STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PUBLIC NOTICE NO 20240418 – IN0001210– D
DATE OF NOTICE: April 18, 2024
DATE RESPONSE DUE: May 20, 2024

The Office of Water Quality proposes the following DRAFT NPDES PERMIT:

Major – Renewal:

Arconic US LLC, Permit No. IN0001210, TIPPECANOE COUNTY, 3131 E Main St., Lafayette, IN. This facility engages in the production of a variety of formed aluminum products serving an international market. The facility discharges sanitary wastewater, industrial wastewater, stormwater and other miscellaneous treated waste streams into Elliot Ditch to Wea Creek to the Wabash River through Outfall 001. Outfall 001 is located at 40º 22' 49" N, 85º 51' 35" W and has an average discharge 0.29 MGD. Permit Manager: Matt Warrener, 317/233-0798, mwarrene@idem.in.gov. Posted online at https://www.in.gov/idem/public-notices/.

PROCEDURES TO FILE A RESPONSE

You are hereby notified of the availability of a 30-day public comment period regarding the referenced draft permit, in accordance with 327 IAC 5-3-9. The application and draft permit documents are available for inspection at IDEM, Office of Water Quality, Indiana Government Center North - Room 1255, 100 N. Senate Ave, Indianapolis, IN 46204 from 9:00 a.m. until 4:00 p.m., Monday thru Friday, (copies 10¢ per page). The Draft Permit is posted online on the above-referenced IDEM public notice web page. A courtesy copy has also been sent via email to the local County Health Department. Please tell others whom you think would be interested in this matter. For more information about public participation including your rights & responsibilities, please see https://www.in.gov/idem/public-notices/. You may want to consult our online Citizens' Guide to IDEM: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

Comments: The proposed decision to issue a permit is tentative. Interested persons are invited to submit written comments on the draft permit. All comments must be delivered to IDEM or postmarked no later than the Response Due Date noted to be considered in the decision to issue a final permit. Deliver or mail all requests or comments to the attention of the Permit Manager at the above address.

To Request a Public Hearing: Any person may request a public hearing. A written request must be submitted to the above address on or before the Response Due Date. The written request shall include: the name and address of the person making the request, the interest of the person making the request, persons represented by the person making the request, the reason for the request and the issues proposed for consideration at the hearing. The Department will determine whether to hold a public hearing based upon the comments and therationale for the request. Public Notice of such a hearing will be circulated in at least one newspaper in the geographical area of the discharge and to those persons submitting comments and/or on the mailing list at

least 30 days prior to the hearing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

April 18, 2024

VIA ELECTRONIC MAIL

Mr. David Barger, Environmental Health and Safety Director
Arconic US LLC
3131 East Main Street
Lafayette, IN 47905

Dear Mr. Barger:

Re: NPDES Permit No. IN0001210
Draft Permit
Arconic US LLC
Lafayette, IN – Tippecanoe County

Your application and supporting documents have been reviewed and processed in accordance with rules adopted under 327 IAC 5. Enclosed is a copy of the draft NPDES Permit.

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at https://www.in.gov/idem/public-notices/. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at https://www.in.gov/idem/resources/citizens-guide-to-idem/. A 30-day comment period is available to solicit input from interested parties, including the public.

Please review this draft permit and associated documents carefully to become familiar with the proposed terms and conditions. Comments concerning the draft permit should be submitted in accordance with the procedure outlined in the enclosed public notice form. We suggest that you meet with us to discuss major concerns or objections you may have with the draft permit.

Questions concerning this draft permit may be addressed to Matt Warrener of my staff, at 317-233-0798 or mwarrene@idem.in.gov.

Sincerely,

Richard Hamblin, Chief
Industrial NPDES Permits Section
Office of Water Quality

Enclosures
cc: Tippecanoe County Health Department
Ms. Joyce Casillas, Certified Operator
Chief, Permits Section, U.S. EPA, Region 5
Ms. Maggie Kroeger, IDEM inspector

STATE OF INDIANA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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., the "Clean Water Act" or "CWA"), and IDEM's authority under IC 13-15,

ARCONIC US LLC

is authorized to discharge from the aluminum manufacturing facility that is located at 3131 East Main Street, Lafayette, Indiana, Tippecanoe County to receiving waters identified as Elliot Ditch to Wea Creek to Wabash River in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I and II hereof. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

Effective Date:_____

Expiration Date:_____

In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as are required by the Indiana Department of Environmental Management no later than 180 days prior to the date of expiration.

Issued on _____ for the Indiana Department of Environmental Management.

Jerry Dittmer, Chief
Permits Branch
Office of Water Quality

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 001, located at Latitude 40° 22' 49", Longitude -86° 51' 35". The discharge is limited to waters and wastewaters from Internal Outfall 101, site storm water and authorized non-storm water discharges identified in Part I.D.4.j., fire hydrant flushing, condensate, contaminated and uncontaminated ground water, minor leakage from cooling towers, contaminated stormwater, well water sources, quench tank wastewaters, contact and noncontact cooling waters, miscellaneous facility drains that may collect wastewaters from minor maintenance activities and potential incidental residues from spills and remediation activities, and heat treatment wastewater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into Elliot Ditch. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][14]
Outfall 001

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	**Monthly Average**	**Daily Maximum**	**Units**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
Flow	Report	Report	MGD	----	----	----	5 X Weekly	24 Hr. Total
O & G	Report	Report	lbs/day	10	15	mg/l	2 X Weekly	Grab
$CBOD_5$ [17]	Report	Report	lbs/day	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
TSS [8][17][19]	Report	Report	lbs/day	20	30	mg/l	3 X Weekly	24-Hr. Comp.
Zinc [4]	Report	Report	lbs/day	0.20	0.44	mg/l	2 X Weekly	24-Hr. Comp.
PCBs [5]	Report	Report	lbs/day	0.0008	0.0019 [6]	ug/l	3 X Weekly [9]	24-Hr. Comp.
Temperature [16]	----	----	----	----	Report	°F	1 X Weekly	Grab
Chloride	Report	Report	lbs/day	370	740	mg/l	2 X Weekly	24-Hr. Comp.
Mercury [6]	Report	Report	lbs/day	Report	Report	mg/l	2 X Annually	Grab
Lithium [15]	Report	Report	lbs/day	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Total Cyanide [4][6][7]	Report	Report	lbs/day	Report	Report	mg/l	2 X Weekly [12]	Grab
Aluminum [17]	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.
Vanadium [7][17][18]	Report	Report	lbs/day	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
Precipitation [10][11]	----	Report	in./day	----	----	----	Daily	Gauge
Whole Effluent Toxicity Testing [13]								

Table 2

	Quality or Concentration				Monitoring Requirements	
Parameter	**Daily Minimum**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
pH [3]	6.0	----	9.0	s.u.	2 X Weekly	Grab

[1] See Part I.B. of the permit for the minimum narrative limitations.

[2] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: https://www.in.gov/idem/forms/idem-agency-forms/.

[3] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

[4] The permittee shall measure and report the identified metal as total recoverable metal.

[5] The water quality based effluent limit (WQBEL) for PCBs is less than the limit of quantitation (LOQ) as specified in footnote [6]. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the LOQ.

If the measured concentration of PCBs is greater than the water quality based effluent limitations and above the respective LOD specified in footnote [6] in any three (3) consecutive analyses, or any five (5) out of nine (9) analyses, then the discharger shall:

(1) Determine the source of the parameter through an evaluation of sampling techniques, analytical/laboratory procedures, and waste streams (including internal waste streams); and eliminate any identifiable sources of PCBs.

(2) The sampling and analysis for PCBs shall be increased to 5 X weekly and remain at this increased sampling frequency until:

(a) The increased sampling frequency for PCBs has been in place for at least two weeks; and

(b) At least nine (9) samples have been taken under this increased sampling frequency; and

(c) The measured concentration of PCBs is less than the LOD specified in footnote [6] in at least seven (7) out of the nine (9) most recent analyses.

[6] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

Parameter	Test Method	LOD	LOQ
Mercury	1631E	0.2 ng/l	0.5 ng/l
Cyanide, Total	335.4, Rev. 1.0 (1993) or 4500-CN^- E-1999	5 µg/l	16 µg/l
Cyanide, Total	Kelada-01	0.5 µg/l	1.6 µg/l
*Total PCBs	608	0.1 µg/l	0.3 µg/l
Vanadium, Total	200.8, revision 5.4 (1994)	2.5 µg/l	8.0 µg/l
*Total PCBs is the sum of the following aroclors: PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260.			
**Free cyanide shall be reported as free cyanide but measured using one of the EPA approved test methods above for available cyanide.			

Case-Specific LOD/LOQ

The permittee may determine and use a case-specific LOD or LOQ using the analytical method specified above, or any other analytical method which is approved by the Commissioner, and EPA if applicable, prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

[7] Sample preservation procedures and maximum allowable holding times for Total Cyanide, or available (free) cyanide are prescribed in Table II of 40 CFR Part 136. Note the footnotes specific to Cyanide. Preservation and holding time information in Table II takes precedence over information in specific methods or elsewhere.

[8] Total Suspended Solids (TSS) Sampling Procedures - Outfall 001
The permittee is required to sample for TSS three (3) times a week on evenly spaced days concurrent with PCB sampling described in Footnote [9]. During precipitation events that exceed the hydraulic capacity of the storage units and Natural Media Filtration (NMF) system, defined by when the MH-12 Level 4 switch is activated, TSS monitoring results for the corresponding composite sample must be reported, and will count toward the required monitoring frequency, but will not be

used to assess compliance with the discharge limitations for Outfall 001. A notation is required on the monthly discharge monitoring report for each time during a calendar month that the MH-12 Level 4 switch is activated. This condition is contingent upon Arconic US LLC maintaining and keeping a current Storm Water Pollution Prevention Plan in accordance with Part I.E. of the permit.

[9] Sampling for PCBs is to occur three (3) times weekly on evenly spaced days. TSS and PCB monitoring is to take place on the same day. No sampling is required on holidays or scheduled plant shutdowns.

[10] During precipitation events that exceed the hydraulic capacity of the storage units and Natural Media Filtration (NMF) system, defined by when the MH-12 Level 4 switch is activated, a notation is required on the monthly discharge monitoring report for each time during a calendar month that the MH-12 Level 4 switch is activated. This condition is contingent upon Arconic US LLC maintaining and keeping a current Storm Water Pollution Prevention Plan in accordance with Part I.E. of the permit.

[11] Precipitation is to be measured by the rain gauge on site during warmer months. During winter months, when the rain gauge is either frozen or precipitations is in the form of snow, precipitation may be reported as measured by the local weather service.

[12] The permittee may qualify for reduced monitoring for Total Cyanide in accordance with the conditions found in 40 CFR 467.03(a). In order to receive reduced monitoring, the first wastewater sample of each calendar year (first sampling period in January) must be analyzed and found to contain less than 0.07 mg/l cyanide. If the sample result falls below 0.07 mg/L, the permittee will not need to sample for cyanide until the following calendar year. See Part I.G. below.

[13] The permittee shall continue Whole Effluent Toxicity (WET) testing in accordance with Part I.F. of this permit.

[14] The Storm Water Monitoring and Non Numeric Effluent Limits and the Storm Water Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.

[15] The above noted parameter(s) shall be monitored to determine whether or not it is present in quantities that have the reasonable potential to exceed the calculated water quality based effluent limits. At the end of a twelve month sampling period, the permittee may request, in writing, a review of these requirements. Upon review by IDEM, the permit may be modified, after public notice and opportunity for

[16] The following conditions apply for Temperature outside the mixing zone:

(1) There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.

(2) The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.

(3) The maximum temperature rise at any time or place above natural shall not exceed five (5) degrees Fahrenheit (two and eight-tenths (2.8) degrees Celsius) in streams.

[17] Samples for this parameter must be collected concurrently at both outfalls.

[18] The permittee must investigate and identify sources of vanadium contributing to the discharge. Within 18 months of the effective date of this permit, the permittee must submit a report to IDEM which identifies the sources of Vanadium attributable to the discharge, as well as any planned activities for reducing Vanadium in the discharge.

[19] The permittee must maintain records which indicate the date and duration of Level 4 Switch activation periods. A summary of those events must be submitted with the next renewal application.

2. The permittee is authorized to discharge from internal Outfall 101. The discharge is limited to process wastewater, sanitary wastewater, drainage and blowdown from contact and non-contact cooling waters, water discharge and leakages from various manufacturing equipment including hydraulic systems, cutting areas, machining areas, extrusion operations, etc.; miscellaneous maintenance activities, wastewater from various shops and support services, authorized storm water discharges to include contaminated stormwater condensate and authorized non-storm water discharges identified in Part I.D.4.j., contaminated and uncontaminated groundwater, potable water and line flushings, cooling tower mist, well water, industrial stormwater etc.; laboratory wastewater, various truck-shop activities; cleaning of stationary and mobile equipment; various floor and pavement washdowns including the aluminum-lithium casting area; boiler blowdown; quench waters; cleanup wastewater from spill remediation activities including broken hydraulic lines, leaking pipe etc.; water softener backwash including backwash from aluminum-lithium facility; authorized contaminated and uncontaminated stormwater from the aluminum-lithium area (containments, basement, groundwater, contact and non-contact cooling water); and pumper-truck wastewater from the removal of stormwater or contaminated wastewater from the various production areas. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the storm sewer and prior to commingling with noncontact or contact wastewaters or additional stormwater. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][3][15]
Internal Outfall 101

Table 3

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	**Monthly Average**	**Daily Maximum**	**Units**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
Flow	Report	Report	MGD	----	----	----	5 X Weekly	24 Hr. Total
O & G	21.80	34.06	lbs/day	Report	Report	mg/l	1 X Quarterly [6]	Grab
$CBOD_5$ [14]	Report	Report	lbs/day	20	30	mg/l	2 X Weekly	24-Hr. Comp.
TSS [14]	33.98	67.95	lbs/day	Report	Report	mg/l	3 X Weekly	24-Hr. Comp.
TRC [7][8]	Report	Report	lbs/day	0.01	0.02	mg/l	3 X Weekly	Grab
T. Chromium [5]	0.19	0.45	lbs/day	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
Chloride	Report	Report	lbs/day	Report	Report	mg/l	2 X Weekly	24-Hr. Comp.
Zinc [5]	0.60	1.43	lbs/day	Report	Report	mg/l	1 X Quarterly [6]	24-Hr. Comp.
T. Cyanide [5][7][12]	0.12	0.29	lbs/day	Report	Report	mg/l	1 X Quarterly [6][13]	Grab
Aluminum [5][14]	Report	Report	lbs/day	0.12	0.29	mg/l	1 X Weekly	24-Hr. Comp.
Vanadium [7][14][16]	Report	Report	lbs/day	Report	Report	mg/l	2 X Monthly	24-Hr. Comp.
E. coli [9]	----	----	----	125 [10]	235 [11]	cfu/100 ml	2 X Weekly	Grab

Table 4

	Quality or Concentration				Monitoring Requirements	
Parameter	**Daily Minimum**	**Monthly Average**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
pH [4]	6.0	----	9.0	s.u.	2 X Weekly	Grab

[1] Sampling for parameters at Internal Outfall 101 and Outfall 001 should occur on the same day.

[2] See Part I.B. of the permit for the minimum narrative limitations.

[3] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: https://www.in.gov/idem/forms/idem-agency-forms/.

[4] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

[5] The permittee shall measure and report the identified metal in total recoverable form.

[6] Samples shall be taken once at any time during each of the four annual quarters:

(A) January-February-March;
(B) April-May-June;
(C) July-August-September; and
(D) October-November-December.

For quarterly monitoring, in the first quarter for example, the permittee may conduct sampling within the month of January, February or March. The result from this reporting timeframe shall be reported on the March DMR, regardless of which of the months within the quarter the sample was taken.

[7] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

Parameter	Test Method	LOD	LOQ
Chlorine, Total residual	4500-Cl D-2000, E-2000 or G-2000	0.02 mg/l	0.06 mg/l
Cyanide, Total	335.4, Rev. 1.0 (1993) or 4500-CN^- E-1999	5 µg/l	16 µg/l
Cyanide, Total	Kelada-01	0.5 µg/l	1.6 µg/l
Vanadium, Total	200.8, revision 5.4 (1994)	2.5 µg/l	8.0 µg/l
**Free cyanide shall be reported as free cyanide but measured using one of the EPA approved test methods above for available cyanide.			

Case-Specific LOD/LOQ

The permittee may determine and use a case-specific LOD or LOQ using the analytical method specified above, or any other analytical method which is approved by the Commissioner, and EPA if applicable, prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

[8] The effluent limit for TRC is less than the limit of quantitation (LOQ) as specified in Footnote [4] above. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the LOQ (0.06 mg/l).

[9] The *E. coli* limitations and monitoring requirements apply from April 1 through October 31 annually.

[10] The monthly average *E. coli* value shall be calculated as a geometric mean. Per 327 IAC 5-10-6, the concentration of *E. coli* shall not exceed one hundred twenty-five (125) cfu or mpn per 100 milliliters as a geometric mean of the effluent samples taken in a calendar month. No samples may be excluded when calculating the monthly geometric mean.

[11] If less than ten samples are taken and analyzed for *E. coli* in a calendar month, no samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. However, when ten (10) or more samples are taken and analyzed for *E. coli* in a calendar month, not more than ten percent (10%) of those samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. When calculating ten percent, the result must not be rounded up. In reporting for compliance purposes on the Discharge Monitoring Report (DMR) form, the permittee shall record the highest non-excluded value for the daily maximum.

[12] Sample preservation procedures and maximum allowable holding times for total cyanide, or available (free) cyanide are prescribed in Table II of 40 CFR Part 136. Note the footnotes specific to cyanide. Preservation and holding time information in Table II takes precedence over information in specific methods or elsewhere.

[13] The permittee may qualify for reduced monitoring for total cyanide in accordance with the conditions found in 40 CFR 467.03(a). In order to receive reduced monitoring, the first wastewater sample of each calendar year (first sampling period in January) must be analyzed and found to contain less than 0.07 mg/l cyanide. If the sample result falls below 0.07 mg/L, the permittee will not need to sample for cyanide until the following calendar year. See Part I.G. below.

[14] Samples for this parameter must be collected concurrently at both outfalls.

[15] Upon completion of the iNEWT system, internal Outfall 101 will be removed and replaced by internal Outfall 102. These effluent limitations and monitoring requirements will be carried over and applied at internal Outfall 102. Updates to these limitations/requirements may be incorporated following the re-direction of the Al-Li wastestream and/or the implementation of additional process changes.

[16] The permittee must investigate and identify sources of vanadium contributing to the discharge. Within 18 months of the effective date of this permit, the permittee must submit a report to IDEM which identifies the sources of Vanadium attributable to the discharge, as well as any planned activities for reducing Vanadium in the discharge.

B. MINIMUM NARRATIVE LIMITATIONS

At all times the discharge from any and all point sources specified within this permit shall not cause receiving waters:

1. including waters within the mixing zone, to contain substances, materials, floating debris, oil, scum attributable to municipal, industrial, agricultural, and other land use practices, or other discharges that do any of the following:

   a. will settle to form putrescent or otherwise objectionable deposits;

   b. are in amounts sufficient to be unsightly or deleterious;

   c. produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;

   d. are in amounts sufficient to be acutely toxic to , or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;

   e. are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.

2. outside the mixing zone, to contain substances in concentrations that on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge flow and shall be taken at times which reflect the full range and concentration of effluent parameters normally expected to be present. Samples shall not be taken at times to avoid showing elevated levels of any parameters.

2. Monthly Reporting

The permittee shall submit monitoring reports to the Indiana Department of Environmental Management (IDEM) containing results obtained during the previous month and shall be submitted no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be

limited to, the Discharge Monitoring Report (DMR) and the Monthly Monitoring Report (MMR). All reports shall be submitted electronically by using the NetDMR application, upon registration, receipt of the NetDMR Subscriber Agreement, and IDEM approval of the proposed NetDMR Signatory. Access the NetDMR website (for initial registration and DMR/MMR submittal) via CDX at: https://cdx.epa.gov/. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit. See Part II.C.10 of this permit for Future Electronic Reporting Requirements.

a. Calculations that require averaging of measurements of daily values (both concentrations and mass) shall use an arithmetic mean, except the monthly average for *E. coli* shall be calculated as a geometric mean.

b. Daily effluent values (both mass and concentration) that are less than the LOQ that are used to determine the monthly average effluent level shall be accommodated in calculation of the average using statistical methods that have been approved by the Commissioner.

c. Effluent concentrations less than the LOD shall be reported on the Discharge Monitoring Report (DMR) forms as < (less than) the value of the LOD. For example, if a substance is not detected at a concentration of 0.1 µg/l, report the value as <0.1 µg/l.

d. Effluent concentrations greater than or equal to the LOD and less than the LOQ that are reported on a DMR shall be reported as the actual value and annotated on the DMR to indicate that the value is not quantifiable.

e. Mass discharge values which are calculated from concentrations reported as less than the value of the limit of detection shall be reported as less than the corresponding mass discharge value.

f. Mass discharge values that are calculated from effluent concentrations greater than the limit of detection shall be reported as the calculated value.

3. Definitions

a. “Monthly Average” means the total mass or flow-weighted concentration of all daily discharges during a calendar month on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar month.

