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 May 30, 2024

Randy Hinojosa, Corporate Environmental Director
Novae LLC
6 Novae Pkwy
Markle, IN 46770

Dear Mr. Hinojosa:

Re: Final IWP Permit No. INP000640
Novae LLC
Markle, IN - Huntington County

Your application for an Industrial Wastewater Pretreatment (IWP) Permit has been processed in accordance with the Indiana Department of Environmental Management's (IDEM) permitting authority under IC 13-15 (formerly IC 13-7-10) and the provisions of 327 IAC 5-21. The enclosed IWP permit covers the discharge from your facility into the Town of Markle Publicly Owned Treatment Works. All discharges from this facility shall be consistent with the terms and conditions of this permit.

One condition of your permit requires periodic reporting of several effluent parameters. You are required to submit both federal discharge monitoring reports (DMRs) and state Monthly Monitoring Reports (MMRs) on a routine basis. The MMR form is available on the internet at the following web site: https://www.in.gov/idem/cleanwater/wastewater-compliance/wastewater-reporting-forms-notices-and-instructions/.

Once you are on this page, select the “IDEM Forms” page and locate the “Monthly Monitoring Report (MMR) for Industrial Discharge Permits-30530” under the Wastewater Facilities heading. We recommend selecting the “XLS” version because it will complete all of the calculations when you enter the data.

All NPDES permit holders are required to submit their monitoring data to IDEM using NetDMR. Information on NetDMR is available on the IDEM website at https://www.in.gov/idem/cleanwater/resources/netdmr/.

Another condition, which needs to be clearly understood, concerns violation of the effluent limitations in this permit. Exceeding the limitations constitutes a violation of the permit and may subject the permittee to criminal or civil penalties. See Part II.B.8 of this permit for further details. It is very important for your office and treatment plant operator to understand this part of the permit.

The draft IWP permit for Novae Corporation was made available for public comment from April 2, 2024 through May 2, 2024 as part of Public Notice No. 20240402 – INP000640– D on IDEM's website at https://www.in.gov/idem/public-notices/public-notices-all-regions/. During this comment period, no comment letters were received.

It should also be noted that any appeal must be filed under procedures outlined in IC 13-15-6, IC 4-21.5, and the enclosed Public Notice. The appeal must be initiated by filing a petition for administrative review with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the emailing of an electronic copy of this letter or within eighteen (18) days of the mailing of a certified copy of this letter by filing at the following addresses:

Director
Office of Environmental Adjudication
Indiana Government Center North
Room N103
100 North Senate Avenue
Indianapolis, Indiana 46204

Commissioner
Indiana Department of Environmental Management
Indiana Government Center North
Room 1301
100 North Senate Avenue
Indianapolis, Indiana 46204

If you have any questions concerning the permit, please contact Ms. Devery J. DeBoy at 317/232-8701 or by email at DDeboy@idem.in.gov. More information on the appeal review process is available at the website for the Office of Environmental Adjudication at http://www.in.gov/oea.

Sincerely,

Jerry Dittmer, Chief
Permits Branch
Office of Water Quality

Enclosures
cc: Huntington County Health Department
Scott Spahr, Town of Markle POTW
Leigh Voss, IDEM
Jeremy Waite, 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, Novae LLC (hereinafter referred to as the permittee) is authorized to discharge from the facility located at 6 Novae Pkwy, Markle, IN, into the Town of Markle 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: August 1, 2024

EXPIRATION DATE: July 31, 2029

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 May 30, 2024 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 at the power wash collection basin after process and prior to combination with sanitary waste flows. 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 [4]**	**Sample Type [5]**
Flow [6]	Report	Report	MGD	Daily	24-Hr. Total
Cadmium [Cd]	0.11 [8]	0.07 [8]	mg/l	2 X Monthly	24 Hr. Comp.
T. Chromium [Cr(T)]	2.77 [8]	1.71 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Copper [Cu]	1.65 [9]	0.707 [9]	mg/l	2 X Monthly	24 Hr. Comp.
Lead [Pb]	0.69 [8]	0.43 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Nickel [Ni]	3.98 [8]	2.38 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Silver [Ag]	0.43 [8]	0.24 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Zinc [Zn]	2.61 [8]	1.48 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Phosphorus	5.00 [9]	1.00 [9]	mg/l	2 X Monthly	24 Hr. Comp.
Molybdenum	1.0 [9]		mg/l	2 X Monthly	24 Hr. Comp.
T. Cyanide [CN(T)][10]	0.319[9]	0.137[9]	mg/l	2 X Monthly	Grab
TTO [11]	2.13		mg/l	2 X Year	Grab

Table 2

	Quality or Concentration		Monitoring Requirements		
Parameter	**Daily Minimum**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
pH [7]	5.5	9.0	s.u.	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] 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.

