STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PUBLIC NOTICE NO. 20220602 – INP000077 – D
DATE OF NOTICE: JUNE 2, 2022
DATE RESPONSE DUE: JULY 5, 2022

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

PRETREATMENT – RENEWAL

HITACHI ASTEMO GREENFIELD LLC, Permit No. INP000077, HANCOCK COUNTY, 400 W. New Rd., Greenfield, IN. This pretreatment facility manufacturers automotive parts, the facility discharges 0.02 million gallons daily of process wastewater to the Greenfield WWTP. Permit Manager: Megan Miller, 317/233-1854, mmiller@idem.in.gov. Posted online at https://www.in.gov/idem/public-notices/.

PROCEDURES TO FILE A RESPONSE

Draft can be viewed or copied (10¢ per page) at IDEM/OWQ NPDES PS, 100 North Senate Avenue, (Rm 1203) Indianapolis, IN, 46204 (east end elevators) from 9 – 4, Mon - Fri, (except state holidays). A copy of the Draft Permit is on file at the local County Health Department. Please tell others you think would be interested in this matter. For your rights & responsibilities see: Public Notices: https://www.in.gov/idem/public-notices/; Citizen Guide: https://www.in.gov/idem/resources/citizens-guide-to-idem/. Please tell others whom you think would be interested in this matter.

Response 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 postmarked no later than the Response 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 Writer at the above address, (mail code 65-42 PS).

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 Date noted. 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. IDEM will determine whether to hold a Public Hearing based on the comments and the rationale for the request. Public Notice of such a Hearing will be published in at least one newspaper in the geographical area of the discharge and sent to anyone submitting written comments and/or making such request and whose name is 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

VIA ELECTRONIC MAIL

June 2, 2022

Jake Hughes, Plant Manager
Hitachi Astemo Greenfield, LLC
400 W New Road
Greenfield, IN 46140

Dear Mr. Hughes:

Re: IWP Permit No. INP000077
Draft Permit
Hitachi Astemo Greenfield, LLC
Greenfield, IN - Hancock County

Your application and supporting documents have been reviewed and processed in accordance with rules adopted under 327 IAC 5. Enclosed is draft Industrial Wastewater Pretreatment Permit No. INP000077 which applies to the discharges associated with the automotive component part manufacturer.

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 document carefully and 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. If you have any questions concerning this proposed permit, please contact Megan Miller at 317/233-1854 or mmiller@idem.in.gov.

Sincerely,

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

Enclosures
cc: Hancock County Health Department
Tim Guedel, Facility Contact
David Scheiter, Greenfield POTW
Leigh Voss, IDEM
Jay Hanko, IDEM
Kevin Stark, IDEM

STATE OF INDIANA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AUTHORIZATION TO DISCHARGE UNDER THE
INDUSTRIAL WASTEWATER PRETREATMENT PROGRAM

INDUSTRIAL WASTEWATER PRETREATMENT (IWP) PERMIT

In accordance with 327 IAC 5-21 and IDEM's permitting authority under IC 13-15, Hitachi Astemo Greenfield, LLC (hereinafter referred to as the permittee) is authorized to discharge from the facility located at 400 W New Road, Greenfield, Indiana into the Greenfield Publicly Owned Treatment Works (POTW), in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in Parts I and II hereof.

EFFECTIVE DATE: _____

EXPIRATION DATE: _____

NOTE: In order to receive authorization to discharge beyond the date of expiration, the permittee must submit a renewal IWP permit application to the Industrial NPDES Permit Section in the Office of Water Quality, no later than one hundred and eighty (180) days prior to the date this permit expires. Failure to do so will result in expiration of the authorization to discharge.

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) During the period beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 001[1][2]. Outfall 001 is located on the west side of the facility. Such discharge shall be limited and monitored by the permittee as specified below:

Table 1

	Discharge Limitations			Monitoring Requirements	
Parameter[3]	Daily Maximum	Monthly Average	Unit	Measurement Frequency[5]	Sample Type [4]
Flow [6]	Report	Report	MGD	1 X Daily	24-Hr. Total
Cadmium [Cd(T)]	0.1[9]	0.07[8]	mg/l	2 X Yearly	24 Hr. Comp
Chromium [Cr(T)]	2.77[9]	1.71[8]	mg/l	2 X Monthly	24 Hr. Comp
Copper [Cu(T)]	2.6[9]	2.07[8]	mg/l	2 X Monthly	24 Hr. Comp
Lead [Pb(T)]	0.4[9]	0.4[10]	mg/l	2 X Monthly	24 Hr. Comp
Nickel [Ni(T)]	2.9[9]	2.38[8]	mg/l	2 X Monthly	24 Hr. Comp
Silver [Ag(T)]	0.43[8]	0.24[8]	mg/l	2 X Yearly	24 Hr. Comp
Zinc [Zn(T)]	2.6[9]	1.48[8]	mg/l	2 X Monthly	24 Hr. Comp
Cyanide [CN(T)][11]	0.2[9]	0.2[10]	mg/l	2 X Yearly	Grab
TTO[12]	2.13[8]	-----	mg/l	2 X Yearly	Grab
Oil & Grease[O&G]	100[9]	-----	mg/l	2 X Yearly	Grab

Table 2

	Quality or Concentration			Monitoring Requirements	
Parameter	Daily Minimum	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [7]	5.0[9]	9.0[9]	s.u.	1 X Daily	Grab

[1] Outfall 001 shall be designated as process wastewaters and contains no dilution streams.

[2] The discharge shall not exceed the local limits in the Sewer Use Ordinance upon entering the POTW.

[3] All metals shall be analyzed as Total Recoverable Metals.

[4] A “24-hour composite sample” means a sample consisting of at least 3 individual flow-proportional samples of wastewater, consisting of aliquots withdrawn throughout the 24-hour discharge period. The aliquots may be: (i) uniform aliquots withdrawn at uniform flow intervals; (ii) flow-proportional aliquots withdrawn at uniform time intervals; or (iii) for batch discharge, uniform aliquots withdrawn from uniform batch volumes. 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.

Alternatively, a 24-hour composite sample may be obtained by an automatic sampler on an equal time interval basis over a twenty-four hour period provided that a minimum of 24 samples are taken and combined prior to analysis. The samples do not need to be flow-proportioned if the permittee collects samples in this manner.

[5] Parameters that are to be monitored twice per year shall be reported during the months of June and December. If, however, two other months are more appropriate, the permittee may request to report in two alternate months, or the State may require the permittee to report during two alternate months.

[6] The flow must be measured and recorded using valid flow measurement devices, not estimated. The flow monitoring device must be calibrated at least once every twelve (12) months.

[7] 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.

[8] Based on categorical standards [40 CFR 433.17]. The Standard is concentration-based (mg/l).

[9] Based on local ordinance [Greenfield Ordinance No. 2015-6 (adopted July 8, 2015)].

[10] In order to be at least as stringent as the categorical pretreatment standards as required, the local daily maximum for these parameters has been included as the monthly average.

[11] The CN(T) parameter includes all cyanide, chelated (bound to heavy metals) and unchelated (free). The Metal Finishing Standard for CN(T) applies only to the CN-bearing flows prior to mixing with the non-CN Metal Finishing flows.

[12] The Total Toxic Organics (TTO) parameter is defined as the sum of all the quantifiable concentration values above .01 mg/l for the toxic organic compounds that constitute this parameter under the applicable categorical standard. See part I.D.("TTO MONITORING REQUIREMENTS") of this permit.

(2) ADDITIONAL DISCHARGE PROHIBITIONS

The permittee shall not allow the introduction of the following into the POTW from any location, including Outfall 001:

(a) A pollutant from any source of nondomestic wastewaters that could pass through or cause interference with the operation or performance of the POTW.

(b) A pollutant that could create a fire or explosion hazard in the POTW, including waste streams with a closed cup flashpoint of less than 140° F degrees Fahrenheit (60° C) using the test methods in 40 CFR 261.21.