The monthly average discharge limitation is the highest allowable average monthly discharge for any calendar month.

b. "Daily Discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that reasonably represents the calendar day for the purposes of sampling.

c. "Daily Maximum" means the maximum allowable daily discharge for any calendar day.

d. A "24-hour composite sample" means a sample consisting of at least 3 individual flow-proportioned samples of wastewater, taken by the grab sample method or by an automatic sampler, which are taken at approximately equally spaced time intervals for the duration of the discharge within a 24-hour period and which are combined prior to analysis. A flow-proportioned composite sample may be obtained by:

(1) recording the discharge flow rate at the time each individual sample is taken,

(2) adding together the discharge flow rates recorded from each individuals sampling time to formulate the "total flow" value,

(3) the discharge flow rate of each individual sampling time is divided by the total flow value to determine its percentage of the total flow value,

(4) then multiply the volume of the total composite sample by each individual sample's percentage to determine the volume of that individual sample which will be included in the total composite sample.

e. "Concentration" means the weight of any given material present in a unit volume of liquid. Unless otherwise indicated in this permit, concentration values shall be expressed in milligrams per liter (mg/l).

f. The "Regional Administrator" is defined as the Region 5 Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.

g. The "Commissioner" is defined as the Commissioner of the Indiana Department of Environmental Management, which is located at the following address: 100 North Senate Avenue, Indianapolis, Indiana 46204.

h. “Limit of Detection” or “LOD” means the minimum concentration of a substance that can be measured and reported with ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix.

i. “Limit of Quantitation” or “LOQ” means a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration above the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant. This term is also sometimes called limit of quantification or quantification level.

j. “Method Detection Level” or “MDL” means the minimum concentration of an analyte (substance) that can be measured and reported with a ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) as determined by procedure set forth in 40 CFR 136, Appendix B. The method detection level or MDL is equivalent to the LOD.

k. “Grab Sample” means a sample which is taken from a wastestream on a one-time basis without consideration of the flow rate of the wastestream and without considerations of time.

4. Test Procedures

The analytical and sampling methods used shall conform to the version of 40 CFR 136 incorporated by reference in 327 IAC 5. Different but equivalent methods are allowable if they receive the prior written approval of the Commissioner and the U.S. Environmental Protection Agency. When more than one test procedure is approved for the purposes of the NPDES program under 40 CFR 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv).

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all monitoring information and monitoring activities, including:

a. The date, exact place and time of sampling or measurement;

b. The person(s) who performed the sampling or measurements;

c. The date(s) analyses were performed;

d. The person(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such measurements and analyses.

6. Additional Monitoring by Permittee

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 above, the results of this monitoring shall be included in the calculation and reporting of the values required in the monthly Discharge Monitoring Report (DMR) and Monthly Monitoring Report (MMR). Such increased frequency shall also be indicated. Other monitoring data not specifically required in this permit (such as internal process or internal waste stream data) which is collected by or for the permittee need not be submitted unless requested by the Commissioner.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. The three years shall be extended:

a. automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or regarding promulgated effluent guidelines applicable to the permittee; or

b. as requested by the Regional Administrator or the Indiana Department of Environmental Management.

D. STORMWATER MONITORING AND NON-NUMERIC EFFLUENT LIMITS

The permittee shall implement the non-numeric permit conditions in this Section of the permit for the entire site as it relates to stormwater associated with industrial activity regardless which outfall the stormwater is discharged from.

1. Control Measures and Effluent Limits

In the technology-based limits included in Part D.2-4., the term “minimize” means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

2. Control Measures

Select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part D.3 to meet the non-numeric effluent limits in Part D.4. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer’s specifications. Any deviation from the manufacturer’s specifications shall be documented. If the control measures are not achieving their intended effect in minimizing pollutant discharges, the control measures must be modified as expeditiously as practicable. Regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility.

3. Control Measure Selection and Design Considerations

When selecting and designing control measures consider the following:

a. preventing stormwater from coming into contact with polluting materials is generally more effective, and cost-effective, than trying to remove pollutants from stormwater;

b. use of control measures in combination is more effective than use of control measures in isolation for minimizing pollutants in stormwater discharge;

c. assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;

d. minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches), can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid groundwater contamination;

e. flow can be attenuated by use of open vegetated swales and natural depressions;

f. conservation and/or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and

g. use of treatment interceptors (e.g. swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

4. Technology-Based Effluent Limits (BPT/BAT/BCT): Non-Numeric Effluent Limits:

a. Minimize Exposure

Minimize the exposure of raw, final, or waste materials to rain, snow, snowmelt, and runoff. To the extent technologically available and economically practicable and achievable, either locate industrial materials and activities inside or protect them with storm resistant coverings in order to minimize exposure to rain, snow, snowmelt, and runoff (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, pay particular attention to the following areas:

Loading and unloading areas: locate in roofed or covered areas where feasible; use grading, berming, or curbing around the loading area to divert run-on; locate the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems.

Material storage areas: locate indoors, or in roofed or covered areas where feasible; install berms/dikes around these areas; use dry cleanup methods.

Note: Industrial materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged to receiving waters.

b. Good Housekeeping

Keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and stowing materials in appropriate containers.

As part of the developed good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage,

handling, and processing occur; and where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, consider using stormwater management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

c. Maintenance

Maintain all control measures which are used to achieve the effluent limits required by this permit in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If control measures need to be replaced or repaired, make the necessary repairs or modifications as expeditiously as practicable.

d. Spill Prevention and Response Procedures

You must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, you must implement:

(1) Procedures for plainly labeling containers (e.g., "Used Oil", "Spent Solvents", "Fertilizers and Pesticides", etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;

(2) Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;

(3) Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your stormwater pollution prevention team;

(4) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or

drinking water supply agencies. Contact information must be in locations that are readily accessible and available;

(5) Procedures for documenting where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfalls that would be affected by such spills and leaks; and

(6) A procedure for documenting all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance.

e. Erosion and Sediment Controls

Through the use of structural and/or non-structural control measures stabilize, and contain runoff from, exposed areas to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions to meet this limit, place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to check out information from both the State and EPA websites. The following two websites are given as information sources:

https://www.in.gov/idem/stormwater/resources/indiana-storm-water-quality-manual/
and
https://www.epa.gov/npdes/stormwater-discharges-industrial-activities

f. Management of Runoff

Divert, infiltrate, reuse, contain or otherwise reduce stormwater runoff, to minimize pollutants in the discharge.

g. Salt Storage Piles or Piles Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged.

h. Waste, Garbage, and Floatable Debris

Ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

i. Employee Training

Train all employees who work in areas where industrial material or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training must cover the specific control measures used to achieve the effluent limits in this part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit.

j. Non-Stormwater Discharges

You must determine if any non-stormwater discharges not authorized by an NPDES permit exist. Any non-stormwater discharges discovered must either be eliminated or modified into this permit. The following non-storm water discharges are authorized and must be documented in the Stormwater Pollution Prevention Plan:

Discharges from fire-fighting activities;
Fire Hydrant flushings;
Potable water, including water line flushings;
Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
Irrigation drainage;
Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
Pavement wash water where no detergents are used and no spills or leaks of toxic or hazardous material have occurred (unless all spilled material has been removed);
Routine external building washdown that does not use detergents;
Uncontaminated groundwater or spring water;
Foundation or footing drains where flows are not contaminated with process materials;
Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional

discharges from cooling towers (e.g., “piped cooling tower blowdown or drains);
Vehicle wash- waters where uncontaminated water without detergents or solvents is utilized; and
Runoff from the use of dust suppressants approved for use by IDEM.
Onsite well water treated with Nalco 30 Trasar 3DT186 scale and corrosion inhibitor (approved water treatment additive) used as mill supply water and used for firefighting activities,
Building wash-waters where no detergents are used; and
Uncontaminated precipitation removed from secondary containment structures.

k. Dust Generation and Vehicle Tracking of Industrial Materials

You must minimize generation of dust and off-site tracking of raw, final, or waste materials.

5. Annual Review

At least once every twelve (12) months, you must review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limitations in this permit. You must document the results of your review in a report that shall be retained within the SWPPP. You must also submit the report to the Industrial NPDES Permit Section, as well as the Compliance Branch, on an annual basis. The report may be submitted by email to the Industrial NPDES Permit Section at OWQWWPER@idem.in.gov and to the Compliance Branch at wwReports@idem.in.gov. The email subject line should include the NPDES Permit # and the type of report being submitted (Annual Stormwater Report). The permittee’s first annual review report will be due twelve (12) months from the effective date of the permit. All subsequent annual review reports will be due no later than the anniversary of the effective date of the permit.

6. Corrective Actions – Conditions Requiring Review

a. If any of the following conditions occur, you must review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated:

(1) an unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this NPDES permit) occurs at this facility;

(2) it is determined that your control measures are not stringent enough for the discharge to meet applicable water quality standards;

(3) it is determined in your routine facility inspection, an inspection by EPA or IDEM, comprehensive site evaluation, or the Annual Review required in Part D.5 that modifications to the control measures are necessary to meet the effluent limits in this permit or that your control measures are not being properly operated and maintained; or

(4) Upon written notice by the Commissioner that the control measures prove to be ineffective in controlling pollutants in stormwater discharges exposed to industrial activity.

b. If construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in stormwater from your facility, or significantly increases the quantity of pollutants discharged, you must review and revise the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit.

7. Corrective Action Deadlines

You must document your discovery of any of the conditions listed in Part I.D.6 within thirty (30) days of making such discovery. Subsequently, within one-hundred and twenty (120) days of such discovery, you must document any corrective action(s) to be taken to eliminate or further investigate the deficiency or if no corrective action is needed, the basis for that determination. Specific documentation required within 30 and 120 days is detailed below. If you determine that changes to your control measures are necessary following your review, any modifications to your control measures must be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but schedules considered reasonable for the documenting of your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

8. Corrective Action Report

a. Within 30 days of a discovery of any condition listed in Part I.D.6, you must document the following information:

(1) Brief description of the condition triggering corrective action;

(2) Date condition identified; and

(3) How deficiency identified.

b. Within 120 days of discovery of any condition listed in Part I.D.6, you must document the following information:

(1) Summary of corrective action taken or to be taken (or, for triggering events identified in Part I.D.6.b.(1), where you determine that corrective action is not necessary, the basis for this determination)

(2) Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;

(3) Date corrective action initiated; and

(4) Date corrective action completed or expected to be completed.

E. STORMWATER POLLUTION PREVENTION PLAN

1. Development of Plan

Within 12 months from the effective date of this permit, the permittee is required to revise and update the current Stormwater Pollution Prevention Plan (SWPPP) for the permitted facility. The plan shall at a minimum include the following:

a. Identify potential sources of pollution, which may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity from the facility. Stormwater associated with industrial activity (defined in 40 CFR 122.26(b)(14)) includes, but is not limited to, the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or materials storage areas at an industrial plant;

b. Describe practices and measure to be used in reducing the potential for pollutants to be exposed to stormwater; and

c. Assure compliance with the terms and conditions of this permit.

2. Contents

The plan shall include, at a minimum, the following items:

a. Pollution Prevention Team -The plan shall list, by position title, the member or members of the facility organization as members of a Stormwater Pollution Prevention Team who are responsible for developing the stormwater pollution prevention plan (SWPPP) and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each stormwater pollution prevention team member. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

b. Description of Potential Pollutant Sources – The plan shall provide a description of areas at the site exposed to industrial activity and have a reasonable potential for stormwater to be exposed to pollutants. The plan shall identify all activities and significant materials (defined in 40 CFR 122.26(b)), which may potentially be significant pollutant sources. As a minimum, the plan shall contain the following:

(1) A soils map indicating the types of soils found on the facility property and showing the boundaries of the facility property.

(2) A graphical representation, such as an aerial photograph or site layout maps, drawn to an appropriate scale, which contains a legend and compass coordinates, indicating, at a minimum, the following:

(A) All on-site stormwater drainage and discharge conveyances, which may include pipes, ditches, swales, and erosion channels, related to a stormwater discharge.

(B) Known adjacent property drainage and discharge conveyances, if directly associated with run-off from the facility.

(C) All on-site and known adjacent property water bodies, including wetlands and springs.

(D) An outline of the drainage area for each outfall.

(E) An outline of the facility property, indicating directional flows, via arrows, of surface drainage patterns.

(F) An outline of impervious surfaces, which includes pavement and buildings, and an estimate of the impervious and pervious surface square footage for

each drainage area placed in a map legend.

(G) On-site injection wells, as applicable.

(H) On-site wells used as potable water sources, as applicable.

(I) All existing major structural control measures to reduce pollutants in stormwater run-off.

(J) All existing and historical underground or aboveground storage tank locations, as applicable.

(K) All permanently designated plowed or dumped snow storage locations.

(L) All loading and unloading areas for solid and liquid bulk materials.

(M) All existing and historical outdoor storage areas for raw materials, intermediary products, final products, and waste materials. Include materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities.

(N) All existing or historical outdoor storage areas for fuels, processing equipment, and other containerized materials, for example, in drums and totes.

(O) Outdoor processing areas.

(P) Dust or particulate generating process areas.

(Q) Outdoor assigned waste storage or disposal areas.

(R) Pesticide or herbicide application areas.

(S) Vehicular access roads.

(T) Identify any storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes,

refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operation, etc., and could result in a discharge of pollutants.

(U) The mapping of historical locations is only required if the historical locations have a reasonable potential for stormwater exposure to historical pollutants.

(3) An area site map that indicates:

(A) The topographic relief or similar elevations to determine surface drainage patterns;

(B) The facility boundaries;

(C) All receiving waters;

(D) All known drinking water wells; and

Includes at a minimum, the features in clauses (A), (C), and (D) within a one-fourth (1/4) mile radius beyond the property boundaries of the facility. This map must be to scale and include a legend and compass coordinates.

(4) A narrative description of areas that generate stormwater discharges exposed to industrial activity including descriptions for any existing or historical areas listed in subdivision 2.b.(2)(J) through (T) of this Part, and any other areas thought to generate stormwater discharges exposed to industrial activity. The narrative descriptions for each identified area must include the following:

(A) Type and typical quantity of materials present in the area.

(B) Methods of storage, including presence of any secondary containment measures.

(C) Any remedial actions undertaken in the area to eliminate pollutant sources or exposure of stormwater to those sources. If a corrective action plan was developed, the type of remedial action and plan date shall be referenced.

(D) Any significant release or spill history dating back a period of three (3) years from the effective date of this permit, in the identified area, for materials spilled outside of secondary containment structures and impervious surfaces in excess of their reportable quantity, including the following:

i. The date and type of material released or spilled.

ii. The estimated volume released or spilled.

iii. A description of the remedial actions undertaken, including disposal or treatment.

Depending on the adequacy or completeness of the remedial actions, the spill history shall be used to determine additional pollutant sources that may be exposed to stormwater. In subsequent permit terms, the history shall date back for a period of five (5) years from the date of the permit renewal application.

(E) Where the chemicals or materials have the potential to be exposed to stormwater discharges, the descriptions for each identified area must include a risk identification analysis of chemicals or materials stored or used within the area. The analysis must include the following:

i. Toxicity data of chemicals or materials used within the area, referencing appropriate material safety data sheet information locations.

ii. The frequency and typical quantity of listed chemicals or materials to be stored within the area.

iii. Potential ways in which stormwater discharges may be exposed to listed chemicals and materials.

iv. The likelihood of the listed chemicals and materials to come into contact with water.

(5) A narrative description of existing and planned management practices and measures to improve the quality of stormwater run-off entering a water of the state. Descriptions must be

created for existing or historical areas listed in subdivision 2.b.(2)(J) through (T) and any other areas thought to generate stormwater discharges exposed to industrial activity. The description must include the following:

(A) Any existing or planned structural and nonstructural control practices and measures.

(B) Any treatment the stormwater receives prior to leaving the facility property or entering a water of the state.

(C) The ultimate disposal of any solid or fluid wastes collected in structural control measures other than by discharge.

(D) Describe areas that due to topography, activities, or other factors have a high potential for significant soil erosion.

(E) Document the location of any storage piles containing salt used for deicing.

(F) Information or other documentation required under Part I.E.2(d) of this permit.

(6) The results of stormwater monitoring. The monitoring data must include completed field data sheets, chain-of-custody forms, and laboratory results. If the monitoring data are not placed into the facility's SWPPP, the on-site location for storage of the information must be reference in the SWPPP.

c. Non-Stormwater Discharges – You must document that you have evaluated for the presence of non-stormwater discharges not authorized by an NPDES permit. Any non-stormwater discharges have either been eliminated or incorporated into this permit. Documentation of non-stormwater discharges shall include:

(1) A written non-stormwater assessment, including the following:

(A) A certification letter stating that stormwater discharges entering a water of the state have been evaluated for the presence of illicit discharges and non-stormwater contributions.

(B) Detergent or solvent-based washing of equipment or vehicles that would allow washwater additives to enter

any stormwater only drainage system shall not be allowed at this facility unless appropriately permitted under this NPDES permit.

(C) All interior maintenance area floor drains with the potential for maintenance fluids or other materials to enter stormwater only storm sewers must be either sealed, connected to a sanitary sewer with prior authorization, or appropriately permitted under this NPDES permit. The sealing, sanitary sewer connecting, or permitting of drains under this item must be documented in the written non-stormwater assessment program.

(D) The certification shall include a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during the test.

d. General Requirements – The SWPPP must meet the following general requirements:

(1) The plan shall be certified by a qualified professional. The term qualified professional means an individual who is trained and experienced in water treatment techniques and related fields as may be demonstrated by state registration, professional certification, or completion of course work that enable the individual to make sound, professional judgments regarding stormwater control/treatment and monitoring, pollutant fate and transport, and drainage planning.

(2) The plan shall be retained at the facility and be available for review by a representative of the Commissioner upon request. IDEM may provide access to portions of your SWPPP to the public.

(3) The plan must be revised and updated as required. Revised and updated versions of the plan must be implemented on or before three hundred sixty-five (365) days from the effective date of this permit. The Commissioner may grant an extension of this time frame based on a request by the person showing reasonable cause.

(4) If the permittee has other written plans, required under applicable federal or state law, such as operation and maintenance, spill prevention control and countermeasures (SPCC), or risk contingency plans, which fulfill certain

requirements of an SWPPP, these plans may be referenced, at the permittee's discretion, in the appropriate sections of the SWPPP to meet those section requirements.

(5) The permittee may combine the requirements of the SWPPP with another written plan if:

(A) The plan is retained at the facility and available for review;

(B) All the requirements of the SWPPP are contained within the plan; and

(C) A separate, labeled section is utilized in the plan for the SWPPP requirements.

F. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

To adequately assess the effects of the effluent on aquatic life, the permittee is required by this section of the permit to conduct chronic whole effluent toxicity (WET) testing. Part I.F.1. of this permit describes the testing procedures and Part I.F.2. describes the toxicity reduction evaluation (TRE) which is only required if the effluent demonstrates toxicity in two (2) consecutive toxicity tests as described in Part I.F.1.f.

1. Whole Effluent Toxicity (WET) Tests

The permittee must conduct the series of aquatic toxicity tests specified in Part I.F.1.d. to monitor the acute and chronic toxicity of the effluent discharged from Outfall(s) 001.

If toxicity is demonstrated in two (2) consecutive toxicity tests, as described in Part I.F.1.f., with any test species during the term of the permit, the permittee is required to conduct a TRE under Part I.F.2.

a. Toxicity Test Procedures and Data Analysis

(1) All test organisms, test procedures and quality assurance criteria used must be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, Section 11, Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test Method 1000.0, and Section 13, Daphnid (*Ceriodaphnia dubia*) Survival and Reproduction Test Method 1002.0, EPA 821-R-02-013, October 2002 (hereinafter "Chronic Toxicity Test Method"), or most recent update that

conforms to the version of 40 CFR 136 incorporated by reference in 327 IAC 5. [References to specific portions of the Chronic Toxicity Test Method contained in this Part I.F. are provided for informational purposes. If the Chronic Toxicity Test Method is updated, the corresponding provisions of that updated method would be applicable.]

(2) Any circumstances not covered by the above methods, or that require deviation from the specified methods must first be approved by the IDEM Permits Branch.

(3) The determination of acute and chronic endpoints of toxicity (LC_{50}, NOEC and IC_{25} values) must be made in accordance with the procedures in Section 9, "Chronic Toxicity Test Endpoints and Data Analysis" and the Data Analysis procedures as outlined in Section 11 for fathead minnow (Test Method 1000.0; see flowcharts in Figures 5, 6 and 9) and Section 13 for *Ceriodaphnia dubia* (Test Method 1002.0; see flowcharts in Figures 4 and 6) of the Chronic Toxicity Test Method. The IC_{25} value together with 95% confidence intervals calculated by the Linear Interpolation and Bootstrap Methods in Appendix M of the Chronic Toxicity Test Method must be determined in addition to the NOEC value.

b. Types of Whole Effluent Toxicity Tests

(1) Tests may include a 3-brood (7-day) definitive static-renewal daphnid (*Ceriodaphnia dubia*) survival and reproduction toxicity test and a 7-day definitive static-renewal fathead minnow (*Pimephales promelas*) larval survival and growth toxicity test.

(2) All tests must be conducted using 24-hour composite samples of final effluent. Three effluent samples are to be collected on alternate days (e.g., collected on days one, three and five). The first effluent sample will be used for test initiation and for test solution renewal on day 2. The second effluent sample will be used for test solution renewal on days 3 and 4. The third effluent sample will be used for test solution renewal on days 5, 6 and 7. If shipping problems are encountered with renewal samples after a test has been initiated, the most recently used sample may continue to be used for test renewal, if first approved by the IDEM Permits Branch, but for no longer than 72 hours after first use.

(3) The whole effluent dilution series for the definitive test must include a control and at least five effluent concentrations with a

minimum dilution factor of 0.5. The effluent concentrations selected must include and, if practicable, bracket the effluent concentrations associated with the determinations of acute and chronic toxicity provided in Part I.F.1.f. Guidance on selecting effluent test concentrations is included in Section 8.10 of the Chronic Toxicity Test Method. The use of an alternate procedure for selecting test concentrations must first be approved by the IDEM Permits Branch.

(4) If, in any control, more than 10% of the test organisms die in the first 48 hours with a daphnid species or the first 96 hours with fathead minnow, or more than 20% of the test organisms die in 7 days, that test is considered invalid and the toxicity test must be repeated. In addition, if in the *Ceriodaphnia dubia* survival and reproduction test, the average number of young produced per surviving female in the control group is less than 15, or if 60% of surviving control females have less than three broods; and in the fathead minnow (*Pimephales promelas*) survival and growth test, if the mean dry weight of surviving fish in the control group is less than 0.25 mg, that test is considered invalid and must also be repeated. All other test conditions and test acceptability criteria for the fathead minnow (*Pimephales promelas*) and *Ceriodaphnia dubia* chronic toxicity tests must be in accordance with the test requirements in Section 11 (Test Method 1000.0), Table 1 and Section 13 (Test Method 1002.0), Table 3, respectively, of the Chronic Toxicity Test Method.

c. Effluent Sample Collection and Chemical Analysis

(1) Whole effluent samples taken for the purposes of toxicity testing must be 24-hour composite samples collected at a point that is representative of the final effluent, but prior to discharge. Effluent sampling for the toxicity testing may be coordinated with other permit sampling requirements as appropriate to avoid duplication. First use of the whole effluent toxicity testing samples must not exceed 36 hours after termination of the 24-hour composite sample collection and must not be used for longer than 72 hours after first use. For discharges of less than 24 hours in duration, composite samples must be collected for the duration of the discharge within a 24-hour period (see “24-hour composite sample” definition in Part I.C.3. of this permit).