In situations of intermittent or batch discharge, all parameters required to be monitored should be sampled during the first representative discharge occurring during the monitoring period and then reported on the appropriate state and federal forms at the end of the monitoring period.

If a representative discharge occurs at any time during the monitoring period as identified for that individual parameter, then it is a violation of this permit to not collect a sample and report those results. At the first opportunity that a representative discharge occurs during the monitoring period, it should be sampled for all the required parameters during that monitoring period. Waiting to collect a sample until the end of a monitoring period risks missing a representative sample collection opportunity, and it is considered a violation of this permit to not collect a sample, analyze and report those results, when there was a discharge for that monitoring period.

[5] 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.

[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 [Town of Markle Ordinance, Section 51.077 (adopted October 2020)].

[10] 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.

[11] 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. Daily Discharge

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. Daily Maximum (Discharge) Limitation

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

Certified Operator
Town of Markle
155 West Sparks Street
Markle, IN 46770

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 Town of Markle 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. <u>Monitoring Alternative for TTO:</u>

   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 Town of Markle 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. Bypass

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. Wastewater Treatment Plant and Certified Operators

Pursuant to IC 13-18-11-11 and 327 IAC 5-23-6, a permittee's wastewater

treatment plant must be under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as determined under 327 IAC 5-23-4.

A certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant if the requirements under 327 IAC 5-23-7(b) are met. "Operator in responsible charge" is defined at 327 IAC 5 23-2(16).

Pursuant to 327 IAC 5-23-6(4)(A), the permittee shall notify IDEM when there is a change in 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 and submitted via e-mail to the Compliance Data Section of the Office of Water Quality at WWReports@idem.IN.gov.

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 Town of Markle.

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
Novae LLC
Draft: March 2024
Final: May 2024

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:	Novae LLC 6 Novae Pkwy Markle, IN 46770
Existing Permit Information:	Permit Number: INP000640 Expiration Date: July 31, 2024
Facility Contact:	Randy Hinojosa, Corporate Environmental Director (260) 758-9838 | randy.hinojosa@novaecorp.com
Facility Location:	6 Novae Pkwy Markle, IN 46770 Huntington County
Receiving POTW:	Town of Markle POTW 155 West Sparks Street Markle, IN 46770 IN0023736
Proposed Action:	Renew Permit Date Application Received: January 22, 2024
Source Category	Industrial Pretreatment
Permit Writer:	Devery Deboy (317) 232-8701| Ddeboy@idem.in.gov

Table of Contents

1.0 INTRODUCTION

The Indiana Department of Environmental Management (IDEM) received an Industrial Wastewater Pretreatment (IWP) Permit application from Novae LLC on January 22, 2024. The current five-year permit was issued with an effective date of August 1, 2019, 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 utility trailers. Manufacturing processes include cutting, forming, and welding of raw steel into frames which are then cleaned and pretreated for powder coating or painting. The plant normally operates twenty-one hours/day, five days/week.

The waste flows from powder coating operations 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 Town of Markle POTW: a 0.45 MGD extended aeration treatment plant consisting of two (2) in-line grit chambers, a comminutor, three (3) aeration basins, two (2) final clarifiers, four (4) aerobic digesters, ultraviolet light disinfection, phosphorus removal, and a post aeration tank with coarse bubble diffusion. Plant design peak flow is 0.45 MGD. The POTW also serves Wayne Metals (INP000094).

The POTW discharges to the Wabash River (Q7,10 = 5.6 CFS).