(c) A pollutant that could cause corrosive structural damage to the POTW, including a discharge with pH lower than five (5.0), unless the POTW is specifically designed to accommodate such a discharge.

(d) A solid or viscous pollutant in an amount that could cause obstruction to the flow in a sewer or other interference with the operation of the POTW.

(e) A pollutant, including an oxygen demanding pollutant (such as biochemical oxygen demand) released in a discharge at a flow rate or pollutant concentration that could cause interference in the POTW.

(f) Heat in an amount that could:

(1) inhibit biological activity in the POTW and result in interference or damage to the POTW; or

(2) exceed 40° C or 104° F at the POTW treatment plant unless the commissioner, upon request of the POTW, approves alternate temperature limits.

(g) Petroleum, oil, non-biodegradable cutting oil, or products of mineral oil origin in an amount that could cause interference or pass through.

(h) A pollutant that could result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

(i) A trucked or hauled pollutant, except:

(1) with the permission of the POTW; and

(2) when introduced to the POTW at a discharge point designated by the POTW.

(3) AFFIRMATIVE DEFENSE

The permittee shall have an affirmative defense in any action brought against the permittee alleging a violation of the prohibitions established in Part I.A.2 of this permit if the permittee can demonstrate that:

(a) it did not know or have reason to know that its discharge, alone or in conjunction with a discharge from another source, would cause pass through or interference; and

(b) a local limit designed to prevent pass through or interference in accordance with Part I.A.2 of this permit:

(1) was developed for each pollutant in the permittee's discharge that caused pass through or interference, and the permittee was in compliance with each such local limit directly prior to and during the pass-through or interference; or

(2) was not developed for the pollutant that caused the pass through or interference, and the permittee's discharge, directly prior to and during the pass through or interference, had not changed substantially in nature or constituents from its usual discharge condition when the POTW was regularly in compliance with the applicable:

(A) NPDES permit requirements; and

(B) requirements for sewage sludge use or disposal, in the case of interference.

(B) DEFINITIONS

(1) <u>Daily Discharge</u>

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 (24) hour period that reasonably represents the calendar day for the purposes of sampling.

(2) <u>Daily Maximum (Discharge) Limitation</u>

The maximum allowable daily discharge for any calendar day.

(3) Monthly Average Discharge (Average Monthly Discharge)

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

(4) Monthly Average (Discharge) Limitation

The highest allowable average monthly discharge for any calendar month.

(5) Interference

(a) "Interference" means a discharge that, alone or in conjunction with a discharge or discharges from other sources inhibits or disrupts the:

(1) treatment processes or operations;

(2) sludge processes; or

(3) selected sludge:

(A) use; or

(B) disposal methods;

of a POTW.

(b) The inhibition or disruption under subsection (a) must:

(1) cause a violation of a requirement of the POTW's NPDES permit, including an increase in the magnitude or duration of a violation; or

(2) prevent the use of the POTW's sewage sludge or its sludge disposal method selected in compliance with the following statutory provisions, regulations, or permits issued thereunder or more stringent state or local regulations:

(A) Section 405 of the Clean Water Act (33 U.S.C. 1345).

(B) The Solid Waste Disposal Act (SWDA) (42 U.S.C. 6901), including:

(i) Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA); and

(ii) the rules contained in a state sludge management plan prepared pursuant to Subtitle D of the SWDA (42 U.S.C. 6941).

(C) The Clean Air Act (42 U.S.C. 7401).

(D) The Toxic Substances Control Act (15 U.S.C. 2601).

(6) Pass-through

"Pass through" means a discharge proceeding through a POTW into waters of the state in quantities or concentrations that, alone or in conjunction with a discharge or discharges from other sources, are a cause of a violation of any requirement of the POTW's NPDES permit, including an increase in the magnitude or duration of a violation.

(7) Pretreatment requirements

"Pretreatment requirements" means any substantive or procedural requirement related to pretreatment, other than a pretreatment standard, imposed on an industrial user.

(8) Pretreatment standards

"Pretreatment standards" means:

(a) state pretreatment standards as established in 327 IAC 5-18-8;

(b) pretreatment standards for prohibited discharges, as established in 327 IAC 5-18-2; and

(c) national categorical pretreatment standards incorporated by reference in 327 IAC 5-2-1.5.

(9) Publicly Owned Treatment Works ("POTW")

A treatment works as defined by Section 212(2) of the Clean Water Act owned by the State or a municipality (as defined by Section 502(4) of the Clean Water Act), except that it does not include pipes, sewers or other conveyances not connected to a facility providing treatment. The term includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or compatible industrial wastes. The term also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant. "POTW" also means the municipality, as defined in Section 502(4) of the Clean Water Act, that has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

(C) MONITORING AND REPORTING

(1) Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the entire permitted discharge.

(2) Reporting

The permittee shall submit monitoring reports to the Indiana Department of Environmental Management and the City of Greenfield 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 this 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/.

If the City of Greenfield is agreeable to receiving an electronic version of the monthly reports, copies can be sent to the City of Greenfield via NetDMR. An acceptable email address for the City of Greenfield must be provided to IDEM's Compliance Data Section. Any non-NetDMR reports sent to the City of Greenfield shall be sent to the following:

Certified Operator
City of Greenfield
809 S State Street
Greenfield, IN 46140

The permittee shall also comply with the applicable reporting requirements of 40 CFR 403.12.

(3) Monitoring Results

Requirements for test procedures shall be as follows:

(a) Test procedures identified in 40 CFR 136 shall be utilized for pollutants or parameters listed in that part, unless an alternative test procedure has been approved under 40 CFR 136.5.

(b) Where no test procedure under 40 CFR 136 has been approved, analytical work shall be conducted in accordance with the most recently approved edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association (APHA) or as otherwise specified by the commissioner in the IWP permit.

(c) Notwithstanding subdivision (a), the commissioner may specify in a permit the test procedure specified in a standard or effluent limitation guideline.

(4) Recording of the Monitoring Results

For each measurement or sample taken pursuant to the requirements of this permit, including the additional monitoring described under Part I(C)(5), below, 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.

(5) 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 such monitoring shall be included in the calculation and reporting of the values required in the Monthly Monitoring Report and the Discharge Monitoring Report. Such increased frequency shall also be indicated.

(6) Records Retention

(a) All records of monitoring activities and results required by this permit (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records) shall be retained at the permitted facility for a minimum of three (3) years. The three-year period shall be extended:

(1) 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

(2) as requested by the commissioner.

(b) The permittee shall maintain and make available to IDEM, the regional administrator, and the City of Greenfield personnel, records of disposal of all wastewater generated at the site. Such records shall include, but not be limited to, flow monitoring records, flow calibration records, and the volume and destination of all wastewater hauled off-site.

(7) Additional Reporting Requirements

(a) In accordance with 327 IAC 5-16-5(g), all categorical and noncategorical industrial users shall notify the POTW immediately of all discharges that could cause problems to the POTW, including any slug loadings as defined by 40 CFR 403.5(b).

(b) In accordance with 327 IAC 5-16-5(h)(2), if sampling performed by an industrial user indicates a violation, the industrial user shall notify the control authority within twenty-four (24) hours of becoming aware of the violation. The industrial user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the control authority within thirty (30) days after becoming aware of the violation.

Where the control authority has performed the sampling and analysis in lieu of the industrial user, the control authority shall perform the repeat sampling and analysis unless it notifies the industrial user of the violation and requires the industrial user to perform the repeat analysis. Resampling is not required if the control authority performs sampling at the industrial user:

(1) at a frequency of at least once per month; or

(2) between the time when the initial sampling was conducted and the time when the industrial user or the control authority receives the results of this sampling.