(2) Chemical analysis must accompany each effluent sample taken for toxicity testing, including each sample taken for the repeat testing as outlined in Part I.F.1.f.(3). The chemical analysis

detailed in Part I.A.F must be conducted for the effluent sample in accordance with Part I.C.4. of this permit.

d. Toxicity Testing Species, Frequency and Duration

Chronic toxicity testing for *Ceriodaphnia dubia* and *Pimephales promelas* must be conducted once every six (6) months, as calculated from the effective date of the permit, for the duration of the permit.

If a TRE is initiated during the term of the permit, after receiving notification under Part I.F.1.e, the Compliance Data Section will suspend the toxicity testing requirements above for the term of the TRE compliance schedule described in Part I.F.2. After successful completion of the TRE, the toxicity tests established under Part I.F.2.c.(4) must be conducted once every six (6) months, as calculated from the first day of the first month following successful completion of the post-TRE toxicity tests (see Part I.F.2.c.(4)), for the remainder of the permit term.

e. Reporting

(1) Notifications of the failure of two (2) consecutive toxicity tests and the intent to begin the implementation of a toxicity reduction evaluation (TRE) under Part I.F.1.f.(4) must be submitted in writing to the Compliance Data Section of IDEM's Office of Water Quality.

(2) Results of all toxicity tests, including invalid tests, must be reported to IDEM according to the general format and content recommended in the Chronic Toxicity Test Method, Section 10, "Report Preparation and Test Review". However, only the results of valid toxicity tests are to be reported on the discharge monitoring report (DMR). The results of the toxicity tests and laboratory report are due by the earlier of 60 days after completion of the test or the 28th day of the month following the end of the period established in Part I.F.1.d.

(3) The full whole effluent toxicity (WET) test laboratory report must be submitted to IDEM electronically as an attachment to an e-mail to the Compliance Data Section at wwreports@idem.IN.gov. The results must also be submitted via NetDMR.

(4) For quality control and ongoing laboratory performance, the laboratory report must include results from appropriate standard reference toxicant tests. This will consist of acute

(LC_{50} values), if available, and chronic (NOEC, LOEC and IC_{25} values) endpoints of toxicity obtained from reference toxicant tests conducted within 30 days of the most current effluent toxicity tests and from similarly obtained historical reference toxicant data with mean values and appropriate ranges for each species tested for at least three months to one year. Toxicity test laboratory reports must also include copies of chain-of-custody records and laboratory raw data sheets.

(5) Statistical procedures used to analyze and interpret toxicity data (e.g., Fisher's Exact Test and Steel's Many-one Rank Test for 7-day survival of test organisms; tests of normality (e.g., Shapiro-Wilk's Test) and homogeneity of variance (e.g., Bartlett's Test); appropriate parametric (e.g., Dunnett's Test) and non-parametric (e.g., Steel's Many-one Rank Test) significance tests and point estimates (IC_{25}) of effluent toxicity, etc.; together with graphical presentation of survival, growth and reproduction of test organisms), including critical values, levels of significance and 95% confidence intervals, must be described and included as part of the toxicity test laboratory report.

(6) For valid toxicity tests, the whole effluent toxicity (WET) test laboratory report must include a summary table of the results for each species tested as shown in the table presented below. This table will provide toxicity test results, reported in acute toxic units (TU_a) and chronic toxic units (TU_c), for evaluation under Part I.F.1.f. and reporting on the discharge monitoring report (DMR).

Test Organism [1]	**Test Type**	**Endpoint [2]**	**Units**	**Result**	**Compliance Limit [6]**	**Pass/ Fail [7]**	**Reporting**
Ceriodaphnia dubia	3-brood (7-day) Definitive Static-Renewal Survival and Reproduction	48-hr. LC_{50}	%	Report			Laboratory Report
			TU_a	Report			
		NOEC Survival	%	Report			
			TU_c	Report			
		NOEC Reproduction	%	Report			
			TU_c	Report			
		IC_{25} Reproduction	%	Report			
			TU_c	Report			
		Toxicity (acute) [3]	TU_a	Report [5]	1.0	Report	Laboratory Report **and NetDMR** (Parameter Code 61425)

		Toxicity (chronic) [4]	TU_c	Report [5]	1.0	Report	Laboratory Report **and NetDMR** (Parameter Code 61426)
Pimephales promelas	7-day Definitive Static-Renewal Larval Survival and Growth	96-hr. LC_{50}	%	Report			Laboratory Report
			TU_a	Report			
		NOEC Survival	%	Report			
			TU_c	Report			
		NOEC Growth	%	Report			
			TU_c	Report			
		IC_{25} Growth	%	Report			
			TU_c	Report			
		Toxicity (acute) [3]	TU_a	Report [5]	1.0	Report	Laboratory Report **and NetDMR** (Parameter Code 61427)
		Toxicity (chronic) [4]	TU_c	Report [5]	1.0	Report	Laboratory Report **and NetDMR** (Parameter Code 61428)

[1] For the whole effluent toxicity (WET) test laboratory report, eliminate from the table any species that was not tested.
[2] A separate acute test is not required. The endpoint of acute toxicity must be extrapolated from the chronic toxicity test.
[3] The toxicity (acute) endpoint for *Ceriodaphnia dubia* is the 48-hr. LC_{50} result reported in acute toxic units (TU_a). The toxicity (acute) endpoint for *Pimephales promelas* is the 96-hr. LC_{50} result reported in acute toxic units (TU_a).
[4] The toxicity (chronic) endpoint for *Ceriodaphnia dubia* is the higher of the NOEC Survival, NOEC Reproduction and IC_{25} Reproduction values reported in chronic toxic units (TU_c). The toxicity (chronic) endpoint for *Pimephales promelas* is the higher of the NOEC Survival, NOEC Growth and IC_{25} Growth values reported in chronic toxic units (TU_c).
[5] Report the values for acute and chronic endpoints of toxicity determined in [3] and [4] for the corresponding species. These values are the ones that need to be reported on the discharge monitoring report (DMR).
[6] These values do not represent effluent limitations, but rather exceedance of these values results in a demonstration of toxicity that triggers additional action and reporting by the permittee.
[7] If the toxicity result (in TUs) is less than or equal to the compliance limit, report "Pass". If the toxicity result (in TUs) exceeds the compliance limit, report "Fail".

f. Demonstration of Toxicity

(1) Toxicity (acute) will be demonstrated if the effluent is observed to have exceeded 1.0 TU_a (acute toxic units) for *Ceriodaphnia dubia* in 48 hours or in 96 hours for *Pimephales promelas*. For

this purpose, a separate acute toxicity test is not required. The results for the acute toxicity demonstration must be extrapolated from the chronic toxicity test. For the purpose of selecting test concentrations under Part I.F.1.b.(2), the effluent concentration associated with acute toxicity is 100%.

(2) Toxicity (chronic) will be demonstrated if the effluent is observed to have exceeded 1.0 TU_c (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas* from the chronic toxicity test. For the purpose of selecting test concentrations under Part I.F.1.b.(2), the effluent concentration associated with chronic toxicity is 100%.

(3) If toxicity (acute) or toxicity (chronic) is demonstrated in any of the chronic toxicity tests specified above, a repeat chronic toxicity test using the procedures in Part I.F.1. of this permit and the same test species must be initiated within two (2) weeks of test failure. During the sampling for any repeat tests, the permittee must also collect and preserve sufficient effluent samples for use in any toxicity identification evaluation (TIE) and/or toxicity reduction evaluation (TRE), if necessary.

(4) If any two (2) consecutive chronic toxicity tests, including any and all repeat tests, demonstrate acute or chronic toxicity, the permittee must notify the Compliance Data Section under Part I.F.1.e. within 30 days of the date of termination of the second test, and begin the implementation of a toxicity reduction evaluation (TRE) as described in Part I.F.2. After receiving notification from the permittee, the Compliance Data Section will suspend the whole effluent toxicity testing requirements in Part I.F.1. for the term of the TRE compliance schedule.

g. Definitions

(1) "Acute toxic unit" or "TU_a" is defined as $100/LC_{50}$ where the LC_{50} is expressed as a percent effluent in the test medium of an acute whole effluent toxicity (WET) test that is statistically or graphically estimated to be lethal to fifty percent (50%) of the test organisms.

(2) "Chronic toxic unit" or "TU_c" is defined as 100/NOEC or $100/IC_{25}$, where the NOEC or IC_{25} are expressed as a percent effluent in the test medium.

(3) "Inhibition concentration 25" or "IC_{25}" means the toxicant (effluent) concentration that would cause a twenty-five percent (25%) reduction in a nonquantal biological measurement for the

test population. For example, the IC_{25} is the concentration of toxicant (effluent) that would cause a twenty-five percent (25%) reduction in mean young per female or in growth for the test population.

(4) "No observed effect concentration" or "NOEC" is the highest concentration of toxicant (effluent) to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms, that is, the highest concentration of toxicant (effluent) in which the values for the observed responses are not statistically significantly different from the controls.

2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

The development and implementation of a TRE is only required if toxicity is demonstrated in two (2) consecutive tests as described in Part I.F.1.f.(4). The post-TRE toxicity testing requirements in Part I.F.2.c. must also be completed as part of the TRE compliance schedule.

Milestone Dates: See a. through e. below for more detail on the TRE milestone dates.

Requirement	**Deadline**
Development and Submittal of a TRE Plan	Within 90 days of the date of two (2) consecutive failed toxicity tests.
Initiate a TRE Study	Within 30 days of TRE Plan submittal.
Submit TRE Progress Reports	Every 90 days beginning six (6) months from the date of two (2) consecutive failed toxicity tests.
Post-TRE Toxicity Testing Requirements	Immediately upon completion of the TRE, conduct three (3) consecutive months of toxicity tests with both test species; if no acute or chronic toxicity is shown with any test species, reduce toxicity tests to once every six (6) months for the remainder of the permit term. If post-TRE toxicity testing demonstrates toxicity, continue the TRE study.
Submit Final TRE Report	Within 90 days of successfully completing the TRE (including the post-TRE toxicity testing requirements), not to exceed three (3) years from the date that toxicity is initially demonstrated in two (2) consecutive toxicity tests.

a. Development of TRE Plan

Within 90 days of the date of two (2) consecutive failed toxicity tests (i.e. the date of termination of the second test), the permittee must submit plans for an effluent TRE to the Compliance Data Section. The TRE plan must include appropriate measures to characterize the causative toxicants and reduce toxicity in the effluent discharge to levels that demonstrate no toxicity with any test species as described in Part I.F.1.f. Guidance on conducting effluent toxicity reduction evaluations is available from EPA and from the EPA publications listed below:

(1) Methods for Aquatic Toxicity Identification Evaluations:

Phase I Toxicity Characterization Procedures, Second Edition (EPA/600/6-91/003), February 1991.

Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080), September 1993.

Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081), September 1993.

(2) Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I (EPA/600/6-91/005F), May 1992.

(3) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs) (EPA/600/2-88/070), April 1989.

(4) Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program, U.S. EPA, March 27, 2001.

b. Conduct the TRE

Within 30 days after submittal of the TRE plan to the Compliance Data Section, the permittee must initiate the TRE consistent with the TRE plan.

c. Post-TRE Toxicity Testing Requirements

(1) After completing the TRE, the permittee must conduct monthly post-TRE toxicity tests with the two (2) test species *Ceriodaphnia dubia* and fathead minnow (*Pimephales promelas*) for a period of three (3) consecutive months.

(2) If the three (3) monthly tests demonstrate no toxicity with any test species as described in Part I.F.1.f., the TRE will be considered successful. Otherwise, the TRE study must be continued.

(3) The post-TRE toxicity tests must be conducted in accordance with the procedures in Part I.F.1. The results of these tests must be submitted as part of the final TRE Report required under Part I.F.2.d.

(4) After successful completion of the TRE, the permittee must resume the chronic toxicity tests required in Part I.F.1. The established starting date for the frequency in Part I.F.1.d. is the first day of the first month following successful completion of the post-TRE toxicity tests.

d. Reporting

(1) Progress reports must be submitted every 90 days to the Compliance Data Section beginning six (6) months from the date of two (2) consecutive failed toxicity tests. Each TRE progress report must include a listing of proposed activities for the next quarter and a schedule to reduce toxicity in the effluent discharge to acceptable levels through control of the toxicant source or treatment of whole effluent.

(2) Within 90 days of successfully completing the TRE, including the three (3) consecutive monthly tests required as part of the post-TRE toxicity testing requirements in Part I.F.2.c., the permittee must submit to the Compliance Data Section a final TRE Report that includes the following:

(A) A discussion of the TRE results;
(B) The starting date established under Part I.F.2.c.(4) for the continuation of the toxicity testing required in Part I.F.1.; and
(C) If applicable, the intent to reduce the number of species tested to the one most sensitive to the toxicity in the effluent under Part I.F.2.c.(4).

e. Compliance Date

The permittee must complete items a., b., c. and d. from Part I.F.2. and reduce toxicity in the effluent discharge to acceptable levels as soon as possible, but no later than three (3) years from the date that toxicity is initially demonstrated in two (2) consecutive toxicity tests (i.e. the date of termination of the second test) as described in Part I.F.1.f.(4).

G. TOTAL CYANIDE MONITORING REDUCTION

The permitted discharge is regulated under the Aluminum Forming Point Source Category. As such, the permittee may qualify for reduced monitoring for cyanide if the following conditions outlined in 40 CFR 467.03(a) are met:

(1) The first wastewater sample of each calendar year has been analyzed and found to contain less than 0.07 mg/l cyanide.

(2) The owner or operator of the aluminum forming plant certifies in writing to the POTW authority or permit issuing authority that cyanide is not and will not be used in the aluminum forming process.

The permittee submitted Total Cyanide data from the previous permitting period which demonstrated concentrations below 0.07 mg/L. Additionally, the permittee included a written statement in the permit renewal application which confirmed that cyanide is not used and will not be used in the aluminum forming process. In order to receive reduced monitoring for cyanide in the permit renewal, the permittee must submit Total Cyanide monitoring results for the first wastewater sample of each calendar year (first sampling period in January) as mentioned in 40 CFR 467.03(a)(1) above. If the sample result falls below 0.07 mg/L, the permittee will not need to sample for cyanide until the following calendar year.

H. REOPENING CLAUSES

This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing:

1. to comply with any applicable effluent limitation or standard issued or approved under 301(b)(2)(C),(D) and (E), 304 (b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:

   a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

   b. controls any pollutant not limited in the permit.

2. for any of the causes listed under 327 IAC 5-2-16.

3. to include whole effluent toxicity limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the TRE study indicate that such limitations are necessary to meet Indiana Water Quality Standards.

4. to change the conditions for Total Cyanide based upon information from the permittee regarding a change in the conditions upon which the Total Cyanide waiver was based.

5. to include a case-specific Limit of Detection (LOD) and/or Limit of Quantitation (LOQ). The permittee must demonstrate that such action is warranted in accordance with the procedures specified under Appendix B, 40 CFR Part 136, using the most sensitive analytical methods approved by EPA under 40 CFR Part 136, or approved by the Commissioner.

6. to specify the use of a different analytical method if a more sensitive analytical method has been specified in or approved under 40 CFR 136 or approved by the Commissioner to monitor for the presence and amount in the effluent of the pollutant for which the WQBEL is established. The permit shall specify the LOD and LOQ that can be achieved by use of the specified analytical method.

PART II

STANDARD CONDITIONS FOR NPDES PERMITS

A. GENERAL CONDITIONS

1. Duty to Comply

The permittee shall comply with all terms and conditions of this permit in accordance with 327 IAC 5-2-8(1) and all other requirements of 327 IAC 5-2-8. Any permit noncompliance constitutes a violation of the Clean Water Act and IC 13 and is grounds for enforcement action or permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

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 the conditions of the permit.

2. Duty to Mitigate

In accordance with 327 IAC 5-2-8(3), the permittee shall take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with this permit. During periods of noncompliance, the permittee shall conduct such accelerated or additional monitoring for the affected parameters, as appropriate or as requested by IDEM, to determine the nature and impact of the noncompliance.

3. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must obtain and submit an application for renewal of this permit in accordance with 327 IAC 5-2-8(2). It is the permittee's responsibility to obtain and submit the application. In accordance with 327 IAC 5-2-3(c), the owner of the facility or operation from which a discharge of pollutants occurs is responsible for applying for and obtaining the NPDES permit, except where the facility or operation is operated by a person other than an employee of the owner in which case it is the operator's responsibility to apply for and obtain the permit. Pursuant to 327 IAC 5-3-2(a)(2), the application must be submitted at least 180 days before the expiration date of this permit. This deadline may be extended if all of the following occur:

a. permission is requested in writing before such deadline;

b. IDEM grants permission to submit the application after the deadline; and

c. the application is received no later than the permit expiration date.

4. Permit Transfers

In accordance with 327 IAC 5-2-8(4)(D), this permit is nontransferable to any person except in accordance with 327 IAC 5-2-6(c). This permit may be transferred to another person by the permittee, without modification or revocation and reissuance being required under 327 IAC 5-2-16(c)(1) or 16(e)(4), if the following occurs:

a. the current permittee notified the Commissioner at least thirty (30) days in advance of the proposed transfer date;

b. a written agreement containing a specific date of transfer of permit responsibility and coverage between the current permittee and the transferee (including acknowledgment that the existing permittee is liable for violations up to that date, and the transferee is liable for violations from that date on) is submitted to the Commissioner;

c. the transferee certifies in writing to the Commissioner their intent to operate the facility without making such material and substantial alterations or additions to the facility as would significantly change the nature or quantities of pollutants discharged and thus constitute cause for permit modification under 327 IAC 5-2-16(d). However, the Commissioner may allow a temporary transfer of the permit without permit modification for good cause, e.g., to enable the transferee to purge and empty the facility's treatment system prior to making alterations, despite the transferee's intent to make such material and substantial alterations or additions to the facility; and

d. the Commissioner, within thirty (30) days, does not notify the current permittee and the transferee of the intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

The Commissioner may require modification or revocation and reissuance of the permit to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act or state law.

5. Permit Actions

a. In accordance with 327 IAC 5-2-16(b) and 327 IAC 5-2-8(4), this permit may be modified, revoked and reissued, or terminated for cause, including, but not limited to, the following:

(1) Violation of any terms or conditions of this permit;

(2) Failure of the permittee to disclose fully all relevant facts or misrepresentation of any relevant facts in the application, or during the permit issuance process; or

(3) A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit, e.g., plant closure, termination of discharge by connection to a POTW, a change in state law that requires the reduction or elimination of the discharge, or information indicating that the permitted discharge poses a substantial threat to human health or welfare.

b. Filing of either of the following items does not stay or suspend any permit condition: (1) a request by the permittee for a permit modification, revocation and reissuance, or termination, or (2) submittal of information specified in Part II.A.3 of the permit including planned changes or anticipated noncompliance.

The permittee shall submit any information that the permittee knows or has reason to believe would constitute cause for modification or revocation and reissuance of the permit at the earliest time such information becomes available, such as plans for physical alterations or additions to the permitted facility that:

(1) could significantly change the nature of, or increase the quantity of pollutants discharged; or

(2) the commissioner may request to evaluate whether such cause exists.

c. In accordance with 327 IAC 5-1-3(a)(5), the permittee must also provide any information reasonably requested by the Commissioner.

6. Property Rights

Pursuant to 327 IAC 5-2-8(6) and 327 IAC 5-2-5(b), the issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to persons or private property or invasion of other private rights, any infringement of federal, state, or local laws or regulations. The issuance of the permit also does not preempt any duty to obtain any other state, or local assent required by law for the discharge or for the construction or operation of the facility from which a discharge is made.

7. Severability

In accordance with 327 IAC 1-1-3, 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 person or circumstance is held invalid, the invalidity shall not affect any other provisions or applications of the permit which can be given effect without the invalid provision or application.

8. Oil and Hazardous Substance Liability

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

9. State Laws

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 established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act or state law.

10. Penalties for Violation of Permit Conditions

Pursuant to IC 13-30-4, a person who violates any provision of this permit, the water pollution control laws; environmental management laws; or a rule or standard adopted by the Environmental Rules Board is liable for a civil penalty not to exceed twenty-five thousand dollars ($25,000) per day of any violation.

Pursuant to IC 13-30-5, a person who obstructs, delays, resists, prevents, or interferes with (1) the department; or (2) the department's personnel or designated agent in the performance of an inspection or investigation performed under IC 13-14-2-2 commits a class C infraction.

Pursuant to IC 13-30-10-1.5(e), a person who willfully or negligently violates any NPDES permit condition or filing requirement, or any applicable standards or limitations of IC 13-18-3-2.4, IC 13-18-4-5, IC 13-18-12, IC 13-18-14, IC 13-18-15, or IC 13-18-16, commits a Class A misdemeanor.

Pursuant to IC 13-30-10-1.5(i), an offense under IC 13-30-10-1.5(e) is a Level 4 felony if the person knowingly commits the offense and knows that the commission of the offense places another person in imminent danger of death or serious bodily injury. The offense becomes a Level 3 felony if it results in serious bodily injury to any person, and a Level 2 felony if it results in death to any person.

Pursuant to IC 13-30-10-1.5(g), a person who willfully or recklessly violates any applicable standards or limitations of IC 13-18-8 commits a Class B misdemeanor.

Pursuant to IC 13-30-10-1.5(h), a person who willfully or recklessly violates any applicable standards or limitations of IC 13-18-9, IC 13-18-10, or IC 13-18-10.5 commits a Class C misdemeanor.

Pursuant to IC 13-30-10-1, a person who knowingly or intentionally makes any false material statement, representation, or certification in any NPDES form, notice, or report commits a Class B misdemeanor.