2.3 Discharge Description

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

Source	Flow (GPD)
Process Wastestream #1:	13,000 (1)
Sanitary:	10,500

(1) Process Wastestream #1 is wastewater from parts washing operations (north and south production lines). Trailer frames and other various parts are washed, and powder coated prior to finishing. This wastewater is batch discharge in 550-gallon increments.

2.4 Wastewater Pretreatment

The wastewater generated from the two wash bays flows into a pretreatment skid system, where it is treated for phosphorus using polymer and filtration. Adjustment of pH also occurs in the pretreatment system. Once treated and filtered, some of the wash water is returned to the wash bay tanks for reuse.

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.

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

2.5 Changes in Operation

Wastewater treatment was added to treat phosphorus and adjust pH in the wash bay discharge.

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 February 2019 and December 2023; one zinc violation and one copper violation. 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 CFR433.17] standards. The facility is also subject to the local sewer use ordinance, which has added phosphorus and molybdenum to its list of parameters for industrial effluent.

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 Town of Markle 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 monthly averages, and some are more stringent than the applicable categorical pretreatment daily maximums limits. Therefore, the Town of Markle SUO's daily maximum and monthly average 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. The SUO limitations for copper, phosphorus, molybdenum, and total cyanide have been incorporated at Outfall 001.

The categorical standards have been adjusted due to the combined wastestreams at the sample site. The categorical process flows account for approximately 55% of the total wastestream that is discharged to the POTW. Therefore, the categorical limitations have been adjusted by factoring the percentage process flow to the total wastestream using the Combined Wastestream Formula (CWF) below.

C_T = Adjusted concentration limit
C_i = Categorical Pretreatment Standard
F_i = Avg. flow of regulated wastestream = GPD (taken from application)
F_D = Avg. flow of dilute wastestream = GPD (taken from application)
F_T = Avg. total flow = GPD

$$C_T = \frac{Ci * Fi}{F_i} \quad X \quad \frac{F_T - F_D}{F_T}$$

The permittee has elected to take samples after process and prior to combination with sanitary wastewater flows rather than end-of-pipe.

Since the permittee has elected to take samples after process and prior to combination with sanitary wastewater flows rather than end-of-pipe, the federal limitations that are protective of the POTW and the local limitations for cadmium, chromium, copper, lead, nickel, silver, zinc, and cyanide will be placed at Outfall 001.

Comparison of Limits at Outfall 001						
	FEG		SUO		Adjusted Limits (CWF)	
Pollutant	Daily Max	Monthly Avg	Daily Max	Monthly Avg	Daily Max	Monthly Avg
Cadmium	**0.11**	**0.07**	1.31	0.563	0.061	0.039
Chromium	**2.77**	**1.71**	138	59.7	1.53	0.946
Copper	3.38	2.07	**1.645**	**0.707**	1.87	1.15
Lead	**0.69**	**0.43**	5.118	2.2	0.382	0.238
Nickel	**3.98**	**2.38**	11.3	4.84	2.20	1.32
Silver	**0.43**	**0.24**	1.76	0.758	0.238	0.133
Zinc	**2.61**	**1.48**	8.56	3.68	1.44	0.819
Cyanide	1.2	0.65	**0.319**	**0.137**	0.664	0.360
TTO	2.13				1.18	

4.3 Self-Monitoring Frequency

Self-Monitoring frequency is determined by the pollutants present in the permittees process and compliance history.

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 001 [1]. Outfall 001 is located after process and prior to combination with sanitary wastewater flows.

Table 1[2]

	Discharge Limitations			Monitoring Requirements	
Parameter [3]	Daily Maximum	Monthly Average	Unit	Measurement Frequency [5]	Sample Type [4]
Flow [6]	Report	Report	MGD	Daily	24-Hr. Total
Cadmium [Cd]	0.11 [8]	0.07 [8]	mg/l	2 X Monthly	24 Hr. Comp.
T. Chromium [Cr(T)]	2.77 [8]	1.71 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Copper [Cu]	1.65 [9]	0.707 [9]	mg/l	2 X Monthly	24 Hr. Comp.
Lead [Pb]	0.69 [8]	0.43 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Nickel [Ni]	3.98 [8]	2.38 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Silver [Ag]	0.43 [8]	0.24 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Zinc [Zn]	2.61 [8]	1.48 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Phosphorus	5.00 [9]	1.00 [9]	mg/l	2 X Monthly	24 Hr. Comp.
Molybdenum	1.0 [9]		mg/l	2 X Monthly	24 Hr. Comp.
T. Cyanide [CN(T)][10]	0.319 [9]	0.137[9]	mg/l	2 X Monthly	Grab
TTO [11]	2.13		mg/l	2 X Year	Grab

Table 2

Parameter	Daily Minimum	Daily Maximum	Unit	Measurement Frequency	Sample Type
pH [7]	5.5[9]	9.0[9]	s.u.	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 individual 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.