(D) TTO MONITORING REQUIREMENTS

(1) The Total Toxic Organics (TTO) limitation is defined as the summation of all quantifiable values greater than 0.01 mg/l for the toxic organic compounds listed in Table 1 that would reasonably be expected to be found. The sum of all values shall not exceed the TTO limitation(s) in Part I.A.

All toxic organic samples must be collected, preserved and stored in accordance with 40 CFR 136, Appendix A. Samples for volatile organics must be analyzed within 14 days of collection. Samples for semi-volatile organics, PCBs and pesticides must be extracted within 7 days of collection and analyzed within 40 days of extraction.

Toxic organics shall be analyzed using U.S. EPA methods 624 (volatile organics), 625 (semi-volatile organics) and 608 (PCBs and pesticides) in 40 CFR 136, or other equivalent methods approved by U.S. EPA. Equivalent methods must be at least as sensitive and specific as methods 624, 625 and 608.

(2) Monitoring Alternative for TTO:

In lieu of monitoring for TTO, and at the discretion of the State, the permittee may make the following certification as a comment to the periodic reports required by 40 CFR 403.12(e):

"Based on my inquiry of the persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the State."

This statement must be signed by the signatory on the DMR.

In requesting that no monitoring be required, the permittee shall submit a solvent management plan that specifies to the State's satisfaction the following conditions:

(a) The toxic organic compounds used;

(b) the method of disposal used instead of dumping, such as reclamation, contract hauling, incineration, etc.; and

(c) the procedures for assuring that toxic organics do not routinely spill or leak into the wastewater.

In requesting that no monitoring be required, the permittee shall monitor for all toxic organics listed in Table 1 at least once and submit a copy of the analytical report(s) to the State. If the permittee can demonstrate compliance with the TTO limit and chooses the certification option in lieu of monitoring, the analytical report(s) shall be conducted and submitted for State approval within six months from the effective date of this permit.

If the permittee is capable of complying with the above conditions and chooses the certification option in lieu of monitoring, a solvent management plan shall be submitted for State approval within six months from the effective date of this permit.

If it is determined that monitoring is necessary to ensure compliance with the TTO limit, the permittee need analyze only for those toxic organics which would reasonably be expected to be present in the discharge.

(E) REOPENING CLAUSE

This permit shall be modified, or, alternatively, revoked and reissued, to comply with any applicable effluent limitation or standard issued or approved under Section 307(b) of the Clean Water Act, if the effluent limitation or standard so issued or approved:

(1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

(2) controls any pollutant not limited in the permit.

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

PART II

(A) RESPONSIBILITIES

(1) Duty to Comply

The permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Environmental Management Act (EMA) and is grounds for:

(a) enforcement action;

(b) permit termination, revocation and reissuance, or modification; or

(c) denial of a permit renewal application.

A permittee may claim an affirmative defense to a permit violation, however, if the circumstances of the noncompliance meet the criteria of an upset as defined in Part II.A.7, the provisions of Part I.A.3, or any defense as provided by local ordinance.

(2) Right of Entry

The permittee shall allow the Commissioner of the Indiana Department of Environmental Management or the Commissioner's authorized representatives (including an authorized contractor acting as a representative of the Commissioner), upon the presentation of the credentials and such other documents as may be required by law:

(a) to enter upon the permittee's premises where a point source is located or where any records must be kept under the terms and conditions of this permit;

(b) to have access to and copy at reasonable times any records that must be kept under the terms and conditions of this permit;

(c) to inspect, at reasonable times:

(1) any monitoring equipment or method;

(2) any collection, treatment, pollution management, or discharge facilities; or

(3) practices required or otherwise regulated under the permit; and

(d) to sample or monitor, at reasonable times, any discharge of pollutants or internal wastestream (where necessary to ascertain the nature of a discharge of pollutants) for the purpose of evaluating compliance with the permit or as otherwise authorized.

(3) Change in Discharge

If the permittee intends to add a pollutant not limited by this permit or increase discharge of a pollutant limited by this permit, the permittee must notify the receiving POTW and apply for a permit modification from the commissioner prior to commencing discharge containing the additional pollutant. The application for permit modification must:

(a) be completed on a form prescribed by the commissioner;

(b) be signed in accordance with 327 IAC 5-2-22(a); and

(c) be submitted to the commissioner no later than 120 days prior to the date that the permittee intends to commence discharge containing the additional pollutant.

(4) Duty to Mitigate Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the POTW or to waters of the State resulting from noncompliance with the IWP permit, including such accelerated or additional monitoring necessary to determine the nature and impact of the non-complying discharge.

(5) Noncompliance Notification

(a) If the permittee does not or will not be able to comply for any reason with any discharge limitation specified in this permit, the permittee shall provide the Indiana Department of Environmental Management and the City of Greenfield with the following information in writing, within twenty-four (24) hours of becoming aware of the noncompliance.

(1) a description of the discharge and cause of noncompliance.

(2) the period of noncompliance, including exact dates and times of the noncomplying event and the anticipated time when the discharge will return to compliance.

(3) steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

The permittee may email the written notification of noncompliance to IDEM at wwreports@idem.in.gov.

(b) If the permittee has any unexpected, unintended, abnormal, or unapproved discharge from the facility into the POTW, the permittee shall comply with the spill reporting and response requirements contained in 327 IAC 2-6.1-7, including the requirement to report the discharge to IDEM and to the receiving POTW within two hours of discovery of the discharge.

(6) Spills, Reporting, Containment, and Response

Notwithstanding the permittee's obligations under Part II.A.5 of this permit, the permittee shall comply with the spill reporting, containment, and response requirements in accordance with 327 IAC 2-6.1, as applicable.

(7) Upset

(a) "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with any pretreatment standards or requirements in 327 IAC 5-2 because of factors beyond the reasonable control of the permittee. An upset does not include:

(1) noncompliance to the extent caused by operational error;

(2) improperly designed treatment facilities;

(3) inadequate treatment facilities;

(4) lack of preventive maintenance; or

(5) careless or improper operation.

(b) An upset shall constitute an affirmative defense to an action brought for noncompliance with the pretreatment standards or requirements if the requirements of subsection (c) are met.

(c) In order to establish an affirmative defense of upset, the permittee must provide properly signed, contemporaneous operating logs, or other relevant evidence of the following facts:

(1) An upset occurred and the permittee can identify the cause of the upset.

(2) The facility was being operated at the time in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures.

(3) The permittee submitted a report, to the POTW and control authority, within twenty-four (24) hours of becoming aware of the upset or within five (5) days, if an initial verbal report of the information is given to the required authority, and the report contained the following information:

(A) A description of the indirect discharge and cause of noncompliance.

(B) The period of noncompliance, including exact dates and times or the anticipated time the noncompliance is expected to continue if it is not corrected.

(C) Steps being taken or planned for reducing, eliminating, and preventing recurrence of the noncompliance.

(d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset shall have the burden of proof.

(e) In the usual exercise of prosecutorial discretion, the control authority may review any claims that noncompliance was caused by an upset. No determinations made in the course of the review constitute the commissioner's final action subject to judicial review. The permittee will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with the pretreatment standards or requirements.

(f) The permittee shall control production or all discharges to the extent necessary to maintain compliance with the pretreatment standards or requirements upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies when, among other things, the primary source of power of the treatment facility is reduced, is lost, or has failed.

(8) <u>Bypass</u>

(a) The following definitions apply throughout this permit:

(1) "Bypass" means the intentional diversion of waste streams from any portion of a permittee's treatment facility.

(2) “Severe property damage” means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that 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 if:

(1) it does not cause a violation of any pretreatment standard or requirement including discharge limitations contained in this permit; and

(2) it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.A.8(c) and Part II.A.8(d) of this permit.

(c) The reporting requirements for a bypass are as follows:

(1) If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the control authority, if possible, at least ten (10) days before the date of the bypass.