11. Penalties for Tampering or Falsification

In accordance with 327 IAC 5-2-8(10), the permittee shall comply with monitoring, recording, and reporting requirements of this permit. The Clean Water Act, as well as IC 13-30-10-1, provides that any person who knowingly or intentionally (a) destroys, alters, conceals, or falsely certifies a record, (b) tampers with, falsifies, or renders inaccurate or inoperative a recording or monitoring device or method, including the data gathered from the device or method, or (c) makes a false material statement or representation in any label, manifest, record, report, or other document; all required to be maintained under the terms of a permit issued by the department commits a Class B misdemeanor.

12. Toxic Pollutants

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant injurious to human health, and that standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition in accordance with 327 IAC 5-2-8(5). Effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants injurious to human health are effective and must be complied with, if applicable to the permittee, within the time provided in the implementing regulations, even absent permit modification.

13. Wastewater treatment plant and certified operators

The permittee shall have the wastewater treatment facilities under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-22. In order to operate a wastewater treatment plant the operator shall have qualifications as established in 327 IAC 5-22-7.

327 IAC 5-22-10.5(a) provides that a certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant, if it can be shown that he will give adequate supervision to all units involved. Adequate supervision means that sufficient time is spent at the plant on a regular basis to assure that the certified operator is knowledgeable of the actual operations and that test reports and results are representative of the actual operations conditions. In accordance with 327 IAC 5-22-3(11), “responsible charge operator” means the person responsible for the overall daily operation, supervision, or management of a wastewater facility.

Pursuant to 327 IAC 5-22-10(4), the permittee shall notify IDEM when there is a change of the person serving as the certified operator in responsible charge of the wastewater treatment facility. The notification shall be made no later than thirty (30) days after a change in the operator.

14. Construction Permit

In accordance with IC 13-14-8-11.6, a discharger is not required to obtain a state permit for the modification or construction of a water pollution treatment or control facility if the discharger has an effective NPDES permit.

If the discharger modifies their existing water pollution treatment or control facility or constructs a new water pollution treatment or control facility for the treatment or control of any new influent pollutant or increased levels of any existing pollutant, then, within thirty (30) days after commencement of operation, the discharger shall file with the Department of Environment Management a notice of installation for the additional pollutant control equipment and a design summary of any modifications.

The notice and design summary shall be sent to the Office of Water Quality, Industrial NPDES Permits Section, 100 North Senate Avenue, Indianapolis, IN 46204-2251.

15. Inspection and Entry

In accordance with 327 IAC 5-2-8(8), the permittee shall allow the Commissioner, or an authorized representative, (including an authorized contractor acting as a representative of the Commissioner) upon the 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, or where records must be kept pursuant to the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;

c. Inspect at reasonable times any facilities, equipment or methods (including monitoring and control equipment), practices, or operations regulated or required pursuant to this permit; and

d. Sample or monitor at reasonable times, any discharge of pollutants or internal wastestreams for the purposes of evaluating compliance with the permit or as otherwise authorized.

16. New or Increased Discharge of Pollutants

This permit prohibits the permittee from undertaking any action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a regulated pollutant that is not a BCC unless one of the following is completed prior to the commencement of the action:

a. Information is submitted to the Commissioner demonstrating that the proposed new or increased discharges will not cause a significant lowering of water quality as defined under 327 IAC 2-1.3-2(50). Upon review of this information, the Commissioner may request additional information or may determine that the proposed increase is a significant lowering of water quality and require the submittal of an antidegradation demonstration.

b. An antidegradation demonstration is submitted to and approved by the Commissioner in accordance with 327 IAC 2-1.3-5 and 327 IAC 2-1.3-6.

B. MANAGEMENT REQUIREMENTS

1. Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for the collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of this permit in accordance with 327 IAC 5-2-8(9).

Neither 327 IAC 5-2-8(9), nor this provision, shall be construed to require the operation of installed treatment facilities that are unnecessary for achieving compliance with the terms and conditions of the permit.

2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(12), the following are requirements for bypass:

a. The following definitions:

(1) “Bypass” means the intentional diversion of a waste stream from any portion of a treatment facility.

(2) “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 can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. The permittee may allow a bypass to occur that does not cause a violation of the effluent limitations contained in this permit, but only if it is also for essential maintenance to assure efficient operation. These bypasses are not subject to Part II.B.2.c. and d.

c. The permittee must provide the Commissioner with the following notice:

(1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.

(2) As required by 327 IAC 5-2-8(11)(C), the permittee shall orally report an unanticipated bypass that exceeds any effluent limitations in the permit within twenty-four (24) hours from the time the permittee becomes aware of such noncompliance. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the cause of noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. If a complete report is submitted by e-mail within 24 hours of the noncompliance, then that e-mail report will satisfy both the oral and written reporting requirement. E-mails should be sent to wwreports@idem.in.gov.

d. The following provisions are applicable to bypasses:

(1) Except as provided by Part II.B.2.b., bypass is prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless the following occur:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

(B) 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 equipment down time. 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 that occurred during normal periods of equipment downtime or preventive maintenance.

(C) The permittee submitted notices as required under Part II.B.2.c.

(2) The Commissioner may approve an anticipated bypass, after considering its adverse effects, if the Commissioner determines that it will meet the conditions listed above in Part II.B.2.d.(1). The Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.

e. Bypasses that result in death or acute injury or illness to animals or humans must be reported in accordance with the "Spill Response and Reporting Requirements" in 327 IAC 2-6.1, including calling 888/233-7745 as soon as possible, but within two (2) hours of discovery. However, under 327 IAC 2-6.1-3(1), when the constituents of the bypass are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

3. Upset Conditions

Pursuant to 327 IAC 5-2-8(13):

a. "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.

b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph c of this section, are met.

c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:

(1) An upset occurred and the permittee has identified the specific cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee complied with any remedial measures required under Part II.A.2; and

(4) The permittee submitted notice of the upset as required in the "Twenty-Four Hour Reporting Requirements," Part II.C.3, or 327 IAC 2-6.1, whichever is applicable. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

d. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof pursuant to 40 CFR 122.41(n)(4).

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State and to be in compliance with all Indiana statutes and regulations relative to liquid and/or solid waste disposal. The discharge of pollutants in treated wastewater is allowed in compliance with the applicable effluent limitations in Part I. of this permit.

C. REPORTING REQUIREMENTS

1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(11)(F), the permittee shall give notice to the Commissioner as soon as possible of any planned physical alterations or additions to the permitted facility. In this context, permitted facility refers to a point source discharge, not a wastewater treatment facility. Notice is required only when either of the following applies:

a. The alteration or addition may meet one of the criteria for determining whether the facility is a new source as defined in 327 IAC 5-1.5.

b. The alteration or addition could significantly change the nature of, or increase the quantity of, pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in Part I.A. nor to notification requirements in Part II.C.9. of this permit.

Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited.

2. Monitoring Reports

Pursuant to 327 IAC 5-2-8(10) and 327 IAC 5-2-13 through 15, monitoring results shall be reported at the intervals and in the form specified in "Monthly Reporting", Part I.C.2.

3. Twenty-Four Hour Reporting Requirements

Pursuant to 327 IAC 5-2-8(11)(C), the permittee shall orally report to the Commissioner information on the following types of noncompliance within 24 hours from the time permittee becomes aware of such noncompliance. If the noncompliance meets the requirements of item b (Part II.C.3.b) or 327 IAC 2-6.1, then the report shall be made within those prescribed time frames. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge that is in noncompliance are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

a. Any unanticipated bypass which exceeds any effluent limitation in the permit;

b. Any noncompliance which may pose a significant danger to human health or the environment. Reports under this item shall be made as soon as the permittee becomes aware of the noncomplying circumstances;

c. Any upset (as defined in Part II.B.3 above) that causes an exceedance of any effluent limitation in the permit,

d. Violation of a maximum daily discharge limitation for any of the following toxic pollutants or hazardous substances: PCBs, Zinc, Total Chromium.

The permittee can make the oral reports by calling (317)232-8670 during regular business hours and asking for the Compliance Data Section or by calling (317) 233-7745 ((888)233-7745 toll free in Indiana) during non-business hours. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee may submit a "Bypass/Overflow Report" (State Form 48373) or a "Noncompliance 24-Hour

Notification Report" (State Form 52415), whichever is appropriate, to IDEM at (317) 232-8637 or wwreports@idem.in.gov. If a complete e-mail submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the email report will satisfy both the oral and written reporting requirements.

4. Other Compliance/Noncompliance Reporting

Pursuant to 327 IAC 5-2-8(11)(D), the permittee shall report any instance of noncompliance not reported under the "Twenty-Four Hour Reporting Requirements" in Part II.C.3, or any compliance schedules at the time the pertinent Discharge Monitoring Report is submitted. The report shall contain the information specified in Part II.C.3;

The permittee shall also give advance notice to the Commissioner of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements; and

All reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

5. Other Information

Pursuant to 327 IAC 5-2-8(11)(E), where the permittee becomes aware of a failure to submit any relevant facts or submitted incorrect information in a permit application or in any report, the permittee shall promptly submit such facts or corrected information to the Commissioner.

6. Signatory Requirements

Pursuant to 327 IAC 5-2-22 and 327 IAC 5-2-8(15):

a. All reports required by the permit and other information requested by the Commissioner shall be signed and certified by a person described below or by a duly authorized representative of that person:

(1) For a corporation: by a responsible corporate officer. A "responsible corporate officer" means either of the following:

(A) A president, secretary, treasurer, any vice president of the corporation in charge of a principal business function, or any other person who performs similar policymaking or decision making functions for the corporation; or

(B) The manager of one (1) or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty to make major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a Federal, State, or local governmental body or any agency or political subdivision thereof: by either a principal executive officer or ranking elected official.

b. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above.

(2) 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 plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

(3) The authorization is submitted to the Commissioner.

c. Electronic Signatures. If documents described in this section are submitted electronically by or on behalf of the NPDES-regulated facility, any person providing the electronic signature for such documents shall meet all relevant requirements of this section, and shall ensure that all of the relevant requirements of 40 CFR part 3 (including, in all cases, subpart D to part 3) (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

d. Certification. Any person signing a document identified under Part II.C.6., shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted 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."

7. Availability of Reports

Except for data determined to be confidential under 327 IAC 12.1, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Indiana Department of Environmental Management and the Regional Administrator. As required by the Clean Water Act, permit applications, permits, and effluent data shall not be considered confidential.

8. Penalties for Falsification of Reports

IC 13-30 and 327 IAC 5-2-8(15) provides 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, shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 180 days per violation, or by both.

9. Changes in Discharge of Toxic Substances

Pursuant to 327 IAC 5-2-9, the permittee shall notify the Commissioner as soon as it knows or has reason to know:

a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant that is not limited in the permit if that discharge will exceed the highest of the following notification levels.

(1) One hundred micrograms per liter (100 µg/l);

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

(4) A notification level established by the Commissioner on a case-by-case basis, either at the Commissioner's own initiative or upon a petition by the permittee. This notification level may exceed the level specified in subdivisions (1), (2), or (3) but may not exceed the level which can be achieved by the technology-based treatment requirements applicable to the permittee under the CWA (see 327 IAC 5-5-2).

b. That it has begun or expects to begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant that was not reported in the permit application under 40 CFR 122.21(g)(9). However, this subsection b. does not apply to the permittee's use or manufacture of a toxic pollutant solely under research or laboratory conditions.

10. Future Electronic Reporting Requirements

IDEM is currently developing the technology and infrastructure necessary to allow compliance with the EPA Phase 2 e-reporting requirements per 40 CFR 127.16 and to allow electronic reporting of applications, notices, plans, reports, and other information not covered by the federal e-reporting regulations. IDEM will notify the permittee when IDEM's e-reporting system is ready for use for one or more applications, notices, plans, reports, or other information. This IDEM notice will identify the specific applications, notices, plans, reports, or other information that are to be submitted electronically and the permittee will be required to use the IDEM electronic reporting system to submit the identified application(s), notice(s), plan(s), report(s), or other information. See Part I.C.2. of this permit for the current electronic reporting requirements for the submittal of monthly monitoring reports such as the Discharge Monitoring Report (DMR) and the Monthly Monitoring Report (MMR).

National Pollutant Discharge Elimination System
Fact Sheet for
Arconic US LLC
Draft: April 2024
Final: TBD

Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Permittee:	Arconic US LLC 3131 E. Main Street Lafayette, IN 47905
Existing Permit Information:	Permit Number: IN0001210 Expiration Date: October 31, 2018
Facility Contact:	Joyce Casillas, Certified Operator 219-836-1000 | joyce.casillas@eptconsultants.com
Facility Location:	3131 E. Main St. Lafayette, IN 47905 Tippecanoe County
Receiving Stream(s):	Elliot Ditch to Wea Creek to Wabash River
GLI/Non-GLI:	Non-GLI
Proposed Permit Action:	Renew
Date Application Received:	March 1, 2018
Source Category:	NPDES Major – Industrial
Permit Writer:	Matt Warrener, Permit Writer 317-233-0798 | mwarrene@idem.in.gov

Table of Contents

1.0 INTRODUCTION

The Indiana Department of Environmental Management (IDEM) received a National Pollutant Discharge Elimination System (NPDES) Permit application from permittee on May, 4, 2023.

In accordance with 327 IAC 5-2-6(a), the current five-year permit was issued with an effective date of November 1, 2018. The permit was subsequently modified on January 23, 2020 and February 13, 2023. A five year permit is proposed in accordance with 327 IAC 5-2-6(a).

The Federal Water Pollution Control Act (more commonly known as the Clean Water Act), as amended, (Title 33 of the United States Code (U.S.C.) Section 1251 *et seq.*), requires an NPDES permit for the discharge of pollutants into surface waters. Furthermore, Indiana law requires a permit to control or limit the discharge of any contaminants into state waters or into a publicly owned treatment works. This proposed permit action by IDEM complies with and implements these federal and state requirements.

In accordance with Title 40 of the Code of Federal Regulations (CFR) Sections 124.8 and 124.56, as well as Title 327 of the Indiana Administrative Code (IAC) Article 5-3-8, a Fact Sheet is required for certain NPDES permits. This document fulfills the requirements established in these regulations. This Fact Sheet was prepared in order to document the factors considered in the development of NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, receiving water conditions, Indiana water quality standards-based wasteload allocations, and other information available to IDEM. Decisions to award variances to Water Quality Standards or promulgated effluent guidelines are justified in the Fact Sheet where necessary.

2.0 FACILITY DESCRIPTION

2.1 General

ARCONIC US LLC is classified under Standard Industrial Classification (SIC) Code 3354 – Aluminum Extruded Products, SIC Code 3341 – Secondary Smelting and Refining of Nonferrous Metals, and SIC Code 3355 – Aluminum Rolling and Drawing.

Arconic US LLC Lafayette Operations began operations in 1937 and is engaged in the production of a variety of formed aluminum components serving an international market. Primary production processes at the facility include ingot casting, extrusion and cold drawn tube production. Dies and associated tooling for extrusion and tube production are designed and manufactured at the facility. Finishing operations associated with extrusion include stretching, sawing, heat treating and annealing. Tube production at the facility involves the cold drawing of extruded tube. In 2014, an Aluminum-Lithium Cast House addition was constructed to create high strength, low weight aluminum-lithium alloys.

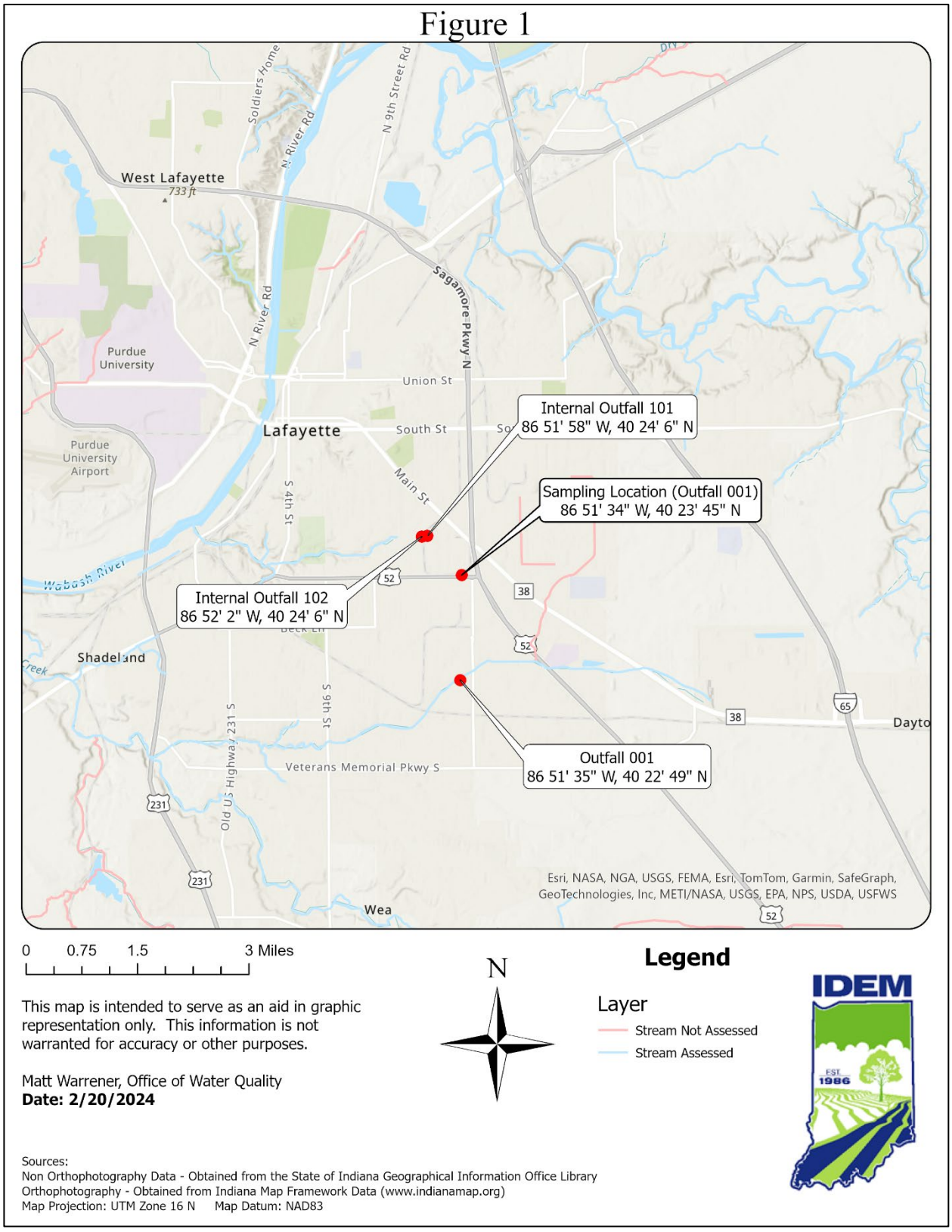
Ingots for extrusion and tube production are cast from eight (8) melting complexes supplied with aluminum stock purchased from other Arconic facilities as well as internal and external aluminum scrap. The ingots range in size from six (6) to forty-one (41) inches in diameter.

The aluminum extrusion and drawn tube facility utilizes thirteen (13) extrusion presses ranging in size from nine-hundred (900) to fifteen-thousand (15,000) tons. Finishing operations associated with extrusion include stretching, sawing, annealing, and heat treating. Tube production involves the cold drawing of extruded tube.

The source water for industrial operations primarily consists of groundwater from on-site wells; a small portion of treated water from the City of Lafayette is used for Aluminum-Lithium production. Treated water from the City of Lafayette is used for domestic use and fire protection.

A map showing the location of the facility has been included as Figure 1.

Figure 1: Facility Location



3131 East Main Street
Lafayette, IN – Tippecanoe County

2.2 Outfall Locations

Internal Outfall 101	Latitude: 40º 24’ 6” N Longitude: 86º 51’ 58” W
Internal Outfall 102	Latitude: 40º 24’ 6” N Longitude: 86º 52’ 2” W
Outfall 001	Latitude: 40º 22’ 49” N Longitude: 86º 51’ 35” W
Outfall 001 Sampling Location	Latitude: 40º 23’ 45” N Longitude: 86º 51’ 34” W

In the previous permit, the coordinates displayed for Outfall 001 were the coordinates for the sampling location for Outfall 001 rather than the actual outfall location. As displayed above, this permit has been updated to include the coordinates for both Outfall 001 and the sampling location for Outfall 001.

Coordinates for internal Outfall 101 and internal Outfall 102 have also been included. The permittee is currently transitioning to a new wastewater treatment system which will result in the elimination of internal Outfall 101. After the transition is complete, internal Outfall 102 will serve as the new internal sampling location. See Section 2.3 and 2.4 of this Fact Sheet for more information.

2.3 Wastewater Treatment

Sanitary wastewater, industrial wastewater, and stormwater is processed at the on-site wastewater treatment system which discharges via internal Outfall 101. Internal Outfall 101 discharge is combined with additional stormwater runoff and other miscellaneous wastestreams which is further treated prior to discharge via Outfall 001 to Elliott Ditch. More detailed descriptions of these wastestreams and their treatment systems has been provided below.

Outfall 001 Discharge and Treatment Description

In the renewal application, the permittee provided the following list of wastewater sources for Outfall 001: waters and wastewaters from internal Outfall 101; authorized non-stormwater discharges from potable water, fire hydrant flushing, condensate, contaminated and uncontaminated groundwater; minor leakage from cooling towers; contaminated stormwater; well water sources; quench tank wastewaters, contact and non-contact cooling waters, miscellaneous maintenance activities; potential spill residue (after remediation); and heat treatment wastewaters.

The above wastestreams are combined in an underground storm sewer system and held in a series of tanks and storage ponds prior to treatment via Natural Media Filtration (NMF) or cartridge filtration prior to discharge. See Figure 6 and Section 2.5 of this Fact Sheet for more information.