In situations of intermittent or batch discharge, all parameters required to be monitored should be sampled during the first representative discharge occurring during the monitoring period and then reported on the appropriate state and federal forms at the end of the monitoring period.

If a representative discharge occurs at any time during the monitoring period as identified for that individual parameter, then it is a violation of this permit to not collect a sample and report those results. At the first opportunity that a representative discharge occurs during the monitoring period, it should be sampled for all the required parameters during that monitoring period. Waiting to collect a sample until the end of a monitoring period risks missing a representative sample collection opportunity, and it is considered a violation of this permit to not collect a sample, analyze and report those results, when there was a discharge for that monitoring period.

[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 [Town of Markle Ordinance, Section 51.077 (adopted October 2020)].

[10] 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.

[11] 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

Indiana Department of Environmental Management

				IDEM ID Number: 5217001 Corps of Engineers ID Number: 20458 Project Manager: Prater, Matthew
Grant				
County Line MHP WWTP	NPDES Final Permit Public Notice (PDF)	04/16/2024 - 05/06/2024	No	Permit Number: IN0038962 Project Manager: Kasuboski, Jordan
Eastbrook High School WWTP	NPDES Final Permit Public Notice (PDF)	04/15/2024 - 05/03/2024	No	Permit Number: IN0031372 Project Manager: DONNELLAN, JOHN
Huntington				
Keystone Automotive Industries, Inc dba Saturn Wheel	Notice of 30-Day Period of Public Comment for Draft Air Permit (PDF)	04/26/2024 - 05/26/2024	Yes	Permit Number: 069-47363-00100
Novae LLC	NPDES Draft Permit Public Notice (PDF)	04/02/2024 - 05/02/2024	Yes	Permit Number: INP000640 Project Manager: Gore, Stephanie A
Jay				
ANR Pipeline Company - Portland Compressor Station	Notice of 30-Day Period of Public Comment for Draft Air Permit (PDF)	05/03/2024 - 06/02/2024	Yes	Permit Number: T075-47697-00012
LaGrange				
Keystone Recreational Vehicle Company Plant 820	Notice of 30-Day Period of Public Comment for Draft Air Permit (PDF)	04/08/2024 - 05/08/2024	Yes	Permit Number: 087-47647-00062
Noble				
Chain O'Lakes State Park	NPDES Draft Permit Public Notice (PDF)	05/02/2024 - 06/03/2024	Yes	Permit Number: IN0030333 Project Manager: Eilerman, Nicholas
Terra Supreme Battery LLC	NPDES Draft Permit Public Notice (PDF)	04/29/2024 - 05/29/2024	Yes	Permit Number: INP000734 Project Manager: Meguschar, John
Albion WWTP	NPDES Final Permit Public Notice (PDF)	04/09/2024 - 04/29/2024	No	Permit Number: IN0022144

The draft IWP permit for Novae Corporation was made available for public comment from April 2, 2024 through May 2, 2024 as part of Public Notice No. 20240402 – INP000640– D on IDEM's website at https://www.in.gov/idem/public-notices/public-notices-all-regions/. During this comment period, no comment letters were received.

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PUBLIC NOTICE NO: 20240530– INP000640 – F
DATE OF NOTICE: May 30, 2024

The Office of Water Quality has issued the following FINAL IWP PERMIT:

MINOR – RENEWAL:

NOVAE LLC, Permit No. INP000640, HUNTINGTON COUNTY, 6 Novae Pkwy, Markle, IN. This facility manufactures utility trailers. The facility discharges process wastewater into the Town of Markle POTW at a rate of 0.0235 MGD. Permit Manager: Devery DeBoy, 317/232-8707, ddeboy@idem.in.gov. Posted online at https://www.in.gov/idem/public-notices/.