(2) If an unanticipated bypass exceeds a pretreatment standard or requirement including discharge limitations contained in this permit, the permittee shall give oral notice to the control authority within twenty-four (24) hours from the time the permittee becomes aware of the bypass. A written submission shall also be provided to IDEM within five (5) days of the time the permittee becomes aware of the bypass. The written submission must contain the following:

(A) A description of the bypass and its cause.

(B) The duration of the bypass, including exact dates and times and the anticipated time it is expected to continue if the bypass has not been corrected.

(C) The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

(d) Bypass is prohibited, and an enforcement action may be taken against the permittee for a bypass unless the following are demonstrated:

(1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

(2) There were no feasible alternatives to the bypass, such as any of the following:

(A) The use of auxiliary treatment facilities.

(B) Retention of untreated wastes.

(C) Maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance.

(3) The permittee submitted notices as required under Part II.A.8(c).

(4) A planned bypass is approved in advance by IDEM after determining that the bypass will not violate Part II.A.8(d)(1) through (3).

(9) Facilities Operation and Maintenance

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

This provision does not act as an independent source of authority to set effluent limitations. Such limitations will be based on the design removal rates of installed treatment facilities only as required under this article. Nor should this provision be construed to require the operation of installed treatment facilities that are unessential for achieving compliance with the terms and conditions of the permit.

(10) Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in compliance with applicable Indiana statutes and rules, including any applicable portions of 327 IAC 6.1 and 329 IAC 10.

(11) Power Failures

When a power source is used to operate wastewater treatment facilities in order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

(a) provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit; or

(b) upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce, or otherwise control production and/or discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

(12) Operator Certification

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 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.

(13) Construction Permit

The permittee shall not construct, install, or modify any water pollution control facility except in accordance with 327 IAC 3 and IC 13-14-8-11.6. Upon completion of any construction, the permittee must notify the Compliance Evaluation Section of the Office of Water Quality in writing.

(14) Containment Facilities

When cyanide or cyanogen compounds are used in any of the processes at this facility the permittee shall provide approved facilities for the containment of any losses of these compounds in accordance with the requirements of 327 IAC 2-2-1.

(B) ADDITIONAL RESPONSIBILITIES

(1) Effect of Permit Issuance

This permit does not affect any pretreatment requirements, including any standards or prohibitions, established by local ordinance of the City of Greenfield.

(2) Permit Renewal

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new IWP permit. An application for an IWP permit must conform to the following:

(a) Be completed on a form prescribed by the commissioner;

(b) Be signed in accordance with 327 IAC 5-2-22(a);

(c) Be submitted to the commissioner no later than one hundred eighty (180) days prior to the expiration date of an existing permit if the industrial user intends to continue discharging to the POTW.

(3) Permit Modification

This permit may be modified in whole or in part, revoked and reissued, or terminated during its term for cause in accordance with the pertinent provisions of 327 IAC 5-2-16. The permittee must:

(a) report to the commissioner plans for or information about any activity that has occurred or will occur that would constitute cause for modification or revocation and reissuance;

(b) comply with the existing IWP permit until it is modified or reissued; and

(c) abide by the commissioner's decision:

(1) to modify or revoke and reissue the permit; and

(2) require submission of a new application as required by 327 IAC 5-21-3.

(4) Permit Transferability

(a) A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued under 327 IAC 5-2-16(c)(1) or 16(e)(4), to identify the new permittee and incorporate such other requirements as may be necessary under the CWA. A permit may be transferred to another person by a permittee, without modification or revocation and reissuance being required, if the following occurs:

(1) The current permittee notifies the commissioner at least thirty (30) days in advance of the proposed transfer date.

(2) A written agreement containing a specific date for 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 that the transferee is liable for violations from that date on) is submitted to the commissioner.

(3) The transferee certifies in writing to the commissioner 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.

(4) 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.

(5) Signature Requirements

(a) The reports required by Part I.C.2 of this Permit must be signed by one (1) of the following:

(1) A responsible corporate officer. As used in this subdivision, "responsible corporate officer" means:

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

(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) A general partner or proprietor or manager if the industrial user submitting the reports is a partnership or sole proprietorship, respectively.

(3) A duly authorized representative of the individual designated in either Part II.B.5(a)(1)(A) or Part II.B.5(a)(1)(B) of this permit if:

(A) the authorization is made in writing by the individual described in either Part II.B.5(a)(1)(A) or Part II.B.5(a)(1)(B) of this permit;

(B) the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

(C) the written authorization is submitted to the commissioner.

(4) If an authorization under subdivision (3) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of subdivision (3) must be submitted to the commissioner prior to or together with any reports to be signed by an authorized representative.

(b) A report required by this section that relates to the actual operation of or discharge from a pretreatment facility must be prepared by or under the direction of a wastewater treatment plant operator certified under IC 13-18-11, if a certified operator is required.

(6) Penalties for False Reporting

In accordance with 327 IAC 5-2-8(15), Section 309(c)(4) of the Clean Water Act (U.S.C. 1319(c)(4)) 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 or noncompliance shall, upon conviction, be punished by a fine of not more than ten thousand dollars ($10,000) per violation, or by imprisonment for not more than one hundred eighty (180) days per violation, or by both.

IC 13-30-10-1 provides that a person who knowingly or intentionally renders inaccurate or inoperative a recording device or a monitoring device required to be maintained by a permit issued by the department commits a class B misdemeanor.

(7) Penalties for Tampering or Falsification

In accordance with 327 IAC 5-2-8(10), Section 309(c)(4) of the Clean Water Act (33 U.S.C. 1319(c)(4)) provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under a permit shall, upon conviction, be punished by a fine of not more than ten thousand dollars ($10,000) per violation, or by imprisonment for not more than one hundred eighty (180) days per violation, or by both.

IC 13-30-10-1 provides that a person who knowingly or intentionally renders inaccurate or inoperative a recording device or a monitoring device required to be maintained by a permit issued by the department commits a class B misdemeanor.

(8) Enforcement

(a) A violation of the pretreatment rules may:

(1) subject a person causing or contributing to the violation to administrative or judicial enforcement proceedings, under IC 13-30-3, and the penalties provided under IC 13-30-4;

(2) be cause for:

(A) modification;

(B) revocation and reissuance; or

(C) termination;

of the industrial wastewater pretreatment permit; and

(3) warrant the invocation of emergency procedures under IC 13-14-10.

(b) The initiation of any action in response to a violation of the pretreatment rules does not preclude initiation of any other response.

(c) A violation of the pretreatment rules includes the following:

(1) The indirect discharge of pollutants in contravention of an applicable pretreatment standard or other applicable discharge limitation.

(2) The indirect discharge of pollutants without a permit from a significant industrial discharger as determined by IDEM.

(3) A violation of discharge limitations or other terms and conditions of the permit where an IWP permit is required under the pretreatment rules.

(4) Failure to comply with any other applicable pretreatment requirement.

(5) Failure to:

(A) allow entry, inspection, and monitoring by representatives of the commissioner when requested in accordance with applicable law; or

(B) carry out monitoring, recording, and reporting required under this permit.

(d) 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.