Internal Outfall 101 Discharge Description

In the renewal application, the permittee provided the following list of wastewater sources for internal Outfall 101: sanitary wastewater (bathrooms, kitchens, and sinks); drainage and blowdown from contact and non-contact cooling waters; water discharge/leakages from various manufacturing equipment (including hydraulic systems, cutting areas, machining areas, and extrusion operations); miscellaneous maintenance activities, wastewater from shops and support services; authorized stormwater discharges (including contaminated stormwater condensate, contaminated and uncontaminated groundwater, potable water and line flushings, cooling tower mist, well water, and industrial stormwater); laboratory wastewater; various truck-shop activities; cleaning water for stationary and mobile equipment; various floor and pavement washdowns (including the aluminum-lithium casting area); boiler blowdown; quench waters; cleanup wastewater from spill remediation activities (including broken hydraulic lines and leaking pipe); water softener backwash (including backwash from the aluminum-lithium facility); authorized contaminated and uncontaminated stormwater from the aluminum-lithium area (containments, basement, groundwater, contact and non-contact cooling water); and pumper-truck wastewater from the removal of stormwater or contaminated wastewater from production areas.

Currently, the above wastestreams are treated using an on-site wastewater treatment plant (WWTP) which includes pH adjustment and phosphorous precipitation facilities, primary and secondary clarification with sludge removal, trickling-filter biological treatment, chlorine disinfection, and carbon filtration. The permittee is in the process of transitioning to a new Industrial Naturally Engineered Wetlands Treatment (iNEWT) system which includes a flow equalization tank, primary clarification with sludge removal, wetlands treatment, ultraviolet disinfection, and sand filtration. After the testing phase has been completed, the iNEWT system will replace the old WWTP and internal Outfall 102 will replace internal Outfall 101. See Figures 2 – 5 and Section 2.4 of this Fact Sheet below.

The on-site WWTP receives process industrial flows from three production areas: Ingot, Extrusion I & II, and Tube Mill. The Al-Li line discharges to the Town of Lafayette Publicly Owned Treatment Works (POTW) via a separate pretreatment permit. The permittee is developing plans to redirect the Al-Li wastestream internally to the on-site wastewater treatment system; this change will be addressed in a future permit modification. See Figures 2 – 5 and Section 2.4 of this Fact Sheet below.

Four figures have been included below:

- Figure 2 illustrates the current operation/water balance conditions in which the Ingot, Extrusion I & II, and Tube Mill production lines discharge to the on-site wastewater treatment system, while the Al-Li wastestream is discharged to the Lafayette POTW.
- Figure 3 illustrates the future/proposed operation/water balance conditions in which the Ingot, Extrusion I & II, Tube Mill, and Al-Li production lines discharge to the on-site iNEWT system.
- Figure 4 illustrates the current on-site WWTP which discharges via internal Outfall 101. During the upcoming permit period, this system will be decommissioned and replaced with the iNEWT system.

- Figure 5 illustrates the iNEWT system which will replace the current on-site WWTP. All internal flows will be re-directed through the iNEWT system which will discharge via internal Outfall 102.
- Figure 6 illustrates the current stormwater/wastewater collection and natural media filtration (NMF)/carbon filtration systems which discharge to Outfall 001. Stormwater and discharge from the internal outfall are combined and treated in this system prior to discharge.

Figure 2: Water Balance Diagram – Current Condition

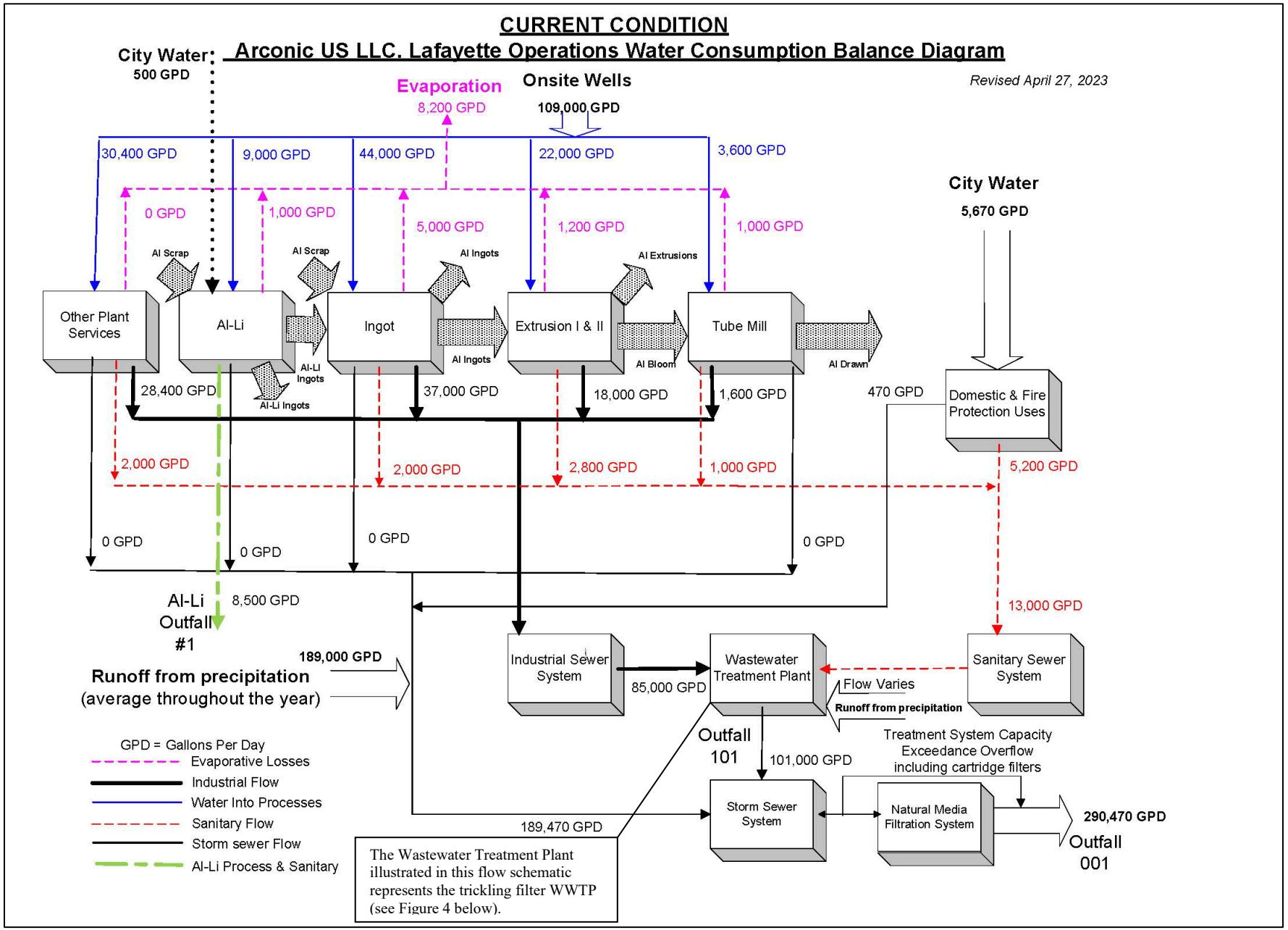


Figure 3: Water Balance Diagram – Proposed Condition

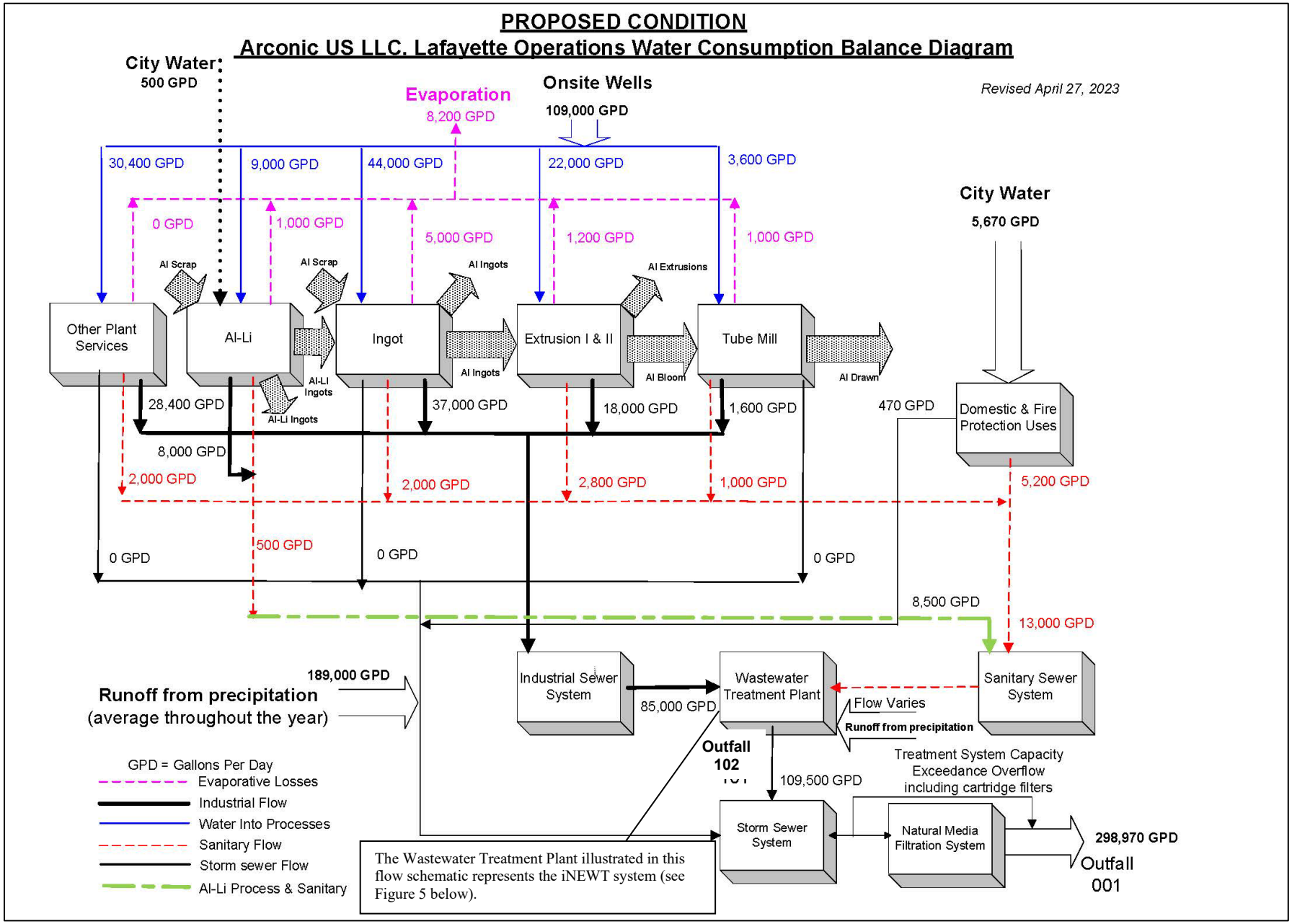


Figure 4: Trickling Filter Wastewater Treatment Plant Flow Schematic

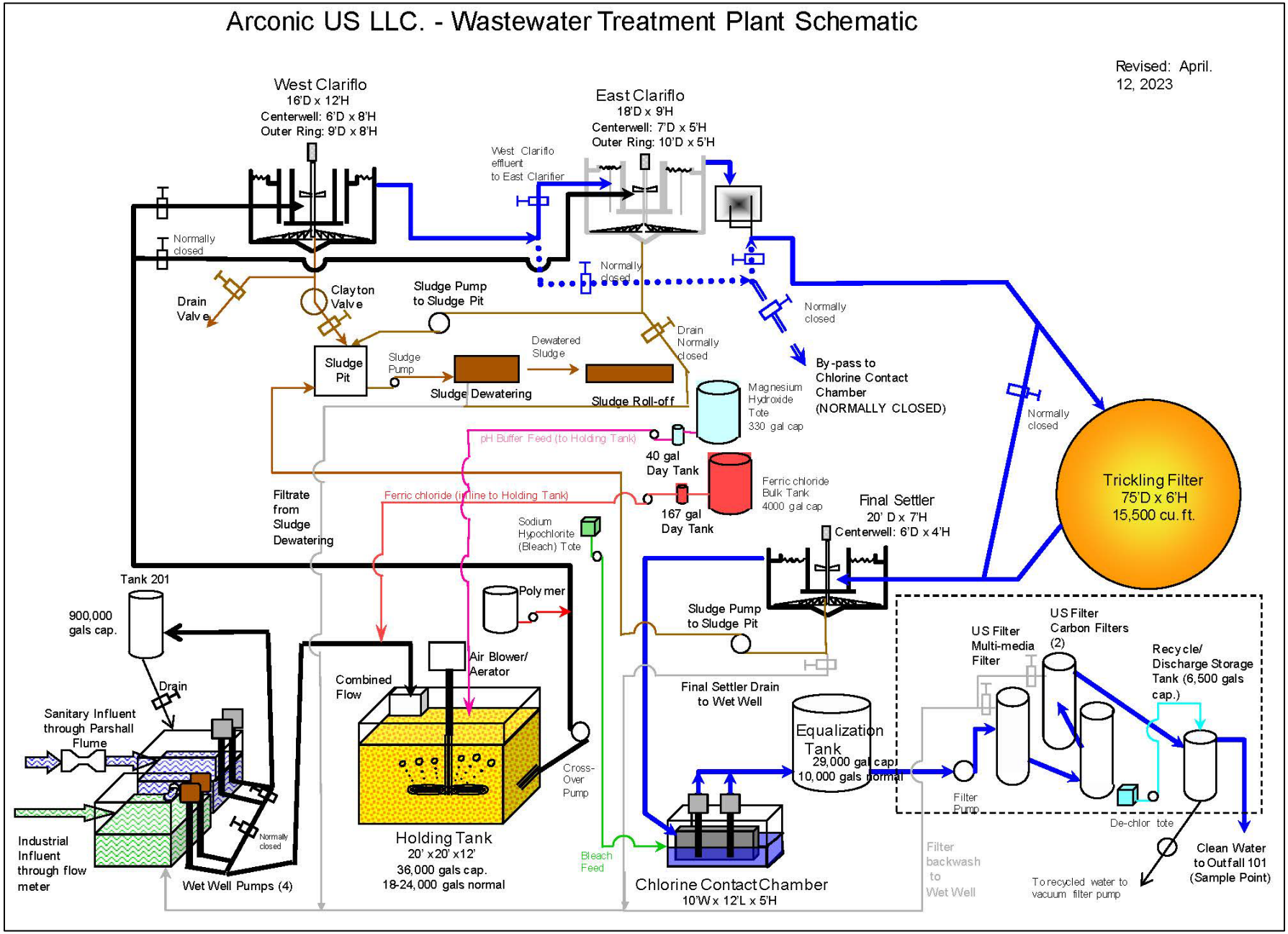
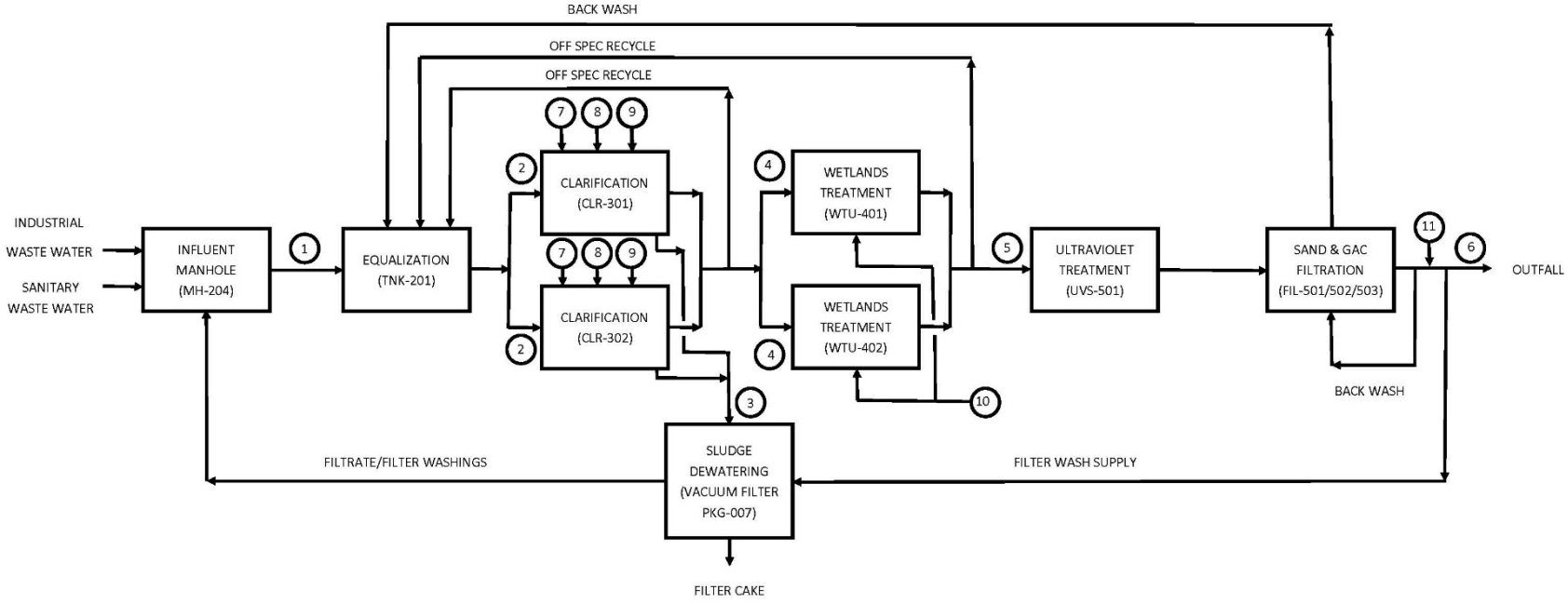


Figure 5: Industrial Naturally Engineered Wetlands Treatment (iNEWT) System Flow Schematic



FLOW TABLE

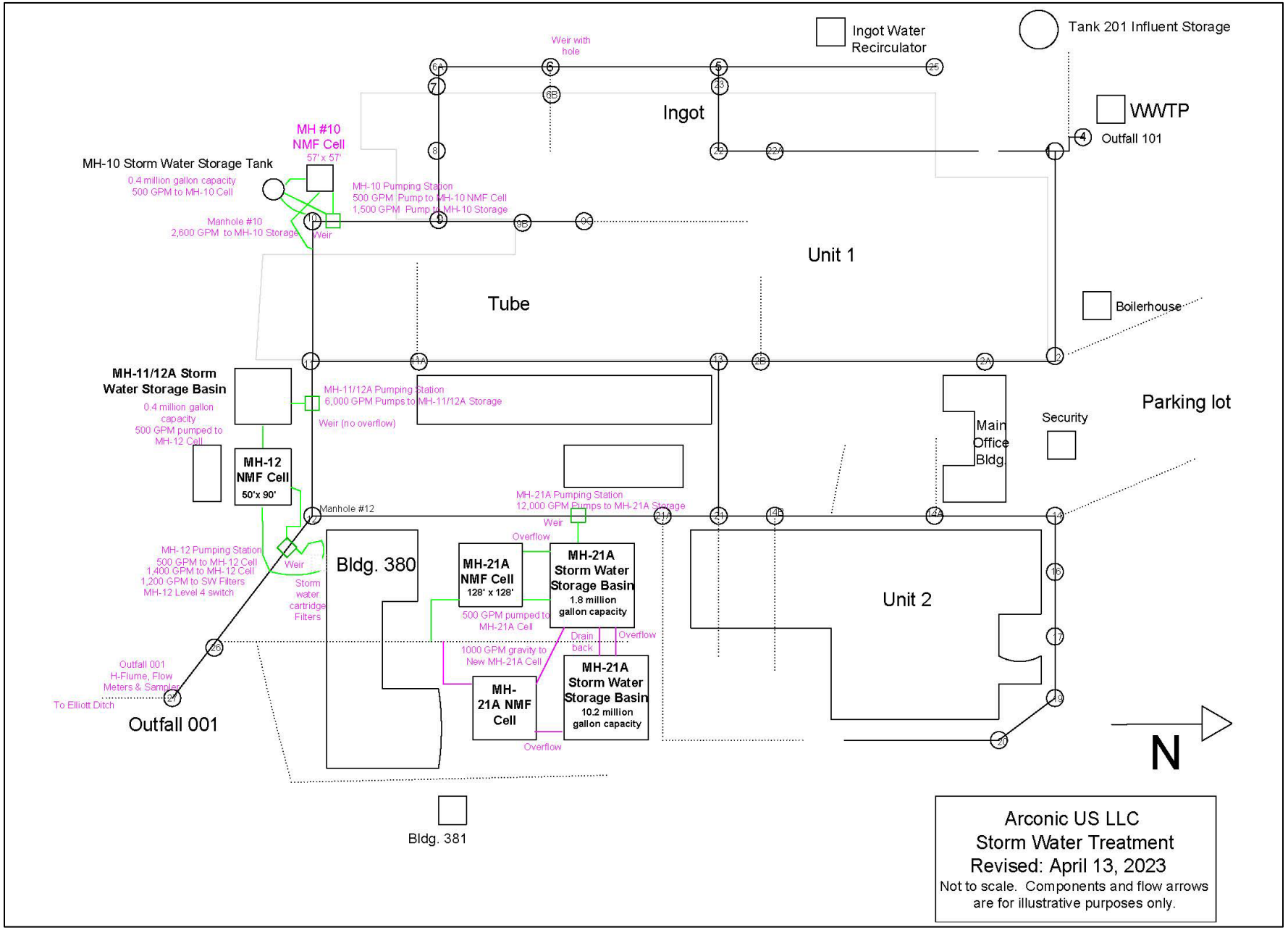
STREAM NO.	1	2	3	4	5	6	7	8	9	10	11
STREAM NAME	Equalization Tank Influent	Clarifier Influent	Clarifiers Under-flow	iNEWT Cell Influ-ent	iNEWT Cells Effluent	iNEWT WWTP Outfall	Ferric Chloride Addition	Magnesium Hy-droxide Addition	Flocculant Poly-mer Addition	Digestion Air Supply (cfm)	Sodium Bisulfite Addition
MIN FLOW (gpm)	60	40	5	35	75	75	0.027	0.135	0.166	410	0.003
MAX FLOW (gpm)	1200	87	10	77	165	165	0.045	0.225	0.288	410	-

DATE: 2/19/2024

iNEWT PROCESS DESIGN BASIS

A9NW-100-25-DBD-001_R2

Figure 6: Stormwater Collection/Treatment System Schematic



The average daily discharge from Outfall 001 to Elliot Ditch is 0.29 MGD. For the purpose of determining the Water Quality-based Effluent Limitations (WQBELs), an estimated flow of 0.73 MGD was used in the Wasteload Allocation (WLA) report completed on December 14, 2023; this flow value represents the highest monthly average flow between June 2018 and April 2023.