Notice of Right to Administrative Review

If you wish to challenge this Permit, you must file a Petition for Administrative Review with the Office of Adjudication (OEA) and serve a copy of the Petition upon IDEM. The requirements for filing a Petition for Administrative Review are found in IC 4-21.5-3-7, IC 13-15-6-1 and 315 IAC 1-3-2. A summary of the requirements of these laws is provided below.

A Petition for Administrative Review must be filed with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the issuance of this notice (eighteen (18) days if you received this notice by U.S. Mail), and a copy must be served upon IDEM. Addresses are:

Director
Office of Environmental Adjudication
Indiana Government Center North
100 North Senate Avenue - Room N103
Indianapolis, Indiana 46204

Commissioner
Indiana Department of Environmental Management
Indiana Government Center North
100 North Senate Avenue - Room 1301
Indianapolis, Indiana 46204

The Petition must contain the following information:

1. The name, address and telephone number of each petitioner.
2. A description of each petitioner's interest in the Permit.
3. A statement of facts demonstrating that each petitioner is:
   a. a person to whom the order is directed.
   b. aggrieved or adversely affected by the Permit.
   c. entitled to administrative review under any law.
4. The reasons for the request for administrative review.
5. The particular legal issues proposed for review.
6. The alleged environmental concerns or technical deficiencies of the Permit.
7. The Permit terms and conditions that the petitioner believes would be appropriate and would comply with the law.

8. The identity of any persons represented by the petitioner.
9. The identity of the person against whom administrative review is sought.
10. A copy of the Permit that is the basis of the petition.
11. A statement identifying petitioner's attorney or other representative, if any.

Failure to meet the requirements of the law with respect to a Petition for Administrative Review may result in a waiver of your right to seek administrative review of the Permit. Examples are:

1. Failure to file a Petition by the applicable deadline.
2. Failure to serve a copy of the Petition upon IDEM when it is filed; or
3. Failure to include the information required by law.

If you seek to have a Permit stayed during the Administrative Review, you may need to file a Petition for a Stay of Effectiveness. The specific requirements for such a Petition can be found in 315 IAC 1-3-2 and 315 IAC 1-3-2.1.

Pursuant to IC 4-21.5-3-17, OEA will provide all parties with Notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action. If you are entitled to Notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above. More information on the appeal review process is available on the website for the Office of Environmental Adjudication at http://www.in.gov/oea.

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, Novae LLC (hereinafter referred to as the permittee) is authorized to discharge from the facility located at 6 Novae Pkwy Markle, IN, into the Town of Markle 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 at the power wash collection basin after process and prior to combination with sanitary waste flows. 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 [4]**	**Sample Type [5]**
Flow [6]	Report	Report	MGD	Daily	24-Hr. Total
Cadmium [Cd]	0.11 [8]	0.07 [8]	mg/l	2 X Monthly	24 Hr. Comp.
T. Chromium [Cr(T)]	2.77 [8]	1.71 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Copper [Cu]	1.65 [9]	0.707 [9]	mg/l	2 X Monthly	24 Hr. Comp.
Lead [Pb]	0.69 [8]	0.43 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Nickel [Ni]	3.98 [8]	2.38 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Silver [Ag]	0.43 [8]	0.24 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Zinc [Zn]	2.61 [8]	1.48 [8]	mg/l	2 X Monthly	24 Hr. Comp.
Phosphorus	5.00 [9]	1.00 [9]	mg/l	2 X Monthly	24 Hr. Comp.
Molybdenum	1.0 [9]		mg/l	2 X Monthly	24 Hr. Comp.
T. Cyanide [CN(T)][10]	0.319[9]	0.137[9]	mg/l	2 X Monthly	Grab
TTO [11]	2.13		mg/l	2 X Year	Grab

Table 2

	Quality or Concentration		Monitoring Requirements		
Parameter	**Daily Minimum**	**Daily Maximum**	**Units**	**Measurement Frequency**	**Sample Type**
pH [7]	5.5	9.0	s.u.	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] 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.

