and the resulting modifications shall be provided in the plan.

**Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION**

- A. Failure to Certify.** Any facility that is unable to provide the certification required under paragraph IV.D.3.g.(1) (testing for non-storm water discharges), must notify the Director within 180 days of the effective date of this permit. Such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible.
- B. Signatory Requirements.** All storm water pollution prevention plans, reports, certifications or information either submitted to the Director (and/or the operator of a large or medium municipal separate storm sewer system), or that this permit requires be maintained by the permittee, shall be signed.
1. a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - c. For a municipality: State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).
2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - a. The authorization is made in writing by a person described above and submitted to the Director.
    - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position).
    - c. Changes to authorization. If an authorization under paragraph VI.B.2. is no longer accurate because of a different individual or position having responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph VI.B.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
    - d. Certification. Any person signing documents under this section shall make the following certification:  
*"I certify under penalty of law that this document and all attachments were prepared under my direct supervision or supervision in accordance with a system designed to assure that qualified personnel properly gathered, reviewed, and evaluated the information submitted. Based on my inquiry of the person or persons who managed the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*
- C. Definitions.**
- "Section 313 water priority chemical"** means a chemical or chemical categories which are: 1) are listed at 40 CFR 117.21 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986; also titled the Emergency Planning and Community Right-to-Know Act of 1986; 2) are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the Act; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.
- "Significant materials"** includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
- "Significant spills"** includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 302.4 of CERCLA (see 40 CFR 302.4).

**Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION (continued)**

C. (continued)

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Definition of Storm Water Associated with Industrial Activity" means the discharge from any conveyance used for collecting and conveying storm water and which is directly related to manufacturing, processing materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, and disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading, unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi)) include those facilities designated under 40 CFR 122.26(a)(1)-(10). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- (i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);
- (ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441, 373;
- (iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, treatment operations, or transmission facilities that discharge storm water contaminated by contact or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;
- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- (v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste not received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;
- (vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but not limited to those classified as Standard Industrial Classification 5015 and 5093;
- (vii) Steam electric power generating facilities, including coal handling sites;
- (viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 422, 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraph (vii) or (ix)-(xi) of this subsection are associated with industrial activity;
- (ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment procedure under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;
- (x) Construction activity - This category of industrial activity is not regulated under this permit.

**Part VI. OTHER STORM WATER REQUIREMENTS, DEFINITIONS AND AUTHORIZATION** (continued)

C. (continued)

- (xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 30, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x)).

"SWPPP" means storm water pollution prevention plan to be completed as a condition of this permit (see Part VI of this permit).

"Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

"Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

"10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in 10 years. This information is available in "Weather Bureau Technical Paper 40," May 1961 and "NOAA Atlas 2," 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.