The permittee shall have the wastewater treatment facilities under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-23-6. In order to operate a wastewater treatment plant the operator shall have qualifications as established in 327 IAC 5-23-7.

IDEM has given the permittee a Class C industrial wastewater treatment plant classification based on the type of wastewater treatment and flows at the facility. Following the completion of the iNEWT system, this permit will be modified and the industrial wastewater treatment plant classification will be upgraded to Class D.

2.4 Changes in Operation

1) The permittee is currently constructing/testing an Industrial Naturally Engineered Wetlands Treatment (iNEWT) system which will replace the existing on-site wastewater treatment plant (WWTP). During the initial testing phase, the permittee plans to direct wastewater through the iNEWT system and discharge to the old WWTP for additional treatment before discharging via internal Outfall 101. When the iNEWT system is able to provide sufficient treatment independently, the permit will be modified to reflect the removal of the old WWTP and internal Outfall 101. A new internal outfall (internal Outfall 102) will be incorporated into the permit modification for regulating the discharges from the iNEWT system.

2) The permittee has proposed to re-direct the Al-Li wastestream (approx. 8,500 gpd) through the on-site wastewater treatment plant and discharge under this permit instead of discharging to the Lafayette POTW under their existing pretreatment permit (Permit No. SIU 16). The re-direction of the Al-Li wastestream will be completed after the new iNEWT system is operating independently. A future permit modification will need to be completed to incorporate new limits and monitoring conditions at internal Outfall 102. The pretreatment permit (Permit No. SIU 16) will be terminated after this permit has been modified to incorporate the Al-Li wastestream.

2.5 Facility Stormwater

A relatively small portion of on-site stormwater is directed to the on-site WWTP for treatment prior to discharging via internal Outfall 101. This includes contaminated stormwater condensate, contaminated and uncontaminated stormwater from the aluminum-lithium area, and stormwater that is collected from production areas using a pumper-truck. The majority of on-site stormwater is managed via an automated stormwater collection and treatment system. This system has two paths that the stormwater may pass though (a smaller western portion and a larger eastern portion). Under high flow conditions, stormwater may be transferred between the two paths as needed. After collecting in on-site drains, stormwater is transferred to holding tanks or detention ponds using a series of weirs and pumps. The stormwater is then pumped into Natural Media Filtration (NMF) cells which contain spent mushroom compost. The water gravity flows through

the compost which filters particulate (containing PCBs and aluminum) and adsorbs PCBs into the carbon content of the compost. The filtered water is collected in a gravel layer beneath the compost and discharged from the NMF cells, where it re-enters the storm sewer and comingles with discharges from internal Outfall 101 before discharging via Outfall 001. Under high flow conditions which exceed capacity of the NMF cells, flow may be redirected through cartridge filters or directly to Outfall 001. Figure 6 above provides an illustration of the stormwater collection/treatment system. Descriptions of the western and central/eastern stormwater treatment paths has been included below:

Western Collection/Treatment Path (MH-10, MH-12A, and MH-12)

Stormwater coming from the western portion of the facility is pumped into the MH-10 Storage Tank or directly to the MH #10 NMF Cell for pretreatment. The MH #10 NMF Cell discharges to the storm sewer and flows to the MH-12A Pumping Station where it is pumped up into the MH-12A Storage Basin. Water is pumped from the MH-12A Storage Basin to the MH #12 NMF cell for additional treatment before discharging to Outfall 001. If the western portion of the stormwater treatment system cannot handle the flow or the storage capacity is reached, water is diverted to the central/eastern path. A more detailed description of MH-10, MH-12A, and MH-12 is provided below.

MH-10 Description

There is a weir located in Manhole #10. There are two sets of pumps in the Manhole #10 Pumping Station; one pumps to the MH-10 Storage Tank and the other pumps directly into the MH #10 NMF Cell for treatment. As the water level rises in the storm sewer, a small pump begins pumping directly to the MH#10 NMF Cell for treatment. If stormwater levels continue to rise, three larger pumps turn on in sequential order and begin pumping water into the MH-10 Storage Tank. Stormwater discharges from the MH-10 Storage tank to the MH #10 NMF cell for treatment. If the MH #10 NMF cell reaches capacity, all three large pumps shut off, allowing water to overflow the Manhole #10 weir and flow to MH-12 without receiving treatment. Under normal flow conditions, the MH #10 NMF Cell gravity discharges downstream of the Manhole #10 weir, allowing treated stormwater to flow toward MH-12A for additional treatment.

MH-12A Description

There is a weir located in Manhole #12A which completely blocks the outlet of the manhole. There are four pumps in the manhole. As the water level rises in the storm sewer, a small pump starts. This pump discharges any dry weather flow or flow from low volume stormwater events from the manhole to the downstream side of the Manhole #12 weir. During heavy rain events, three pumps transfer stormwater to the MH-12A Storage Basin. If the MH-12A Storage Basin reaches capacity, the pumps will turn off, and additional water will flow backwards through the system from Manhole #11 to Manhole #13. Discharge from Manhole #13 flows to the central/eastern portion of the treatment system, where it comingles with flow to MH-21A.

MH-12 Description

MH-12 Pumping Station lies just downstream of Manhole #12. The pumping station contains a weir and three pumps. As the water level rises in the storm sewer, the small pump discharges

stormwater to the MH-12 NMF cell for treatment. During heavy stormwater events, the remaining pumps turn on and pump additional stormwater to the MH-12 NMF cell. Discharge from the MH-12 NMF cell gravity drains through the weir in the MH-12 Pumping Station and flows to Outfall 001. If the M-12 NMF cell reaches capacity, a float switch (Level 4 Float Switch) will activate, and stormwater will bypass the M-12 NMF cell and begin pumping through a cartridge filtration system. The cartridge filtration system consists of four filter housings, each containing nine filter cartridges. Water flows through the filter housings until the differential pressure reaches 15 psi in any housing. If that occurs, a warning alarm is activated and the WWTP Operator will replace each of the filter cartridges and reset the system. Discharge from the cartridge filtration system flows directly to Outfall 001.

Eastern Collection/Treatment Path (MH-21A)

Stormwater coming from the central/eastern portion of the facility is pumped into a 1.8-million-gallon storage basin. If this basin reaches capacity, stormwater overflows into an additional 10.2-million-gallon storage basin. Both basins are emptied by pumping and/or gravity flow into two parallel MH-21A NMF cells. The effluent from the MH-21A NMF cells flows to Outfall 001 for discharge to Elliott Ditch. If MH-21A cannot handle the flow or the storage capacity is reached, water is diverted downstream to the MH-12 Pumping Station which pumps water into the MH-12 NMF cell for treatment prior to discharge via Outfall 001. If MH-12 cannot accommodate flow or the MH-12 NMF cell reaches capacity, stormwater is pumped through the cartridge filtration system before discharging to Outfall 001 without NMF treatment. If the cartridge filters cannot accommodate additional flow, stormwater flows over the weir in the MH-12 Pumping Station and to Outfall 001 without treatment.

MH-21A Description

There is a weir located in the storm sewer by the MH-21A Pumping Station. The pumping station contains four (4) pumps. As the water level rises in the storm sewer, one small pump turns on and discharges dry weather or low volume stormwater flow to the downstream side of the weir to the MH-12 Pumping Station. If the water level in the storm sewer continues to rise, the small pump turns off and three larger pumps begin pumping stormwater into the 1.8-million-gallon MH-21A Storage Basin. When the 1.8-million-gallon MH-21A Storage Basin reaches capacity, it will overflow into the adjacent 10.2-million-gallon MH-21A Storage Basin. When the storage basins reach capacity, the pumps will turn off, allowing excess flow to discharge downstream to the MH-12 Pumping Station. As flow dissipates following a storm event, the 10.2-million-gallon storage basin discharges back into the 1.8-million gallon storage basin. There are two MH-21A NMF cells which receive stormwater from the storage basins. If the water level in the east NMF cell reaches capacity, a float valve will stop flow into the system. The treated discharge from both MH-21A NMF cells gravity drains into the storm sewer and flows directly to Outfall 001.

3.0 PERMIT HISTORY

3.1 Compliance History

A review of this facility's discharge monitoring data showed the following exceedances/violations at internal Outfall 101 between January 2020 and May 2023:

Outfall 101 Exceedances			
Month	**Year**	**Parameter**	**Violation Type**
June	2020	$CBOD_5$	Daily Max
August	2020	$CBOD_5$	Daily Max
September	2020	TRC	Daily Max
November	2020	$CBOD_5$	Daily Max
April	2021	$CBOD_5$	Daily Max
July	2021	$CBOD_5$	Daily Max
July	2021	*E. coli*	Daily Max
August	2021	$CBOD_5$	Daily Max & Monthly Avg
August	2021	TRC	Daily Max
September	2021	TRC	Daily Max
December	2021	$CBOD_5$	Daily Max
January	2022	$CBOD_5$	Daily Max
February	2022	$CBOD_5$	Daily Max
March	2022	$CBOD_5$	Daily Max & Monthly Avg
April	2022	$CBOD_5$	Daily Max
May	2022	TRC	Daily Max
June	2022	$CBOD_5$	Daily Max
August	2022	$CBOD_5$	Daily Max
October	2022	TRC	Daily Max
December	2022	$CBOD_5$	Daily Max & Monthly Avg
January	2023	$CBOD_5$	Daily Max
January	2023	Aluminum	Monthly Avg
February	2023	Aluminum	Monthly Avg

A review of this facility's discharge monitoring data showed the following exceedances/violations at Outfall 001 between January 2020 and May 2023:

Outfall 001 Exceedances			
Month	**Year**	**Parameter**	**Type**
August	2021	Chloride	Monthly Avg

The permittee received an inspection summary/noncompliance letter on March 27, 2023 citing the recent effluent violations. The permittee submitted a response letter on April 19, 2023 stating that the installation of a new Industrial Naturally Engineered Wetlands Treatment (iNEWT) system which is expected to improve treatment efficiency. No additional compliance-related actions are currently underway.

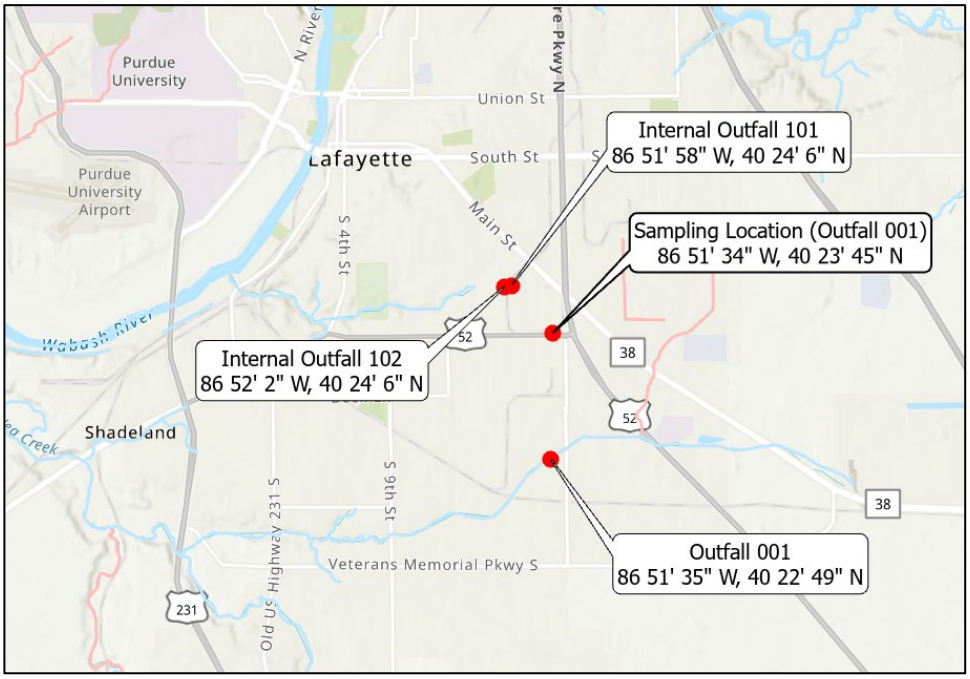
4.0 LOCATION OF DISCHARGE/RECEIVING WATER USE DESIGNATION

The receiving stream for Outfall 001 is Elliot Ditch (approximately one mile south of the facility), to Wea Creek to Wabash River. The $Q_{7,10}$ low flow value of Elliot Ditch is 0.0 cfs. Elliot Ditch shall be capable of supporting a well-balanced, warm water aquatic community and full body contact recreation in accordance with 327 IAC 2-1-3.

The permittee discharges to a waterbody that has been identified as a water of the state that is not within the Great Lakes system. Therefore, it is subject to NPDES requirements specific to dischargers not discharging to waters within the Great Lakes system under 327 IAC 2-1 and 327 IAC 5-2-11.1. These rules contain applicable water quality standards and the procedures to calculate and incorporate water quality-based effluent limitations.

A Site Map has been included as Figure 7.

Figure 7: Site Map



4.1 Total Maximum Daily Loads (TMDLs)

Section 303(d) of the Clean Water Act requires states to identify waters, through their Section 305(b) water quality assessments, that do not or are not expected to meet applicable water quality standards with federal technology-based standards alone. States are also required to develop a priority ranking for these waters taking into account the severity of the pollution and the designated uses of the waters. Once this listing and ranking of impaired waters is completed, the states are required to develop TMDLs for these waters in order to achieve compliance with the water quality standards. Indiana's 2022 303(d) List of Impaired Waters was developed in accordance with Indiana's Water Quality Assessment and 303(d) Listing Methodology for Waterbody Impairments and Total Maximum Daily Load Development for the 2022 Cycle.

Elliot Ditch (Assessment-Unit INB0814_04, HUC-12 051201080104) is on the 2022 303(d) list for Biological Impairment and PCBs in fish tissue. A TMDL for Elliot Ditch has not been developed or planned. However, a TMDL has been developed for the Wabash River which lies approximately 6.5 miles downstream of Outfall 001. The Wabash River Watershed (WRW) TMDL was approved on September 22, 2006 to address *E. coli*, Nutrients, Impaired Biotic Communities, Dissolved Oxygen, and pH. Section 4.3 of the TMDL report states that no additional reductions for *E. coli*, fecal coliform, or nitrate are necessary for individual permitted facilities. Additionally, a review of the Form 2C included with the renewal application indicates that nitrate and phosphorous concentrations at this facility fall below the WLA targets identified in the TMDL report.

Although the TMDL report determined that no additional reductions are required, the permit does contain limits for *E.coli*. The *E. coli* targets of 125 cfu/100 ml (based on geometric mean) and 235 cfu/100 ml (based on single sample maximum) identified in the TMDL are consistent with Indiana's WQSs (327 IAC 2-1.5-8). The permittee originally received an *E. coli* limit during the 2002 permit issuance. This permit also includes final effluent limitations for pH based on Indiana WQS (327 IAC 2-1-6(b)(2)) and $CBOD_5$ based on the Small Sanitary Discharge rule (327 IAC 5-10-5(a)(1). The permittee originally received these limits during the 1985 permit issuance.

5.0 PERMIT LIMITATIONS

5.1 Technology-Based Effluent Limits (TBELs)

EPA develops effluent limitations guidelines (ELGs) for industrial and commercial activities as required by the Clean Water Act (CWA). ELGs are technology-based effluent limits (TBELs). TBELs established pursuant to sections 301(b), 304, and 306 of the CWA represent the minimum level of treatment for industrial point sources that must be included in an NPDES permit (327 IAC 5-5-2(a)). The federal effluent guidelines and standards are located at 40 CFR 403 through 471, inclusive, and are incorporated into Indiana law at 327 IAC 5-2-1.5. In Indiana, NPDES permits are required to ensure compliance with these federal ELGs under 327 IAC 5-2-10(a)(1), 327 IAC 5-2-10(a)(2), and 327 IAC 5-5-2.

In the absence of ELGs for a particular process or parameter, TBELs can also be established on a case-by-case basis for a particular process or parameter using best professional judgment (BPJ) in accordance with 327 IAC 5-5-2 and 5-2-10 (see also 40 CFR 122.44 and 125.3, and Section 402(a)(1) of the CWA).

The applicable technology-based standards for Arconic US LLC are contained in 40 CFR 467 Subpart C – Extrusion Subcategory and 467 Subpart E – Drawing Operation with Neat Oils Subcategory. The EPA established mass-based limitations expressed in terms of allowable pollutant discharge per unit of production or some other measure of production (i.e. production normalized). Table 5 below provides a description of applicable subpart(s), process(es), and average daily production (from 2018 – 2022) as included in the permit application. See Attachment C for production data provided by the permittee.

Table 5: Applicable ELG Subparts and Production Levels

Outfall	Subpart	Description	Process	Average Daily Production (lbs/day)
101, 001	Subpart C – Extrusion Subcategory (40 CFR § 467.30)	This subpart applies to the core and ancillary operations of the extrusion subcategory	Core	64,638
			Extrusion Press Leakage	64,638
			Direct Chill Casting	288,443 [1]
			Solution Heat Treat	64,971
			Cleaning & Etching Bath	800
			Cleaning & Etching Rinse	800
101, 001	Subpart E – Drawing Operation with Neat Oils Subcategory (40 CFR § 467.50)	This subpart applies to the core and drawing with neat oils and ancillary operations	Core	48,537
			Solution Heat Treat	70,423
			Cleaning & Etching Bath	1,165
			Cleaning & Etching Rinse	1,165

[1] Direct Chill Casting production was divided into two values for the calculation of ELGs: 256,082 lbs/day and 32,361 lbs/day (288,443 lbs/day total). The first value (256,082 lbs/day) represents production that is not associated with the Al-Li line; this was introduced before the promulgation of Aluminum Forming Effluent Limitation Guidelines (ELGs) in 1983 and is therefore subject to Best Practicable Control Technology (BPT) and Best Available Technology (BAT) limits. The second value (32,361 lbs/day) represents production from the Al-Li line; this was introduced after the promulgation of Aluminum Forming ELGs in 1983 and is therefore subject to New Source Performance Standards (NSPS) limits.

Each subpart of 40 CFR 467 contains Best Practicable Control Technology (BPT), Best Available Technology (BAT), and New Source Performance Standards (NSPS) production-based effluent limitations. The more stringent of these limitation categories is applicable. Table 6 in the following section contains the applicable ELG subparts from the federal regulations and the calculated permit effluent limits for each individual production process. The less stringent BPT/BAT/NSPS limits in the table are shaded and do not apply.

Table 6: Technology-Based Effluent Limits

Production (lbs/day)	Production Unit	Parameter	ELG (lbs pollutant per 1,000,000 off-lbs)		Permit Mass Limit (lbs/day)	
			Monthly Average	Daily Max	Monthly Average	Daily Max
Subpart C Core: 64,638 lbs/day	BPT 40 CFR 467.32	Total Chromium	0.066	0.16	0.004	0.010
		Total Cyanide	0.044	0.11	0.003	0.007
		Zinc	0.22	0.53	0.014	0.034
		Aluminum	1.16	2.34	0.075	0.151
		Oil and Grease	4.39	7.32	0.284	0.473
		TSS	7.13	15.0	0.461	0.970
	BAT 40 CFR 467.33	Total Chromium [1]	0.061	0.15	0.004	0.010
		Total Cyanide	0.041	0.098	0.003	0.006
		Zinc	0.21	0.49	0.014	0.032
		Aluminum	1.09	2.19	0.070	0.142
Subpart E Core: 48,537 lbs/day	BPT 40 CFR 467.52	Total Chromium	0.0090	0.022	0.0004	0.001
		Total Cyanide	0.0050	0.015	0.0002	0.001
		Zinc	0.031	0.073	0.0015	0.004
		Aluminum	0.160	0.32	0.0078	0.016
		Oil and Grease	0.598	0.97	0.0290	0.047
		TSS	0.972	2.04	0.0472	0.099
	BAT 40 CFR 467.53	Total Chromium	0.009	0.022	0.0004	0.001
		Total Cyanide	0.006	0.015	0.0003	0.001
		Zinc	0.031	0.073	0.0015	0.004
		Aluminum	0.16	0.321	0.0078	0.016

[1] Below are example Total Chromium calculations under the Core Subcategory for BAT:

Total Chromium Monthly Avg. Limit = 64,638 $\frac{lbs\ product}{day}$ x 0.061 $\frac{lbs\ pollutant}{1{,}000{,}000\ lbs\ product}$ = 0.004 $\frac{lbs\ pollutant}{day}$

Total Chromium Daily Max Limit = 64,638 $\frac{lbs\ product}{day}$ x 0.15 $\frac{lbs\ pollutant}{1{,}000{,}000\ lbs\ product}$ = 0.010 $\frac{lbs\ pollutant}{day}$

Table 6 (continued): Technology-Based Effluent Limits

Production (lbs/day)	Production Unit	Parameter	ELG (lbs pollutant per 1,000,000 off-lbs)		Permit Mass Limit (lbs/day)	
			Monthly Average	Daily Max	Monthly Average	Daily Max
Subpart C Extrusion Press Leakage: 64,638 lbs/day	BPT 40 CFR 467.32	Total Chromium	0.27	0.65	0.017	0.042
		Total Cyanide	0.18	0.43	0.012	0.028
		Zinc	0.90	2.16	0.058	0.140
		Aluminum	4.73	9.51	0.306	0.615
		Oil and Grease	17.74	29.56	1.147	1.911
		TSS	28.82	60.60	1.863	3.917
	BAT 40 CFR 467.33	Total Chromium	0.27	0.65	0.017	0.042
		Total Cyanide	0.18	0.43	0.012	0.028
		Zinc	0.90	2.16	0.058	0.140
		Aluminum	4.73	9.51	0.306	0.615