(9) Oil and Hazardous Substance Liability

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

(10) Property Rights

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

(11) Severability

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

TABLE 1.
TOXIC ORGANICS

I. ETHERS

Ether, bis(2-chloroethyl)
Ether, bis(2-chloroisopropyl)
Ether, 2-chloroethyl vinyl
Ether, 4-chlorophenyl phenyl
Ether, 4-bromophenyl phenyl
Bis (2-chloroethoxy) methane

II. PHTHALATES

Phthalate, dimethyl; DMP
Phthalate, diethyl; DEP
Phthalate, di-n-butyl; DBP
Phthalate, di-n-octyl; DOP
Phthalate, bis(2-ethylhexyl); DEHP
Phthalate, butyl benzyl; BBP

III. NITROGEN COMPOUNDS

Nitrosamine, dimethyl-
Nitrosamine, diphenyl-
Nitrosamine, di-n-propyl-
Benzidine
Benzidine, 3,3'-dichloro-
Hydrazine, 1,2-diphenyl-
Acrylonitrile

IV. PHENOLS

Phenol
Phenol, 2-chloro
Phenol, 2,4-dichloro-; 2,4-DCP
Phenol, 2,4,6-trichloro-
Phenol, pentachloro-; PCP
Phenol, 2-nitro-
Phenol, 4-nitro-
Phenol, 2,4-dinitro-; 2,4-DNP
Phenol, 2,4-dimethyl-
m-Cresol, p-chloro-
o-Cresol, 4,6-dinitro-; DNOC

V. AROMATICS

Benzene
Benzene, chloro-
Benzene, 1,2-dichloro-
Benzene, 1,3-dichloro-
Benzene, 1,4-dichloro-
Benzene, 1,2,4-trichloro-
Benzene, hexachloro-; HCB
Benzene, ethyl-
Benzene, nitro-
Toluene
Toluene, 2,4-dinitro-; DNT
Toluene, 2,6-dinitro-

VI. POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)

2-Chloronaphthalene
Benzo (a) anthracene
Benzo (b) fluoranthene; B(b)F
Benzo (k) fluoranthene; B(k)F
Benzo (a) pyrene; B(a)P
Ideno (1,2,3-cd) pyrene; IP
Dibenzo (a,h) anthracene; DBA
Benzo (ghi) perylene
Acenaphthene
Acenaphthylene
Anthracene
Chrysene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene

VII. PCB's

PCB-1016; Aroclor 1016
PCB-1221; Aroclor 1221
PCB-1232; Aroclor 1232
PCB-1242; Aroclor 1242
PCB-1248; Aroclor 1248
PCB-1254; Aroclor 1254
PCB-1260; Aroclor 1260

TABLE 1.
(CONTINUED)
TOXIC ORGANICS

VIII. HALOGENATED HYDROCARBONS; HALOGENATED ALIPHATICS

Methane, chloro-; methyl chloride
Methane, dichloro-; Methylene chloride
Methane, trichloro-; chloroform
Methane, tetrachloro-; Carbon tetrachloride
Methane, bromo-; methyl bromide
Methane, dichlorobromo-
Methane, chlorodibromo-
Methane, tribromo-; bromoform
Ethane, chloro-
Ethane, 1,1-dichloro-
Ethane, 1,2-dichloro-
Ethane, 1,1,1-trichloro-
Ethane, 1,1,2-trichloro-
Ethane, 1,1,2,2-tetrachloro-
Ethane, hexachloro-
Ethylene, chloro-; Vinyl Chloride
Ethylene, 1,1-dichloro-; 1,1-DCE
Ethylene, 1,2-trans-dichloro-
Ethylene, trichloro-; TCE
Ethylene, tetrachloro-; Perchloroethylene
Propane, 1,2-dichloro-
Propylene, 1,3-dichloro-
Butadiene, hexachloro-; HCBD
Cyclopentadiene, hexachloro-; HCCPD

IX. PESTICIDES

alpha-Endosulfan
Endosulfan sulfate
beta-Endosulfan
Hexachlorocyclohexanes:
- alpha-BHC
- beta-BHC
- gamma-BHC
- delta-BHC; Lindane

Aldrin; HHDN
Dieldrin; HEOD
4,4'-DDE
4,4'-DDT; p,p'-DDT
4,4'-DDD; p,p'-DDD; p,p'-TDE
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
Chlordane
Toxaphene

X. OXYGENATED COMPOUNDS

Acrolein

XI. MISCELLANEOUS

Isophorone
2,3,7,8-tetrachlorodibenzo-p-dioxin; TCDD; dioxin

Industrial Wastewater Pretreatment (IWP)

Briefing Memo for
Hitachi Astemo Greenfield, LLC
Draft: May 2022

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:	Hitachi Astemo Greenfield, LLC 400 W New Road Greenfield, IN 46140
Existing Permit Information:	Permit Number: INP000077 Expiration Date: September 30, 2022
Facility Contact:	Tim Guedel, Project Manager (317)243-1819, tguedel@midwestenvironmentalservices.com
Facility Location:	400 W New Road Greenfield, IN 46140 Hancock County
Receiving POTW:	Greenfield POTW 809 S State Street Greenfield, IN 46140 NPDES Permit # IN0020109
Proposed Action:	Renew Permit Date Application Received: March 30, 2022
Source Category	Industrial Pretreatment
Permit Writer:	Megan Miller, Environmental Manager (317) 233-1854, mmiller@idem.in.gov

Table of Contents

1.0 Introduction 3
2.0 General 3
2.1 Facility Description 3
2.2 Receiving Publicly Owned Treatment Works (POTW) 4
2.3 Discharge Description 4
2.4 Wastewater Pretreatment 5
2.5 Changes in Operation 9
3.0 Permit History 9
3.1 Compliance History 9
4.0 Permit DRAFT DISCUSSION 9
4.1 Selection of Parameters 9
4.2 Selection of Limits 9
4.3 Self-Monitoring Frequency 10
5.0 Permit Limitations 11
5.1 Summary of Limits and Basis for Each: 11
5.2 Permit Processing/Public Comment 13

1.0 INTRODUCTION

The Indiana Department of Environmental Management (IDEM) received an Industrial Wastewater Pretreatment (IWP) Permit application from Hitachi Astemo Greenfield, LLC on March 30, 2022. The current five year permit was issued with an effective date of October 1, 2017 in accordance with 327 IAC 5-2-6(a). The permit was subsequently modified on July 23, 2021 for a name change. A five year permit is proposed in accordance with 327 IAC 5-2-6(a).

The Federal Water Pollution Control Act of 1972 and subsequent amendments require a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of wastewater to surface waters. Furthermore, Indiana Statute 13-15-1-2 requires a permit to control or limit the discharge of any contaminants into state waters or into a publicly owned treatment works (POTW). This proposed permit action by IDEM complies with both federal and state requirements.

In accordance with Title 40 of the Code of Federal Regulations (CFR) Sections 124.7 and 124.6, as well as Indiana Administrative Code (IAC) 327 Section 5, development of a Statement of Basis, or Briefing Memo, is required for NPDES permits. This document fulfills the requirements established in those regulations.

This Briefing Memo was prepared in order to document the factors considered in the development of IWP Permit effluent limitations. The technical basis for the Briefing Memo may consist of evaluations of prohibited discharge standards, categorical pretreatment standards, existing effluent quality, and receiving POTW limitations.

2.0 GENERAL

2.1 Facility Description

The permittee manufactures automotive component parts such as: fuel injection systems, transmission component parts, miscellaneous automotive parts made from ferrous and non-ferrous metals. Manufacturing processes include: aluminum and magnesium ingots are melted and cast. The castings are machined, washed to remove oil and coolants, and some are trivalent chrome conversion-coated. All coated parts are washed after the trivalent chrome conversion. Steel parts are machined but not cast at the facility. Steel, magnesium, and aluminum are assembled with other parts to make a unit; the units are calibrated. The plant normally operates 24 hours/day, 7 days/week.

The waste flows from the above referenced processes are subject to the Categorical Pretreatment Standards for New Source Metal Finishing operations [40 CFR 433.17]. The standards are concentration-based (mg/l).

2.2 Receiving POTW

The permittee discharges to the Greenfield POTW: a Class III, 4.0 MGD activated sludge wastewater treatment facility consisting of bar screen, a grit chamber, four primary clarifiers, an aerated flow equalization tank, four aeration tanks, four secondary clarifiers, alum/ferric chloride chemical feed facilities, chlorination/dichlorination disinfection facilities, post aeration, and influent and effluent flow meters. The POTW also serves Precoat Metals Corp (INP000043), Indiana Automotive Fasteners (INP000120), Job Shop Coatings, Inc. (INP000165), Labcorp Early Development Laboratories, Inc. (INP000643), Mariah Foods, Inc. (INP000677), BWI Indiana, Inc. (INP000686), and Bastian Automation Engineering (INP000701).