In situations of intermittent or batch discharge, all parameters required to be monitored should be sampled during the first representative discharge occurring during the monitoring period and then reported on the appropriate state and federal forms at the end of the monitoring period.

If a representative discharge occurs at any time during the monitoring period as identified for that individual parameter, then it is a violation of this permit to not collect a sample and report those results. At the first opportunity that a representative discharge occurs during the monitoring period, it should be sampled for all the required parameters during that monitoring period. Waiting to collect a sample until the end of a monitoring period risks missing a representative sample collection opportunity, and it is considered a violation of this permit to not collect a sample, analyze and report those results, when there was a discharge for that monitoring period.

[5] 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.

[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 [Town of Markle Ordinance, Section 51.077 (adopted October 2020)].

[10] 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.

[11] 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. Daily Discharge

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. Daily Maximum (Discharge) Limitation

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

Certified Operator
Town of Markle
155 West Sparks Street
Markle, IN 46770

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 Town of Markle 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. <u>Monitoring Alternative for TTO:</u>

   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 Town of Markle 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. Bypass

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. Wastewater Treatment Plant and Certified Operators

Pursuant to IC 13-18-11-11 and 327 IAC 5-23-6, a permittee's wastewater

treatment plant must be under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as determined under 327 IAC 5-23-4.

A certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant if the requirements under 327 IAC 5-23-7(b) are met. "Operator in responsible charge" is defined at 327 IAC 5 23-2(16).

Pursuant to 327 IAC 5-23-6(4)(A), the permittee shall notify IDEM when there is a change in 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 and submitted via e-mail to the Compliance Data Section of the Office of Water Quality at WWReports@idem.IN.gov.

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 Town of Markle.

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

APPLICATION FOR INDUSTRIAL WASTEWATER PRETREATMENT (IWP) PERMIT

State Form 50271 (R2 / 9-08)
Approved by State Board of Accounts, 2008
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM - Office of Water Quality
Attn: Cashier
Pretreatment Section
100 N. Senate Avenue
Indianapolis, IN 46204
Phone: (317) 232- 8603 or toll-free
1-800-451-6027 (Indiana Residents Only)
http://www.in.gov/idem/water/permits/

INSTRUCTIONS:

- ***This form must be accompanied by state form 49456.*** *You may find state form 49456 at http://www.in.gov/icpr/webfile/formsdiv/49456.pdf . Both forms must be submitted together.*
- *Unless stated otherwise, all items are to be filled out completely. Your application will not be considered complete unless every question is answered on this form. If an item is not applicable, indicate by noting "NA" to show that you considered the question.*
- *Depending upon the adequacy of the data submitted for determining issuance of a permit, additional information may be required. Please read all questions and attached information prior to completing this application.*
- *You can fill out this form electronically, using the mouse and keyboard. Simply click inside of the first form field to begin, and advance to the next fields using the "tab" key on your keyboard, or by clicking in the fields with your mouse. Print the completed form, and submit it to IDEM, OWQ with any additional documentation in your application packet.*
- *A $50 application fee is required with the submission of this form. Please enclose a check or money order payable to the Indiana Department of Environmental Management with this form and any supporting attachments and documentation, and mail the application package to the address listed in the upper-right side of this page.*
- *This application must be submitted in accordance with 327 IAC 5-21-3, including the time frames thereof.*

Type of IWP Permit

- ☐ New
- ☒ Renewal
- ☐ Modification

IWP PERMIT NUMBER

~~INP000640~~ INP 000640

PART A: APPLICANT ADDRESS AND CONTACT(S)

FACILITY/OPERATION

1. Facility name: Novae LLC

2. Mailing address:
1 Novae Pkwy

City:	County:	State:	ZIP Code:
Markle	Huntington	IN	46770

3. Facility phone number:

4. Facility e-mail address (optional):

IDEM-WATER QUALITY
JAN 22 2024
RECEIVED

5. Address of operation:
6 Novae Pkwy

City:	State:	ZIP Code:
Markle	IN	46770

DESIGNATED FACILITY CONTACT PERSON

6. Designated contact name (first, last):
Randy Hinojosa

7. Title:
Corporate Environmental Director

8. Mailing address:
6 Novae Pkwy

City:	State:	ZIP Code:
Markle	IN	46770

9. Phone number: (260) 758-9838

10. E-mail address (optional): randy.hinojosa@novaecorp.com

DESIGNATED SIGNATORY AUTHORITY

NOTE: Signatory Authorization is defined in 327 IAC 5-16-5(b)