Production (lbs/day)	Production Unit	Parameter	ELG (lbs pollutant per 1,000,000 off-lbs)		Permit Mass Limit (lbs/day)	
			Monthly Average	Daily Max	Monthly Average	Daily Max
Subpart C Direct Chill Casting Contact Cooling Water (Non-Al-Li Production): 256,082 lbs/day	BPT 40 CFR 467.32	Total Chromium	0.24	0.59	0.061	0.15
		Total Cyanide	0.16	0.39	0.041	0.10
		Zinc	0.81	1.94	0.207	0.50
		Aluminum	4.26	8.55	1.091	2.19
		Oil and Grease	15.95	26.58	4.085	6.81
		TSS	25.92	54.49	6.638	13.95
	BAT 40 CFR 467.33	Total Chromium	0.24	0.59	0.061	0.15
		Total Cyanide	0.16	0.39	0.041	0.10
		Zinc	0.81	1.94	0.207	0.50
		Aluminum	4.26	8.55	1.091	2.19
Subpart C Direct Chill Casting Contact Cooling Water (Al-Li Production): 32,361 lbs/day	NSPS 40 CFR 467.34	Total Chromium	0.20	0.49	0.051	0.13
		Total Cyanide	0.11	0.27	0.028	0.07
		Zinc	0.56	1.36	0.143	0.35
		Aluminum	3.60	8.12	0.922	2.08
		Oil and Grease	13.29	13.29	3.403	3.40
		TSS	15.95	19.94	4.085	5.11

Table 6 (continued): Technology-Based Effluent Limits

Production (lbs/day)	Production Unit	Parameter	ELG (lbs pollutant per 1,000,000 off-lbs)		Permit Mass Limit (lbs/day)	
			Monthly Average	Daily Max	Monthly Average	Daily Max
Subpart C Solution Heat Treat Contact Cooling Water: 64,971 lbs/day	BPT 40 CFR 467.32	Total Chromium	1.39	3.39	0.090	0.22
		Total Cyanide	0.93	2.24	0.060	0.15
		Zinc	4.70	11.25	0.305	0.73
		Aluminum	24.66	49.55	1.602	3.22
		Oil and Grease	92.46	154.10	6.007	10.01
		TSS	150.25	315.91	9.762	20.52
	BAT 40 CFR 467.33	Total Chromium	0.37	0.90	0.024	0.06
		Total Cyanide	0.25	0.59	0.016	0.04
		Zinc	1.25	2.98	0.081	0.19
		Aluminum	6.52	13.10	0.424	0.85
Subpart E Solution Heat Treat Contact Cooling Water: 70,423 lbs/day	BPT 40 CFR 467.52	Total Chromium	1.39	3.39	0.098	0.24
		Total Cyanide	0.93	2.24	0.065	0.16
		Zinc	4.70	11.25	0.331	0.79
		Aluminum	24.66	49.55	1.737	3.49
		Oil and Grease	92.46	154.10	6.511	10.85
		TSS	150.25	315.91	10.581	22.25
	BAT 40 CFR 467.53	Total Chromium	0.367	0.896	0.026	0.063
		Total Cyanide	0.245	0.591	0.017	0.042
		Zinc	1.243	2.974	0.088	0.209
		Aluminum	6.519	13.10	0.459	0.923

Production (lbs/day)	Production Unit	Parameter	ELG (lbs pollutant per 1,000,000 off-lbs)		Permit Mass Limit (lbs/day)	
			Monthly Average	Daily Max	Monthly Average	Daily Max
Subpart C Cleaning and Etching Bath: 800 lbs/day	BPT 40 CFR 467.32	Total Chromium	0.032	0.079	0.00003	0.0001
		Total Cyanide	0.022	0.052	0.00002	0.00004
		Zinc	0.109	0.26	0.00009	0.0002
		Aluminum	0.573	1.15	0.00046	0.0009
		Oil and Grease	2.15	3.58	0.00172	0.0029
		TSS	3.49	7.34	0.00279	0.0059
	BAT 40 CFR 467.33	Total Chromium	0.032	0.079	0.00003	0.0001
		Total Cyanide	0.022	0.052	0.00002	0.0000
		Zinc	0.109	0.262	0.00009	0.0002
		Aluminum	0.58	1.15	0.00046	0.0009
Subpart E Cleaning and Etching Bath: 1,165 lbs/day	BPT 40 CFR 467.52	Total Chromium	0.032	0.079	0.00004	0.00009
		Total Cyanide	0.022	0.052	0.00003	0.00006
		Zinc	0.11	0.26	0.00013	0.00030
		Aluminum	0.57	1.150	0.00066	0.00134
		Oil and Grease	2.15	3.58	0.00250	0.00417
		TSS	3.49	7.34	0.00407	0.00855
	BAT 40 CFR 467.53	Total Chromium	0.032	0.079	0.00004	0.00009
		Total Cyanide	0.022	0.052	0.00003	0.00006
		Zinc	0.109	0.262	0.00013	0.00031
		Aluminum	0.563	1.151	0.00066	0.00134

Table 6 (continued): Technology-Based Effluent Limits

Production (lbs/day)	Production Unit	Parameter	ELG (lbs pollutant per 1,000,000 off-lbs)		Permit Mass Limit (lbs/day)	
			Monthly Average	Daily Max	Monthly Average	Daily Max
Subpart C Cleaning and Etching Rinse: 800 lbs/day	BPT 40 CFR 467.32	Total Chromium	2.51	6.12	0.002	0.005
		Total Cyanide	1.67	4.04	0.001	0.003
		Zinc	8.49	20.31	0.007	0.016
		Aluminum	44.52	89.46	0.036	0.072
		Oil and Grease	166.95	278.24	0.134	0.223
		TSS	271.29	570.39	0.217	0.456
	BAT 40 CFR 467.33	Total Chromium	0.7	1.7	0.001	0.001
		Total Cyanide	0.5	1.2	0.000	0.001
		Zinc	2.4	5.7	0.002	0.005
		Aluminum	13	25	0.010	0.020
Subpart E Cleaning and Etching Rinse: 1,165 lbs/day	BPT 40 CFR 467.52	Total Chromium	2.51	6.12	0.003	0.007
		Total Cyanide	1.67	4.04	0.002	0.005
		Zinc	8.49	20.31	0.010	0.024
		Aluminum	44.52	89.46	0.052	0.104
		Oil and Grease	166.95	278.24	0.194	0.324
		TSS	271.29	570.39	0.316	0.665
	BAT 40 CFR 467.53	Total Chromium	0.251	0.612	0.0003	0.001
		Total Cyanide	0.167	0.404	0.0002	0.0005
		Zinc	0.849	2.031	0.001	0.002
		Aluminum	4.451	8.944	0.005	0.010

Each process wastestream above is combined for treatment prior to discharge from internal Outfall 101. Therefore, the calculated ELGs in the *Permit Mass Limit* column are added together by pollutant. Table 7 below provides that summation; these cumulative mass limits are applied at internal Outfall 101.

Table 7: Cumulative Effluent Limits (All wastestreams combined)

Cumulative ELG Limits (All wastestreams combined prior to Outfall 101)		
Parameter	**Monthly Average (lbs/day)**	**Daily Maximum (lbs/day)**
Total Chromium	0.19	0.45
Total Cyanide	0.12	0.29
Zinc	0.60	1.43
Aluminum	3.30	6.85
Oil and Grease	21.80	34.06
TSS	33.98	67.95

Internal Outfall 101 also accepts sanitary wastewater. ELGs have not yet been developed specifically for this type of discharge. Therefore, as provided by law, IDEM has established TBELs in the proposed permit utilizing BPJ to meet the requirements of BCT/BAT/NSPS.

5.2 Water Quality-Based Effluent Limits (WQBELs)

WQBELs are designed to be protective of the beneficial uses of the receiving water and are independent of the available treatment technology. The WQBELs for this facility are based on water quality criteria in 327 IAC 2-1-6 or developed under the procedures described in 327 IAC 2-1-8.2 through 8.7 and 327 IAC 2-1-8.9, and implementation procedures in 327 IAC 5. Limitations are required for any parameter which has the reasonable potential to exceed a water quality criterion as determined using the procedures under 327 IAC 5-2-11.1(h).

5.3 Effluent Limitations and Monitoring Requirements by Outfall

Under 327 IAC 5-2-10(a) (see also 40 CFR 122.44), NPDES permit requirements are technology-based effluent limitations and standards (including TBELs based on federal effluent limitations guidelines or developed on a case-by-case basis using BPJ, where applicable), water quality standards-based, or based on other more stringent requirements. The decision to limit or monitor the parameters contained in this permit is based on information contained in the permittee's NPDES application and other available information relating to the facility and the receiving waterbody as well as the applicable federal effluent limitation guidelines. In addition, when renewing a permit, the existing permit limits, the antibacksliding requirements under 327 IAC 5-2-10(a)(11), and the antidegradation requirements under 327 IAC 2-1.3 must be considered.

5.3.1 All External Outfalls (001)

Narrative Water Quality Based Limits

The narrative water quality criteria contained under 327 IAC 2-1-6(a)(1) and (2) have been included in this permit to ensure that these minimum water quality conditions are met.

Flow

The effluent flow is to be monitored in accordance with 327 IAC 5-2-13(a)(2). Monitoring is to be conducted 5 X Weekly and reported as a 24 Hr. Total.

pH

Discharges to waters of the state are limited to the range of 6.0-9.0 s.u.; these water quality-based effluent limits (WQBELs) are considered sufficient to ensure compliance with 327 IAC 2-1-6(b)(2). Samples are to be collected 2 X Weekly by Grab sampling.

Oil and Grease (O & G)

O & G limitations are 10 mg/l Monthly Average and 15 mg/l Daily Maximum. These WQBELs are considered sufficient to ensure compliance with narrative water quality criteria in 327 IAC 2-1-6(a)(1)(C) which prohibits oil or other substances in amounts sufficient to produce color, visible sheen, odor, or other conditions in such a degree to create a nuisance. Samples are to be collected 2 X Weekly by Grab sampling.

$CBOD_5$

$CBOD_5$ monitoring requirements have been added at Outfall 001 to evaluate additional $CBOD_5$ contributions from the wastestreams which comingle with the discharge from internal Outfall 101. $CBOD_5$ samples must be collected concurrently at both outfalls. Samples are to be collected 2 X Weekly by 24 Hr. Composite sampling.

Total Suspended Solids (TSS)

The WQBELs for TSS of 20 mg/l Monthly Average and 30 mg/l Daily Maximum at Outfall 001 were originally incorporated in the 1985 permit and have been retained in the renewal. Samples at Outfall 001 and internal Outfall 101 are to be collected concurrently. Samples are to be collected 3 X Weekly by 24 Hr. Composite sampling.

During precipitation events that exceed the hydraulic capacity of the storage units and Natural Media Filtration (NMF) system, which is defined by the activation of the MH-12 Level 4 switch, TSS monitoring results for the corresponding composite sample must be reported, and will count toward the required monitoring frequency, but will not be used to assess compliance with the discharge limitations for Outfall 001. A notation is required on the monthly discharge monitoring report for each time during a calendar month that the MH-12 Level 4 switch is activated. This condition is contingent upon the permittee maintaining and keeping a current Storm Water Pollution Prevention Plan (SWPPP) in accordance with Part I.E. of the permit. During the permit renewal process, the permittee was asked to provide records indicating the number of times the Level 4 Switch was activated during the previous permit period. Between November 1, 2018 and February 5, 2024, the Level 4 Switch was activated two hundred forty one (241) times. Footnote [19], Part I.A.1. of this permit requires the permittee to maintain record of all Level 4 Switch activations which occur during this permit period. These records must be submitted with the next renewal application.

Zinc

The WQBELs for Zinc of 0.20 mg/l Monthly Average and 0.44 mg/l Daily Maximum were originally incorporated in the 2002 permit and have been retained in this renewal in accordance with antibacksliding requirements found in 327 IAC 5-2-10(a)(11). These WQBELs are more stringent than the technology-based effluent limits (TBELs) applied at internal Outfall 101 and the WQBELs calculated in the 2023 reasonable potential to exceed (RPE) analysis and have been retained at Outfall 001 to ensure compliance with Indiana Water Quality Standards. Samples are to be collected 2 X Weekly by 24 Hr. Composite sampling. The 2023 RPE analysis has been included as Attachment A.

PCBs

The effluent limitations for PCBs have been retained from the previous permit. The limits reflect the WQBELs for PCBs which are based upon the criteria in 327 IAC 2-1-6 that uses Human Health Criteria (30-day Average). The calculated effluent limits for PCBs are 0.0008 ug/l Monthly Average and 0.0019 ug/l Daily Maximum. Samples are to be collected 3 X Weekly by 24 Hr. Composite Sampling. The WQBELs for PCBs are less

than the limit of quantitation (LOQ) as specified below. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the LOQ.

Parameter	Test Method	LOD	LOQ
PCBs	608	0.1 ug/l	0.3 ug/l

Temperature

A large portion of the discharge wastewater consists of contact and noncontact cooling waters. Therefore, monitoring for Temperature is required to ensure compliance with Indiana Water Quality Standards in 327 IAC 2-1-6(b)(4). Monitoring requirements for Temperature have been retained from the previous permit. Samples are to be collected 1 X Weekly by Grab sampling.

Chloride

Effluent limitations for Chloride are based on the 2023 RPE analysis and are the same as those included in the previous permit. The calculated WQBELs are 370 mg/l Monthly average and 740 mg/l Daily maximum. Samples are to be collected 2 X Weekly by 24 Hr. Composite sampling.

A RPE analysis for Chloride was conducted on December 14, 2023 using effluent data collected during the 2018-2023 permit cycle. For the purposes of this RPE analysis, using the procedures identified in 327 IAC 5-2-11.5, it was determined that Chloride is discharged from the permitted facility at a level that demonstrates RPE. The existing WQBELs for chloride are the same as those calculated in the 2023 RPE analysis; therefore the existing limits were retained. The 2023 RPE analysis has been included as Attachment A.

Mercury

Monitoring requirements for Mercury have been retained from the previous permit; these requirements were originally incorporated in the 2002 permit following identification of Mercury in fish tissue in the receiving waters. Samples are to be collected 2 X Annually by Grab sampling.

The analytical testing and sampling methodology for mercury included in the permit have limits of detection and quantitation at levels below the water quality criterion, and the IDEM is requiring the permittee to use these methodologies to determine whether the discharge at the identified Outfall(s) has a reasonable potential to exceed the water quality criterion. Sampling must be completed using EPA Test Method 1631, Method E.

A RPE analysis for Mercury was conducted on December 14, 2023 using effluent data collected during the 2018-2023 permit cycle. For the purposes of this RPE analysis, using the procedures identified in 327 IAC 5-2-11.5, it was determined that Mercury is not discharged from the permitted facility at a level that demonstrates RPE. The 2023 RPE analysis has been included as Attachment A.

Lithium

Lithium monitoring was added to the 2018 permit and has been retained from the previous permit due to the presence of discharge from the aluminum-lithium (Al-Li) production line. Samples are to be collected 2 X Monthly by 24 Hr. Composite sampling.

A RPE analysis for Lithium was conducted on December 14, 2023 using data collected during the 2018-2023 permit cycle. For the purposes of this RPE analysis, using the procedures identified in 327 IAC 5-2-11.5, it was determined that Lithium is not presently discharged at a level that demonstrates RPE. The RPE analysis has been included as Attachment A. An updated RPE analysis will need to be conducted following the redirection of additional process wastewater associated with the Al-Li line (see below).

During the upcoming permit period, the permittee plans to re-direct additional wastewater flows (approximately 8,500 gpd) from the Al-Li production line to the on-site wastewater treatment plant (WWTP). This wastestream is currently discharging to the City of Lafayette POTW via a pretreatment permit. The permittee intends to terminate the pretreatment permit after the wastestream has been re-directed to the on-site WWTP. A final completion date for this project has not been provided. Therefore, the permittee must request and receive a permit modification from IDEM prior to discharging the new Al-Li wastestream to the on-site WWTP. IDEM may incorporate effluent limits and/or increased monitoring frequency for Lithium in the permit modification based on Best Professional Judgement (BPJ) and/or the results of an antidegradation review and updated RPE analysis.

Total Cyanide

Total Cyanide monitoring requirements at Outfall 001 have been retained from the previous permit because Total Cyanide is a categorical parameter limited in the federal effluent limitation guidelines (ELGs) which are applied at internal Outfall 101. The permittee does not qualify for a continuance of its cyanide waiver (originally issued in 2002) under 40 CFR 122.44, however the permittee may qualify for reduced cyanide monitoring under 40 CFR 467.03(a). See below.

In the permit renewal application, the permittee requested a continuance of its cyanide waiver in accordance with the conditions found in 40 CFR 122.44. A review of the permittee's discharge data demonstrates that non-quantifiable (below the LOQ) concentrations of cyanide are present in the discharge. Under 40 CFR 122.44, permittees must demonstrate a pollutant is not present in the discharge or only present in background levels from intake water. The renewal application states that cyanide is not used in any production processes at the facility, and cyanide is not expected to be present in the intake well water. As such, the presence of cyanide in the discharge disqualifies the permittee from renewing its cyanide waiver under 40 CFR 122.44.

However, the permittee may qualify for reduced monitoring under 40 CFR 467.03(a). The permittee is regulated under the Aluminum Forming Point Source Category (40 CFR 467). Under 40 CFR 467.03(a), the permittee may qualify for reduced monitoring if the following conditions are met:

(1) The first wastewater sample of each calendar year has been analyzed and found to contain less than 0.07 mg/l Cyanide.

(2) The owner or operator of the aluminum forming plant certifies in writing to the POTW authority or permit issuing authority that Cyanide is not and will not be used in the aluminum forming process.

The first wastewater sample of each calendar year (first sampling period in January) must be analyzed and found to contain less than 0.07 mg/l Cyanide. If the sample result falls below 0.07 mg/L, the permittee will not need to sample for Cyanide until the following calendar year. If the sample result does not fall below 0.07 mg/l, the permittee must continue sampling for Cyanide as prescribed in the permit. See Part I.G. and Footnote [12] under Part I.A.1. and Part I.A.2. of the permit for more details.

Aluminum

Aluminum monitoring requirements have been applied at Outfall 001. WQBELs for Aluminum have already been applied at internal Outfall 101; therefore, the Aluminum monitoring at Outfall 001 will be used to evaluate additional Aluminum contributions from the wastestreams which comingle with the discharge from internal Outfall 101. Samples at Outfall 001 and internal Outfall 101 are to be collected concurrently. Sampling is to be conducted 1 X Weekly by 24 Hr. Composite sampling.

Vanadium

Vanadium monitoring has been added at Outfall 001 based on the sampling data which was included in Form 2C of the permit renewal application. A RPE analysis was conducted by this Office on December 14, 2023 which showed RPE for an aquatic life screening value. Currently, there are no water quality criterion for Vanadium in Indiana. However, data collected during this permit term will be evaluated to determine the potential for developing site-specific water quality criterion. Samples at Outfall 001 and internal Outfall 101 are to be collected concurrently.

Please see Footnote [18], Part I.A.1. of the permit for additional requirements pertaining to Vanadium.

Samples are to be collected 2 X Monthly by 24 Hr. Composite sampling.

Precipitation

Precipitation is to be recorded (inches/day) during precipitations events which exceed the hydraulic capacity of the stormwater collection and treatment system. This is defined as when the MH-12 Level 4 switch is activated. The permittee must include a notation on the monthly monitoring report (MMR) each time such an event occurs. This condition is contingent upon the permittee maintaining and keeping a current Storm Water Pollution Prevention Plan (SWPPP) in accordance with Part I.E. of the permit.

Whole Effluent Toxicity (WET) Testing

WET testing requirements have been included at Outfall 001. See Section 5.4 of this Fact Sheet for more information.

5.3.2 Internal Outfall (101)

The limitations/monitoring requirements listed below for internal Outfall 101 will be applied at internal Outfall 102 after the existing WWTP is replaced by the iNEWT system. Some of these limitations/monitoring requirements may change following the redirection of the Al-Li wastestream.

Flow

The effluent flow is to be monitored in accordance with 327 IAC 5-2-13(a)(2). Monitoring is to be conducted 5 X Weekly and reported as a 24 Hr. Total.

pH

Discharges to waters of the state are limited to the range of 6.0-9.0 s.u.; these WQBELs are considered sufficient to ensure compliance with 327 IAC 2-1-6(b)(2). Samples are to be collected 2 X Weekly by Grab sampling.

Oil and Grease (O & G)

The calculated TBELs for O&G are based on the ELG limits (as shown in Section 5.1, Table 7). These limits are 21.80 lbs/day Monthly Average and 34.06 lbs/day Daily Maximum. Samples are to be collected 1 X Quarterly by Grab sampling.

$CBOD_5$

$CBOD_5$ limits have been applied at this outfall because the effluent includes treated sanitary flow, stormwater, and process wastewater which may contribute $CBOD_5$. The $CBOD_5$ limits of 20 mg/l Monthly Average and 30 mg/l Daily Maximum were originally incorporated into the 1985 permit in accordance with BPJ and the Small Sanitary Discharger Rule (327 IAC 5-10-5). Samples at Outfall 001 and internal Outfall 101 are to be collected concurrently. Samples are to be collected 2 X Weekly by 24 Hr. Composite sampling.

Total Suspended Solids (TSS)

The calculated TBELs for TSS are based on the ELG limits (as shown in Section 5.1, Table 7). These limits are more stringent than the BPJ limits which appeared in the previous permit (see comparison below). The applicable TBEL limits are 33.98 lbs/day Monthly Average and 67.95 lbs/day Daily Maximum. Samples at Outfall 001 and internal Outfall 101 are to be collected concurrently. Samples are to be collected 3 X Weekly by 24 Hr. Composite sampling.

TSS Limit Comparison – TBELs vs. BPJ WQBELs			
Calculated TBEL Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
33.98	67.95	----	----
BPJ Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
----	----	20	30

*An average flow of 0.73 MGD was used to convert WQBEL concentration limits to loading limits for comparison to calculated TBELs (Example: 20 mg/l x 0.73 MGD x 8.345 = 121.8 lbs/day).

Total Residual Chlorine (TRC)

Chlorine is used as a disinfectant to help meet the *E. coli* limits for internal Outfall 101. This requirement is applicable from April 1st through October 31st annually. Since all waters containing chlorine are treated at the on-site wastewater treatment plant, the effluent limitation is set at internal Outfall 101 based on the LOQ. This effluent limitation for TRC has been retained from the previous permit. The limits for TRC are 0.01 mg/L Monthly Average and 0.02 mg/L Daily Maximum. Samples are to be collected 3 X Weekly by Grab sampling.