The POTW discharges to the Brandywine Creek (Q7,10 = 0.0 CFS), a tributary to the Big Blue River, which is a tributary of the East Fork of the White River.

2.3 Discharge Description

The permittee discharges wastewaters from the following sources to the POTW:

Source	Flow (GPD)
Process Wastestream #1:	**1,000** (1)
Process Wastestream #2:	**9,500** (2)
Process Wastestream #3:	**3,500** (3)
Pretreatment:	**14,000** (4)
Sanitary:	**9,375**
Non-Contact Cooling Water:	**13,000**
Boiler Blowdown:	**1,000**

(1) Process Wastestream #1 is overflow rinse water from the trivalent chrome conversion coating line.

(2) Process Wastestream #2 is wastewater composed of waste oil and coolants from the machining and parts washing operations.

(3) Process Wastestream #3 is contact process water from the die-cast cooling water, quench tanks for washing and brightening, Life Test Lab sink water, and rainwater from the containment pits, tank farm containment area, and hazardous waste storage area.

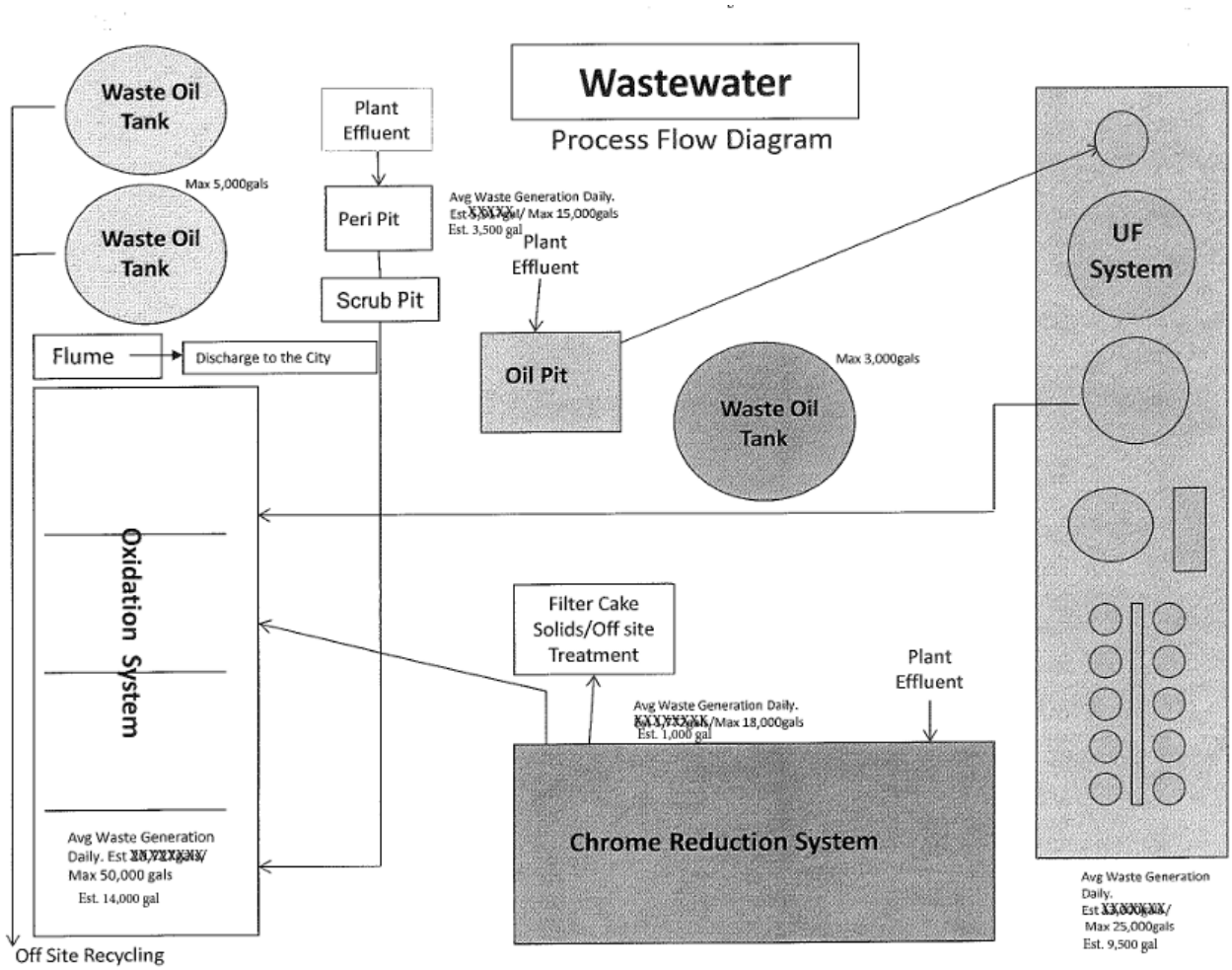
(4) Pretreatment is the combined value of Process Wastestream #1, Process Wastestream #2, Process Wastestream #3.

2.4 Wastewater Pretreatment

The three process wastestreams are handled in separate treatment systems. The three separate treatment systems all combine in the oxidation system before being discharged to the POTW.

A flow diagram has been included as Figure 1:

Figure 1: Flow Diagram



Process wastewater #1 undergoes a chrome reduction process for pre-treatment. The overflow rinse water from the trivalent chrome conversion coating line is pumped into an equalization tank (T-1). Once T-1 is full the wastewater is pumped into the mixing tank (T-2). In T-2 sodium hydroxide is added to maintain pH. The treated wastewater is then fed into the reaction tank (T-3) where sodium hydroxide and sulfuric acid are automatically added to maintain pH. At this time a coagulant is also added to help the chrome solids form. The wastewater is then fed into a polymer mixing tank (T-4) and polymer is added. The wastewater flows into the clarifier where the wastewater and solids separate. The wastewater feeds into the effluent tank (T-5) and then into station #3 of the oxidation line for final pH adjustments before discharging to the POTW. The solids are transferred to the thickener tank (T-6) where they are processed through a filter press. Water filtered through the press goes back to T-1 for reprocessing. The filter cake from the press is removed and stored for disposal. Figure 2 and Figure 3 display the path taken by the wastewater in chrome reduction process.

Figure 2:

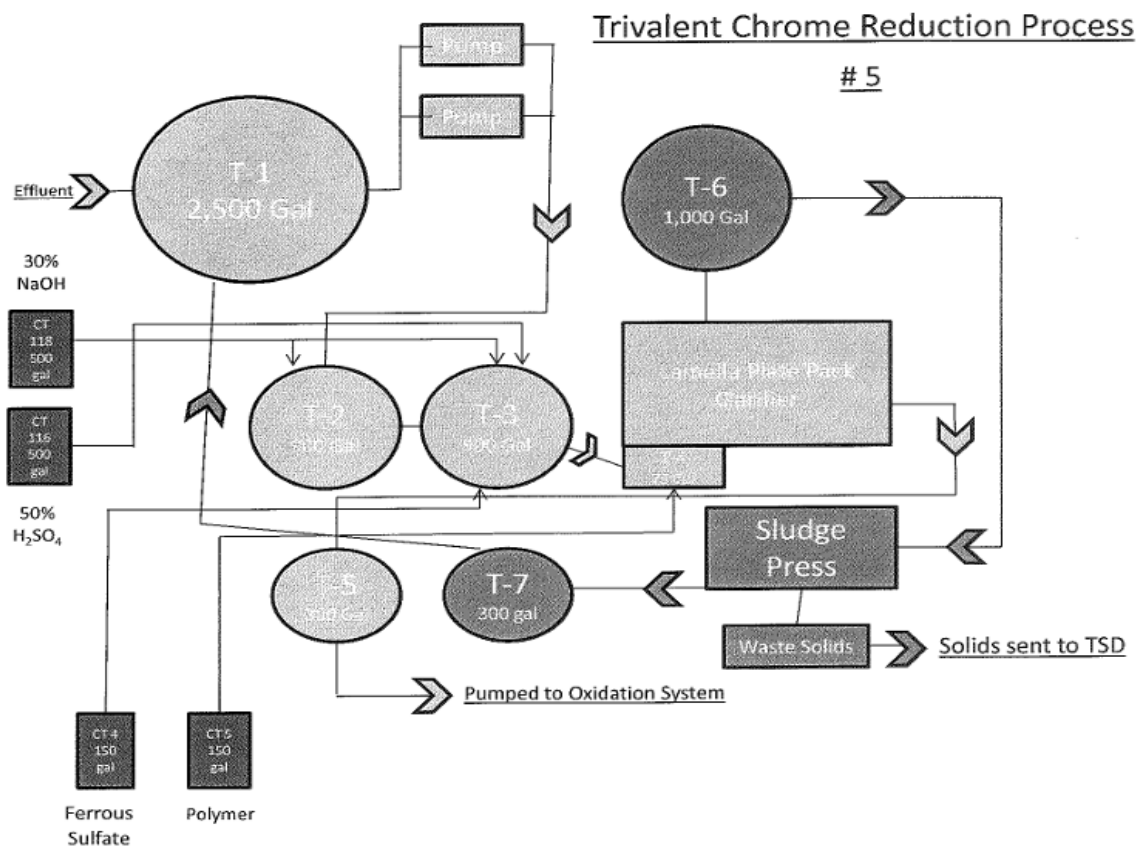
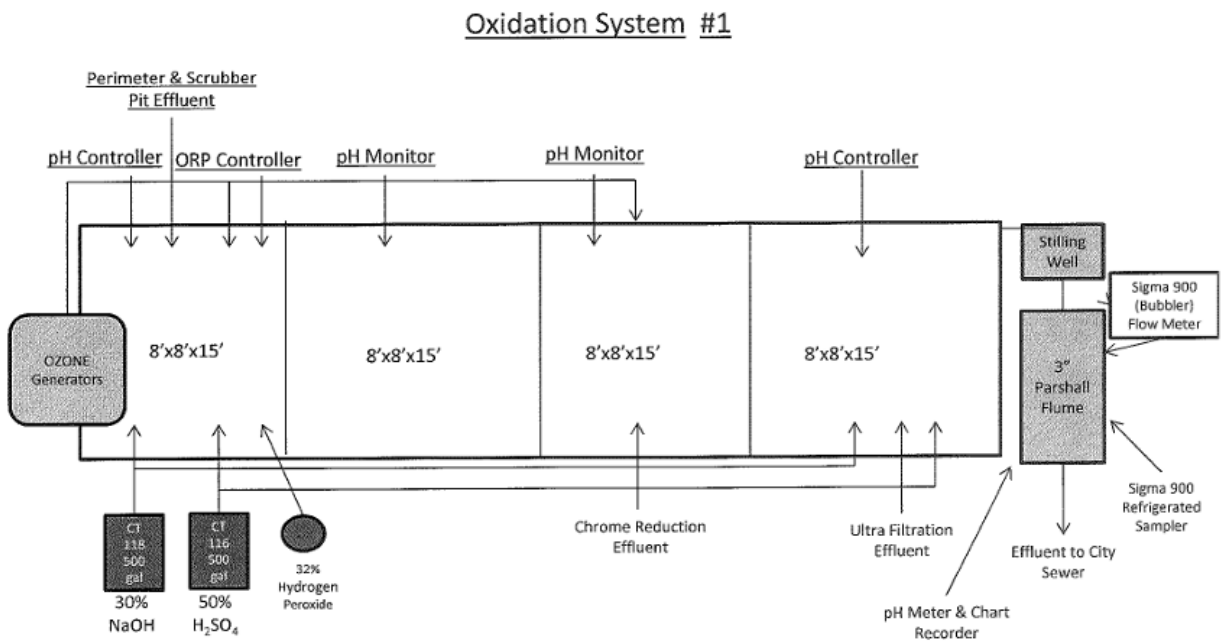
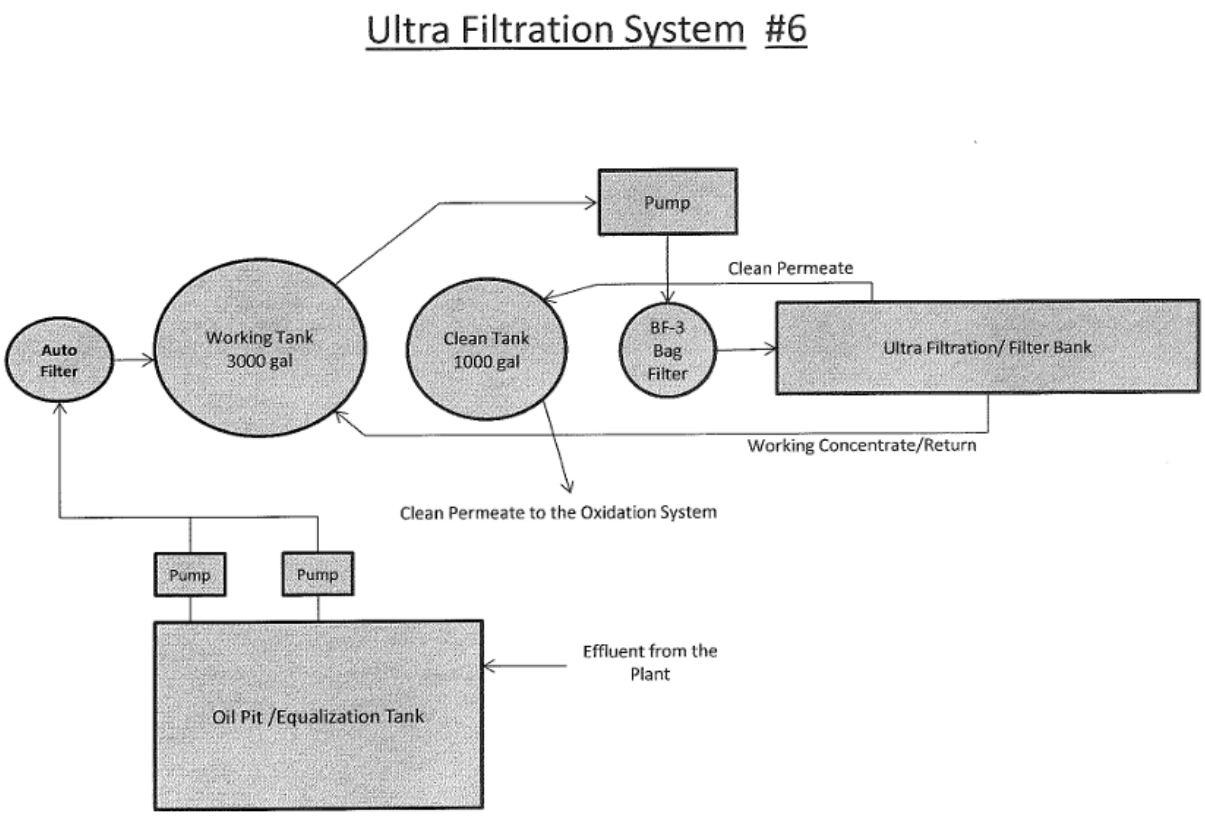


Figure 3:



Process wastewater #2 undergoes an oil-water separation process for pre-treatment. All wastewater that contains oils and coolant go to the oil pit. From the oil pit the wastewater goes through an auto-regeneration filter. The wastewater flows into a working tank and is pumped through bag filter-3. The wastewater then passes through the ultra-filtration membrane bank, this separates the oil from water. The oil free water flows into the cleaner tank and is pumped to station #4 of the oxidation line for final pH adjustments before discharging to the POTW. The oil and coolant that is separated from the wastewater at the UF filter bank is pumped to the waste oil holding tank to store for disposal. Figure 3 and 4 displays the path taken by the wastewater in the oil separation process.