11. Designated signatory authority name (first, last):
Randy Hinojosa

12. Title:
Corporate Environmental Director

13. Address:
6 Novae Pkwy

City:	State:	ZIP Code:
Markle	IN	46770

14. Phone number: (260) 758-9838

15. E-mail address (optional): randy.hinojosa@novaecorp.com

(Continued on page 2)

(Account No. and Revenue Code: 2830-433800-100600)

RECEIVING POTW: Town of Markle Pretreatment Plant

16. Contact Name	17. Title:
Scott Spahr	Wastewater Superintendent

18. Address:
155 West Sparks Street

City:	State:	ZIP Code:
Markle	IN	46770

19. Phone number: (260) 758-3192

20. E-mail address (optional): wwtp@markleindiana.com

PART B: OPERATING SCHEDULE

SHIFT INFORMATION

21. Days of operation *(check all that apply)*: ☒ Mon. ☒ Tue. ☒ Wed. ☒ Thu. ☒ Fri. ☐ Sat. ☐ Sun.

22. Hours per day of operation: 6:00 am- 4:30 pm & 7:30 pm- 6:00 am

23. Number of shifts per day: Two

24. Total number of employees per shift: First Shift- 52 employees / Third Shift 21 employees

DURATION OF OPERATION

25. Date that facility began (or will begin) operation (mm/dd/yyyy): 12/01/2014

26. Indicate whether the operation is (will be):
☒ a. Continuous throughout the year
☐ b. Seasonal (check the boxes below corresponding with the months of active production)
☐ Jan. ☐ Feb. ☐ Mar. ☐ April ☐ May ☐ June ☐ July ☐ Aug. ☐ Sept. ☐ Oct. ☐ Nov. ☐ Dec.

CLOSED-LOOP OPERATIONS

27. Describe any closed-loop operations:
N/A

28. Does this water ever contact the product? ☒ Yes ☐ No

29. Does the system ever discharge to the city sewer? ☒ Yes* ☐ No

***If yes,**
a. How often? Daily
b. How much? 8,500 gpd
c. Is this water pretreated? ☒ Yes ☐ No

(Continued on page 3)

PART C: PROCESS DESCRIPTION

30. Describe the product(s) manufactured or service(s) provided:

Novae LLC is a utility trailer manufacturer. Fabrication and assembly of a variety of trailersusing a combination of purchased parts, and various components.Steel frames are fabricated on our premises, shot blasted, washed, and powder coated with a final surface finish. Once complete trailers are delivered to dealerships nationwide.

31. Provide a detailed description of the manufacturing process(es) or service activities conducted on premises, especially those processes that involve or generate wastewater (use additional sheets if necessary).

A process flow diagram and narrative information are attached.

(Continued on page 4)

PART C: PROCESS DESCRIPTION (CONTINUED)

32. List chemicals and metals used in processes (raw materials):

1) Structural and tube steel
2) Wash detergent- SDS's attached
3) Welding media
4) Shot blast media
5) Powder coat
6)
7)
8)
9)
10)
11)
12)
13)
14)
15)
16)
17)
18)
19)
20)

33. If production-based standards apply, list the amount of production (in units expressed by the standards) that passes through (or will pass through) each process that is subject to a standard (attach list if needed):

Trailer frames (metal) parts, fixtures, plates, and related- 12,000 pounds per hour (est).

PART D: INTAKE WATER INFORMATION

34. In the table below, list intake water sources and volumes:

	SOURCE	VOLUME (GPD)
a.	Municipal Water System* *Specify City: Markle	23,500
b.	Private Well	N/A
c.	Surface water	N/A
d.	Other** **Specify:	0

(Continued on page 5)

PART E: WATER LOSS INFORMATION

35. For the following items, provide the average volume of discharge or water loss *(GPD)*.

a. Natural outlet or storm sewer: N/A GPD

i) Do you have an NPDES permit for the discharge to the Natural Outlet or Storm Sewer?