Parameter	Test Method	LOD	LOQ
Total Residual Chlorine	4500-Cl-D	0.02 mg/l	0.06 mg/l
	4500-Cl-E	0.02 mg/l	0.06 mg/l
	4500-Cl-G	0.02 mg/l	0.06 mg/l

The WQBEL for TRC is less than the limit of quantitation (LOQ) as specified above. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the LOQ of 0.06 mg/l.

Total Chromium

The calculated TBELs for total chromium are based on the ELG limits (as shown in Section 5.1, Table 7). These limits are more stringent than the WQBELs calculated in the RPE analysis conducted on December 14, 2023 (see comparison below). The applicable TBEL limits are 0.19 lbs/day Monthly Average and 0.45 lbs/day Daily Maximum. Samples are to be collected 2 X Weekly by 24 Hr. Composite sampling.

Total Chromium Limit Comparison – TBELs vs. WQBELs			
Calculated TBEL Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
0.19	0.45	----	----
WQBEL Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
1.4	2.8	0.23	0.46

Chloride

Chloride monitoring at internal Outfall 101 was originally incorporated in the 2002 permit based on the sampling data which was included in Form 2C; this monitoring requirement has been retained in the renewal. Samples are to be collected 2 X Weekly by 24 Hr. Composite sampling.

Zinc

The calculated TBELs for zinc limits are based on the ELG limits (as shown in Section 5.1, Table 7). These limits are more stringent than the WQBELs calculated in the RPE analysis conducted on December 14, 2023. The appliable TBEL limits are 0.60 lbs/day Monthly Average and 1.43 lbs/day Daily Maximum. Samples are to be collected 1 X Quarterly by 24 Hr. Composite sampling.

Zinc Limit Comparison – TBELs vs. WQBELs			
Calculated TBEL Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
0.60	1.43	--	--
WQBEL Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
1.9	3.9	0.32	0.64

Total Cyanide

The calculated TBELs for Total Cyanide are based on the ELG limits (as shown in Section 5.1, Table 7). These limits are 0.12 lbs/day Monthly Average and 0.29 lbs/day Daily Maximum. Samples are to be collected 1 X Quarterly by Grab sampling.

The permittee does not qualify for a continuance of its cyanide waiver (originally issued in 2002) under 40 CFR 122.44, however the permittee may qualify for reduced monitoring under 40 CFR 467.03(a). See Part I.G. and Footnote [12] under Part I.A.1. and Part I.A.2. of the permit for more details.

Aluminum

The calculated TBELs for aluminum are based on the ELG limits (as shown in Section 5.1, Table 7). However, more-stringent WQBELs were originally included in the 2002 permit and have been retained at this outfall. The applicable WQBEL limits are 0.12 mg/l Monthly Average and 0.29 mg/l Daily Maximum. Samples at Outfall 001 and internal Outfall 101 are to be collected concurrently. Sampling is to be conducted 1 X Weekly by 24 Hr. Composite sampling.

Aluminum Limit Comparison – TBELs vs. WQBELs			
Calculated TBEL Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
3.30	6.85	----	----
WQBEL Limits			
Monthly Average (lbs/day)	Daily Maximum (lbs/day)	Monthly Average (mg/l)	Daily Maximum (mg/l)
----	----	0.12	0.39

*An average flow of 0.73 MGD was used to convert WQBEL concentration limits to loading limits for comparison to calculated TBELs (Example: 0.12 mg/l x 0.73 MGD x 8.345 = 0.73 lbs/day).

Vanadium

Monitoring for vanadium has been added at internal Outfall 101 based on the sampling data which was included in Form 2C of the permit renewal application. Sampling at internal Outfall 101 is intended to compliment the monitoring which was included at Outfall 001. Samples at Outfall 001 and internal Outfall 101 are to be collected concurrently.

Please see Footnote [16], Part I.A.2. of the permit for additional requirements pertaining to Vanadium.

Samples are to be collected 2 X Monthly by 24 Hr. Composite sampling.

E. coli

Effluent limitations for *E. coli* have been retained from the previous permit.
The *E.coli* limitations of 125 count/100ml Monthly Average and 235 count/100ml Daily

Maximum have been determined appropriate for this facility after taking into consideration the quality of the receiving stream (Elliot Ditch) and the discharge of treated sanitary wastewater through this outfall. The limits are set in accordance with the WCW TMDL and Indiana Water Quality Standards found in 327 IAC 2-1.5-8. Samples are to be collected 2 X Weekly by Grab sampling.

5.4 Whole Effluent Toxicity (WET) Testing

Whole effluent toxicity (WET) test requirements are included in the NPDES permit to monitor compliance with the narrative water quality criteria under 327 IAC 2-1-6(a)(1)(E) and (a)(2). 327 IAC 2-1-6(a)(1)(E) requires all surface waters at all times and all places, including the mixing zone, to be free from substances, materials, etc. which are in amounts sufficient to be acutely toxic to or to otherwise severely injure or kill aquatic life, other animals, plants, or humans. 327 IAC 2-1-6(2) requires that all waters outside the mixing zone be free of substances in concentrations that on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants. In addition, under 327 IAC 5-2-11.1(h), IDEM is required to determine whether the discharge causes, or has the reasonable potential to cause or contribute to a violation of these narrative water quality criteria.

Therefore, the permittee is required to conduct WET tests to determine the toxicity of the final effluent. This does not negate the requirement to submit a water treatment additive (WTA) application and/or worksheet for replacement or new additives/chemicals proposed for use at the site.

The previous permit required a single test species (*Ceriodaphnia dubia*). Based on WET test results collected over the previous permitting period, a second test species (*Pimephales promelas)* has been re-added to the permit. The permittee must complete WET testing with both test species for the duration of the permit.

5.5 Antibacksliding

Pursuant to 327 IAC 5-2-10(a)(11), unless an exception applies, a permit may not be renewed, reissued or modified to contain effluent limitations that are less stringent than the comparable effluent limitations in the previous permit. None of the limits included in this permit are less stringent than the comparable effluent limitations in the previous permit, therefore, backsliding is not an issue in accordance with 327 IAC 5-2-10(a)(11).

5.6 Antidegradation

Indiana's Antidegradation Standards and Implementation procedures are outlined in 327 IAC 2-1.3. The antidegradation standards established by 327 IAC 2-1.3-3 apply to all surface waters of the state. The permittee is prohibited from undertaking any deliberate action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a regulated pollutant that is not a BCC unless information is submitted to the commissioner demonstrating that the proposed new or increased discharge will not cause

a significant lowering of water quality, or an antidegradation demonstration submitted and approved in accordance 327 IAC 2-1.3-5 and 2-1.3-6.

The NPDES permit does not propose to establish a new or increased loading of a regulated pollutant; therefore, the Antidegradation Implementation Procedures in 327 IAC 2-1.3-5 and 2-1.3-6 do not apply to the permitted discharge.

5.7 Stormwater

Under 327 IAC 5-4-6(d), if an individual permit is required under 327 IAC 5-4-6(a) for discharges consisting entirely of stormwater, or if an individual permit is required under 327 IAC 5-2-2 that includes discharge of commingled stormwater associated with industrial activity, IDEM may consider the following in determining the requirements to be contained in the permit:

> (1) The nature of the discharges and activities occurring at the site or facility.
> (2) Information relevant to the potential impact on water quality.
> (3) The requirements found in the following: (A) 327 IAC 5-2, (B) 327 IAC 5-5, (C) 327 IAC 5-9, and (D) 327 IAC 15-6.
> (4) "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits", EPA 833-D-96-001, September 1, 1996, available from U.S. EPA, National Service Center for Environmental Publications at https://www.epa.gov/nscep or from IDEM.

In accordance with 327 IAC 15-2-2(a), the commissioner may regulate stormwater discharges associated with industrial activity, as defined in 40 CFR 122.26(b)(14), consistent with the EPA 2008 NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, as modified, effective May 27, 2009, under an NPDES general permit. Therefore, using Best Professional Judgment to develop case-by-case technology-based limits as authorized by 327 IAC 5-2-10, 327 IAC 5-5, and 327 IAC 5-9 (see also 40 CFR 122.44, 125.3, and Section 402(a)(1) of the Clean Water Act (CWA)), IDEM has developed stormwater requirements for individual permits that are consistent with the EPA 2008 NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity. The 2008 Multi-Sector General Permit and Fact Sheet is available from: https://www.epa.gov/npdes/previous-versions-epas-msgp-documents.

According to 40 CFR 122.26(b)(14) and 327 IAC 15-6-2 facilities classified under Standard Industrial Classification (SIC) Code 3354, 3341, and 3355, are considered to be engaging in “industrial activity” for purposes of 40 CFR 122.26(b). Therefore, the permittee is required to have all stormwater discharges associated with industrial activity permitted. Treatment for stormwater discharges associated with industrial activities is required to meet, at a minimum, best available technology economically achievable/best conventional pollutant control technology (BAT/BCT) requirements. EPA has determined that non-numeric technology-based effluent limits have been determined to be equal to the best practicable technology (BPT) or BAT/BCT for stormwater associated with industrial activity.

Stormwater associated with industrial activity must also be assessed to ensure compliance with all water quality standards. Effective implementation of the non-numeric technology-based requirements should, in most cases, control discharges as necessary to meet applicable water

quality standards. Violation of any of these effluent limitations constitutes a violation of the permit.

Additionally, IDEM has determined that with the appropriate implementation of the required control measures and Best Management Practices (BMPs) found in Part I.D. of the permit, the discharge of stormwater associated with industrial activity from this facility will meet applicable water quality standards and will not cause a significant lowering of water quality. Therefore, the stormwater discharge is in compliance with the antidegradation standards found in 327 IAC 2-1.3-3, and pursuant to 327 IAC 2-1.3-4(a)(5), an antidegradation demonstration is not required.

The technology-based effluent limits (TBELs) require the permittee to minimize exposure of raw, final, or waste materials to rain, snow, snowmelt, and runoff. In doing so, the permittee is required, to the extent technologically available and economically achievable, to either locate industrial materials and activities inside or to protect them with storm resistant coverings. In addition, the permittee is required to: (1) use good housekeeping practices to keep exposed areas clean, (2) regularly inspect, test, maintain and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharges, (3) minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur, (4) stabilize exposed area and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants, (5) divert, infiltrate, reuse, contain or otherwise reduce stormwater runoff, to minimize pollutants in the permitted facility discharges, (6) enclose or cover storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces, (7) train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team, (8) ensure that waste, garbage and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged, and (9) minimize generation of dust and off-site tracking of raw, final or waste materials.

To meet the non-numeric effluent limitations in Part I.D.4, the permit requires the facility to select control measures (including BMPs) to address the selection and design considerations in Part I.D.3.

The permittee must control its discharge as necessary to meet applicable water quality standards. It is expected that compliance with the non-numeric technology-based requirements should ensure compliance with applicable water quality standards. However, if at any time the permittee, or IDEM, determines that the discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective actions, and conduct follow-up monitoring and IDEM may impose additional water quality-based limitations.

"Terms and Conditions" to Provide Information in a Stormwater Pollution Prevention Plan (SWPPP)

Distinct from the effluent limitation provisions in the permit, the permit requires the discharger to prepare a SWPPP for the permitted facility. The SWPPP is intended to document the selection,

design, installation, and implementation (including inspection, maintenance, monitoring, and corrective action) of control measures being used to comply with the effluent limits set forth in Part I.D. of the permit. In general, the SWPPP must be kept up-to-date, and modified when necessary, to reflect any changes in control measures that were found to be necessary to meet the effluent limitations in the permit.

The requirement to prepare a SWPPP is not an effluent limitation. Rather, it documents what practices the discharger is implementing to meet the effluent limitations in Part I.D. of the permit. The SWPPP is not an effluent limitation because it does not restrict quantities, rates, and concentrations of constituents which are discharged. Instead, the requirement to develop a SWPPP is a permit "term or condition" authorized under sections 402(a)(2) and 308 of the Act. Section 402(a)(2) states, "[t]he Administrator shall prescribe conditions for [NPDES] permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate." The SWPPP requirements set forth in this permit are terms or conditions under the CWA because the discharger is documenting information on how it intends to comply with the effluent limitations (and inspection and evaluation requirements) contained elsewhere in the permit. Thus, the requirement to develop a SWPPP and keep it up-to-date is no different than other information collection conditions, as authorized by 327 IAC 5-1-3 (see also CWA section 402(a)(2)).

It should be noted that EPA has developed a guidance document, "Developing your Stormwater Pollution Prevention Plan – A guide for Industrial Operators (EPA 833-B09-002), February 2009, to assist facilities in developing a SWPPP. The guidance contains worksheets, checklists, and model forms that should assist a facility in developing a SWPPP.

Public availability of documents

Part I.E.2.d(2) of the permit requires that the permittee retain a copy of the current SWPPP at the facility and make it immediately available, at the time of an onsite inspection or upon request, to IDEM. When submitting the SWPPP to IDEM, if any information in the SWPPP is considered to be confidential, that information shall be submitted in accordance with 327 IAC 12.1. Interested persons can request a copy of the SWPPP through IDEM. Any information that is confidential pursuant to Indiana law will not be released to the public.

5.8 Water Treatment Additives

In the event that changes are to be made in the use of water treatment additives that could significantly change the nature of, or increase the discharge concentration of any of the additives contributing to an outfall governed under the permit, the permittee must apply for and obtain approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) available at: https://www.in.gov/idem/forms/idem-agency-forms/ and submitting any needed supplemental information. In the review and approval process, IDEM determines, based on the information submitted with the application, whether the use of any new or changed water treatment additives/chemicals or dosage rates could potentially cause the discharge from any permitted outfall to cause chronic or acute toxicity in the receiving water.

The authority for this requirement can be found under one or more of the following: 327 IAC 5-2-8(11)(B), which generally requires advance notice of any planned changes in the permitted facility, any activity, or other circumstances that the permittee has reason to believe may result in noncompliance with permit requirements; 327 IAC 5-2-8(11)(F)(ii), which generally requires notice as soon as possible of any planned physical alterations or additions to the permitted facility if the alteration or addition could significantly change the nature of, or increase the quantity of, pollutants discharged; and 327 IAC 5-2-9(2) which generally requires notice as soon as the discharger knows or has reason to know that the discharger has begun or expects to begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant that was not reported in the permit application.

The following is a list of water treatment additives currently approved for use at the facility:

Supplier	WTA	Purpose	Date of Approval
Solenis	Biosperse 250	Microbiocide	August 24, 2000
Solenis	Biosperse 550	Microbiocide	September 6, 2007
Solenis	Biosperse 3204	Microbiocide	2008 Permit
Solenis	Biosperse CN2150	----	April 27, 2017
Solenis	Chargepac 9500	Ingot Water Recirculatory	2013 Permit
Solenis	Drewgard 2808	Corrosion Inhibitor	August 24, 2000
Solenis	Drewgard 120	Corrosion Inhibitor	July 25, 2000
Solenis	Drewplus-Drewgard ED 795	Foam Control Agent	2002 Permit
Solenis	Drewsperse 747A	Deposit Control	August 24, 2000
Solenis	Drewtrol 7000	Boiler Treatment	August 24, 2000
RMC	Enviroplus 3508	Corrosion Inhibitor	September 6, 2007
----	Ferric Chloride	Coagulant	May 17, 2017
----	Magnesium Hydroxide	pH adjustment	June 16, 2004
Solenis	Millsperse 955	Corrosion Inhibitor	July 25, 2000
Nalco	Nalco 3DT 120	Polymer	May 17, 2017
Nalco	Nalco 3DT 179	Corrosion Inhibitor	June 16, 2017
Nalco	Nalco 3DT 186	Corrosion Inhibitor	May 17, 2017
Nalco	Nalco 3DT 231	Corrosion Inhibitor	May 17, 2017
Nalco	Nalco 7330	Biocide	September 20, 2017
Nalco	Nalco 7346	Coagulant	May 17, 2017
Nalco	Nalco 7408	Chlorine Scavenger	May 17, 2017
Nalco	Nalco 8187	----	----
Nalco	Nalco Nalsperse 7348	----	----
Nalco	Nalco Optimer 9901	----	----
Nalco	Nexguard 22352	Boiler Water Treatment	May 17, 2017
----	Sodium Hydroxide (Caustic)	Water Treatment	2008 Permit
----	Sodium Hypochlorite	Water Treatment	2013 Permit
----	Sulfuric Acid	Water Treatment	2008 Permit

6.0 PERMIT DRAFT DISCUSSION

6.1 Discharge Limitations, Monitoring Conditions and Rationale

The proposed final effluent limitations are based on the more stringent of the Indiana water quality-based effluent limitations (WQBELs), technology-based effluent limitations (TBELs), or approved total maximum daily loads (TMDLs) and NPDES regulations as appropriate for each regulated outfall. Section 5.3 of this Fact Sheet explains the rationale for the effluent limitations at each Outfall.

Analytical and sampling methods used shall conform to the version of 40 CFR 136 as referenced in 327 IAC 5-2-13(d)(1) and 327 IAC 5-2-1.5.

Outfall 001 Effluent Limits & Monitoring Requirements:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	5 X Weekly	24 Hr. Total
Oil and Grease	10 Report	15 Report	mg/l lbs/day	2 X Weekly	Grab
$CBOD_5$	Report Report	Report Report	mg/l lbs/day	2 X Weekly	24 Hr. Comp.
TSS	20 Report	30 Report	mg/l lbs/day	3 X Weekly	24 Hr. Comp.
Zinc	0.20 Report	0.44 Report	mg/l lbs/day	2 X Weekly	24 Hr. Comp.
PCBs	0.0008 Report	0.0019 Report	ug/l lbs/day	3 X Weekly	24 Hr. Comp.
Temperature	-----	Report	°F	1 X Weekly	Grab
Chloride	370 Report	740 Report	mg/l lbs/day	2 X Weekly	24 Hr. Comp.
Mercury	Report Report	Report Report	ng/l lbs/day	2 X Annually	Grab
Lithium	Report Report	Report Report	mg/l lbs/day	2 X Monthly	24 Hr. Comp.
Total Cyanide	Report Report	Report Report	mg/l lbs/day	2 X Weekly	Grab
Aluminum	Report Report	Report Report	mg/l lbs/day	1 X Weekly	24 Hr. Comp.
Vanadium	Report Report	Report Report	mg/l lbs/day	2 X Monthly	24 Hr. Comp.
Precipitation	-----	Report	Inches/day	Daily	Gauge
Whole Effluent Toxicity Testing					

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	2 X Weekly	Grab

Internal Outfall 101 Effluent Limits & Monitoring Requirements:

Parameter	Monthly Average	Daily Maximum	Units	Minimum Frequency	Sample Type
Flow	Report	Report	MGD	5 X Weekly	24 Hr. Total
Oil and Grease	Report 21.80	Report 34.06	mg/l lbs/day	1 X Quarterly	Grab
$CBOD_5$	20 Report	30 Report	mg/l lbs/day	2 X Weekly	24 Hr. Comp.
TSS	Report 33.98	Report 67.95	mg/l lbs/day	3 X Weekly	24 Hr. Comp.
TRC	0.01 Report	0.02 Report	mg/l lbs/day	3 X Weekly	Grab
Total Chromium	Report 0.19	Report 0.45	mg/l lbs/day	2 X Weekly	24 Hr. Comp.
Chloride	Report Report	Report Report	mg/l lbs/day	2 X Weekly	24 Hr. Comp.
Zinc	Report 0.60	Report 1.43	mg/l lbs/day	1 X Quarterly	24 Hr. Comp.
Total Cyanide	Report 0.12	Report 0.29	mg/l lbs/day	1 X Quarterly	Grab
Aluminum	0.12 Report	0.29 Report	mg/l lbs/day	1 X Weekly	24 Hr. Comp.
Vanadium	Report Report	Report Report	mg/l lbs/day	2 X Monthly	24 Hr. Comp.
E. coli	125	235	count/100ml	2 X Weekly	Grab

Parameter	Daily Minimum	Daily Maximum	Units	Minimum Frequency	Sample Type
pH	6.0	9.0	Std Units	2 X Weekly	Grab

6.2 Schedule of Compliance

The draft permit contains new effluent limits for Aluminum. In accordance with 327 IAC 5-2-12 (see also 40 CFR 122.47(a)), a schedule of compliance is allowed in an NPDES permit when requested and justified by the permittee, but only when appropriate and when the schedule of compliance requires achievement of compliance “as soon as possible” and meets other specified conditions. Before a schedule of compliance can be included in a permit, the permittee must submit a request for the schedule to IDEM and demonstrate that they meet the requirements for such a schedule pursuant to 327 IAC 5-2-12.

6.3 Special Conditions and Other Permit Requirements

There are no special conditions on this permit.

6.4 Spill Response and Reporting Requirement

Reporting requirements associated with the Spill Reporting, Containment, and Response requirements of 327 IAC 2-6.1 are included in Part II.B.2.(d), Part II.B.3.(c), and Part II.C.3. of the NPDES permit. Spills from the permitted facility meeting the definition of a spill under 327 IAC 2-6.1-4(15), the applicability requirements of 327 IAC 2-6.1-1, and the Reportable Spills requirements of 327 IAC 2-6.1-5 (other than those meeting an exclusion under 327 IAC 2-6.1-3 or the criteria outlined below) are subject to the Reporting Responsibilities of 327 IAC 2-6.1-7.

It should be noted that the reporting requirements of 327 IAC 2-6.1 do not apply to those discharges or exceedances that are under the jurisdiction of an applicable permit when the substance in question is covered by the permit and death or acute injury or illness to animals or humans does not occur. In order for a discharge or exceedance to be under the jurisdiction of this NPDES permit, the substance in question (a) must have been discharged in the normal course of operation from an outfall listed in this permit, and (b) must have been discharged from an outfall for which the permittee has authorization to discharge that substance.

6.5 Permit Processing/Public Comment

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at https://www.in.gov/idem/public-notices/. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at https://www.in.gov/idem/resources/citizens-guide-to-idem/. A 30-day comment period is available to solicit input from interested parties, including the public.