Figure 4:



Process wastewater #3 undergoes an organic oxidation process for pre-treatment. The following wastewater will go to the perimeter pit: spills from die-cast cooling water and wastewater from quench tanks that contain phosphoric acid and sodium bicarbonate for washing and brightening, Life Test Lab sink water, and rainwater from the containment pits, tank farm containment area, and hazardous waste storage area. Wastewater in the perimeter pit is transferred to the scrubber pit and filtered through one of two in-line basket strainers. The wastewater then goes to station #1 of the oxidation line. In Station #1 the wastewater is oxidized and the pH is adjusted with sodium hydroxide and sulfuric acid. The water then goes through station #2 and #3 of the oxidation line for additional mixing and reaction time. The final pH adjustments are made at Station #4. The wastewater is then fed into a 3” parshall flume and discharged to the POTW. Figure 1 and 3 display the path taken by the wastewater in the organic oxidation process.

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 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. Based on information supplied by the permittee, the facility is required to have a Class B Operator.

2.5 Changes in Operation

In the permit application, no changes in operation were identified as occurring since the previous permit renewal.

3.0 PERMIT HISTORY

3.1 Compliance History

The purpose of this section is to summarize any violations and enforcement actions associated with the permit.

A review of this facility's discharge monitoring data was conducted for compliance verification. This review indicates the following permit limitation violations at Outfall 001 between March 2020 and March 2022;

- Zinc violation in March 2022.
- Oil & Grease violation in in June 2021

There are no pending or current enforcement actions regarding this IWP permit.

4.0 PERMIT DRAFT DISCUSSION

4.1 Selection of Parameters

This permit regulates the substances and parameters in the permittee's wastewater that are subject to New Source Metal Finishing operations [40 CFR 433.17] standards.

4.2 Selection of Limits

The permittee's discharge must comply with New Source Metal Finishing operations [40 CFR 433.17] standards that apply at the end of process and any existing local ordinance limits that apply at the end of pipe.

The Greenfield Sewer Use Ordinance (SUO) contains local discharge limits for specific pollutants to prohibit contribution by industrial users that may cause interference or pass through at the POTW. These limits in the SUO are expressed as daily maximums, and some are more stringent than the applicable categorical pretreatment daily maximums limits. Therefore, the Greenfield SUO's daily maximum limitations for certain parameters have been incorporated into the permit to comply with 327 IAC 5-18-9 which states that in addition to the applicable pretreatment standard, the most stringent limitation must be applied to protect the POTW. Corresponding monthly average limits must also be included in the permit as monthly average limits are included in the categorical standards. The Greenfield SUO does not include monthly average limits, and for some of these parameters, the applicable categorical pretreatment standard monthly averages would be greater than the corresponding local daily maximum, and would therefore be less stringent than the applicable local limit which would violate 327 IAC 5-18-9(1). In order to be at least as stringent as the categorical pretreatment standards as required, the local daily maximum for those parameters has been included as the monthly average.

4.3 Self-Monitoring Frequency

Self-Monitoring frequency is determined by the pollutants present in the permittees process and compliance history. During the previous permit renewal, compliance history was reviewed leading to a reduction in monitoring frequency from 2 X Weekly to 2 X Monthly.

To assure compliance with the limits and terms of this permit, State rules [327 IAC 5-21-9 and 10] require the permittee to: (i) monitor the final pretreated discharge at a minimum frequency; and (ii) report the results to this agency. To fulfill this requirement, the samples must be: (i) representative of the daily discharge; and (ii) collected, preserved and analyzed using U.S. EPA-approved materials and methods.

5.0 PERMIT LIMITATIONS

5.1 Summary of Limits and Basis for Each:

Outfall 001

The table below summarizes the permit limits at the designated sample site (Outfall 001) [1][2]. Outfall 001 is located after the pretreatment system and contains no dilution streams.

Table 1

	Discharge Limitations			Monitoring Requirements	
Parameter [3]	Daily Maximum	Monthly Average	Unit	Measurement Frequency [5]	Sample Type [4]
Flow [6]	Report	Report	MGD	1 X Daily	24-Hr. Total
Cadmium [Cd]	0.1[9]	0.07[8]	mg/l	2 X Yearly	24 Hr. Comp.
T. Chromium [Cr(T)]	2.77[9]	1.71[8]	mg/l	2 X Monthly	24 Hr. Comp.
Copper [Cu]	2.6[9]	2.07[8]	mg/l	2 X Monthly	24 Hr. Comp.
Lead [Pb]	0.4[9]	0.4[10]	mg/l	2 X Monthly	24 Hr. Comp.
Nickel [Ni]	2.9[9]	2.38[8]	mg/l	2 X Monthly	24 Hr. Comp.
Silver [Ag]	0.43[8]	0.24[8]	mg/l	2 X Yearly	24 Hr. Comp.
Zinc [Zn]	2.6[9]	1.48[8]	mg/l	2 X Monthly	24 Hr. Comp.
T. Cyanide[CN(T)][11]	0.2[9]	0.2[10]	mg/l	2 X Yearly	Grab
TTO[12]	2.13[8]	-----	mg/l	2 X Yearly	Grab
Oil and Grease [O&G]	100[9]	-----	mg/l	2 X Yearly	Grab

Table 2

Parameter	Daily Minimum	Daily Maximum	Unit	Measurement Frequency	Sample Type
pH [7]	5.0[9]	9.0[9]	s.u.	1 X Daily	Grab

[1] Outfall 001 shall be designated as process wastewaters and contains no dilution streams.

[2] The discharge shall not exceed the local limits in the Sewer Use Ordinance upon entering the POTW.

[3] All metals shall be analyzed as Total Recoverable Metals.

[4] A “24-hour composite sample” means a sample consisting of at least 3 individual flow-proportional samples of wastewater, consisting of aliquots withdrawn throughout the 24-hour discharge period. The aliquots may be: (i) uniform aliquots withdrawn at uniform flow intervals; (ii) flow-proportional aliquots withdrawn at uniform time intervals; or (iii) for batch discharge, uniform aliquots withdrawn from uniform batch volumes. 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.

Alternatively, a 24-hour composite sample may be obtained by an automatic sampler on an equal time interval basis over a twenty-four hour period provided that a minimum of 24 samples are taken and combined prior to analysis. The samples do not need to be flow-proportioned if the permittee collects samples in this manner.

[5] Parameters that are to be monitored twice per year shall be reported during the months of June and December. If, however, two other months are more appropriate, the permittee may request to report in two alternate months, or the State may require the permittee to report during two alternate months.

[6] The flow must be measured and recorded using valid flow measurement devices, not estimated. The flow monitoring device must be calibrated at least once every twelve (12) months.

[7] 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.

[8] Based on categorical standards [40 CFR 433.17]. The Standard is concentration-based (mg/l).

[9] Based on local ordinance [Greenfield Ordinance No. 2015-6 (adopted July 8, 2015)].

[10] In order to be at least as stringent as the categorical pretreatment standards as required, the local daily maximum for these parameters has been included as the monthly average.

[11] The CN(T) parameter includes all cyanide, chelated (bound to heavy metals) and unchelated (free). The Metal Finishing Standard for CN(T) applies only to the CN-bearing flows prior to mixing with the non-CN Metal Finishing flows.

[12] The Total Toxic Organics (TTO) parameter is defined as the sum of all the quantifiable concentration values above .01 mg/l for the toxic organic compounds that constitute this parameter under the applicable categorical standard.

5.2 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.