☒ Yes* ☐ No

ii) *If yes, provide the permit number: INP000640

b. Waste hauler: N/A GPD

c. Evaporation: 2,500 GPD

d. Contained in product: N/A GPD

e. Other*: 0 GPD

*Specify:

N/A

PART F: WASTEWATER DISCHARGE(S) TO SANITARY OR COMBINED SEWERS

36. For each line to the municipal sewer, list average wastewater discharge *(actual, expected or potential - please specify by checking the appropriate box)* from the following sources prior to pretreatment *(if any)*. With a checkmark, indicate the Outfall to which the waste-stream discharges *(if there are additional outfalls, please attach additional copies of this page of the form)*:

	Source	WW Discharge Volume (GPD)	Volume Based On (*Check One*)	Outfall #1	Outfall #2	Outfall #3
a.	Process Waste-stream #1	6,500	☐ Actual Volume ☐ Expected Volume	☒	☐	☐
b.	Process Waste-stream #2	6,500	☐ Actual Volume ☐ Expected Volume	☒	☐	☐
c.	Process Waste-stream #3		☐ Actual Volume ☐ Expected Volume	☐	☐	☐
d.	Pretreatment Discharge (if any)		☐ Actual Volume ☐ Expected Volume	☐	☐	☐
e.	Boiler Blowdown		☐ Actual Volume ☐ Expected Volume	☐	☐	☐
f.	Non-contact Cooling Water (once through)		☐ Actual Volume ☐ Expected Volume	☐	☐	☐
g.	Sanitary Water	10,500	☐ Actual Volume ☐ Expected Volume	☒	☐	☐
h.	Other **Specify:**		☐ Actual Volume ☐ Expected Volume	☐	☐	☐

Include an attachment describing how each flow (36 a.-h. above) is generated

(Continued on page 6)

PART G: WASTEWATER DISCHARGE(S) TO SANITARY OR COMBINED SEWERS (DETAILS)

37. Is the discharge to the sewer?

☒ a. Continuous

☒ b. batch*

*If batch discharge,

i) Provide the frequency of discharge occurrence: Every 30 minutes

ii) What is the average volume (in gallons) of each batch? 550 gallons

38. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

a. Flow metering equipment ☒ Yes[1] ☐ No ☐ N/A

b. Sampling equipment ☒ Yes[1] ☐ No ☐ N/A

39. If "Yes" for item #38a or #38b, describe the type of flow meter(s) and sampling equipment.

1 1/2" Neptune T-10 Flow meters are installed on equipment./ The automatic sampling equipment is outsourced through CF Environmental and is conducted twice monthly.

40. Are any process changes or expansions planned in the immediate future that could alter wastewater volumes or characteristics? (Consider production processes as well as air or water pollution treatment processes that may affect the discharge).

☐ Yes ☒ No

41. Are any materials or water reclamation systems in use or planned?

☒ Yes[2]** ☐ No

42. **If "Yes" for Item #41, describe the recovery process, substances recovered, percent recovered, and the concentrations in the spent solution. Submit a flow diagram for each process. (Attach additional sheets if needed):

The wastewater generated from our two wash bays flows into an pretreatment skid system and is treated for Phosphorus and pH adjustment. Once treated and filtered, some of the clean wash water is returned back to the wash bay tanks for reuse.

PART H: CHARACTERISTICS OF DISCHARGE

▶ BUILDING LAYOUT

Submit scale drawings (or blueprints) showing the location of each building on the premises. Show map orientation and location of all water meters, storm drains, numbered unit processes (from schematic flow diagram), and public sewers. Show existing and/or proposed sampling locations.

▶ SCHEMATIC FLOW DIAGRAM

For each major activity in which wastewater is or will be generated, on an attached sheet, draw a diagram of the flow of materials, products, water, and wastewater from start of the activity to its completion, showing all unit processes. Indicate which processes use water and which generate wastestreams. Include the average daily volume and maximum daily volume of each wastestream (new facilities or new dischargers may estimate). If estimates are used for flow data this must be indicated. Number each unit process having wastewater discharges to the community sewer.

(Continued on page 7)

[1] If the facility has, or will have, automatic sampling equipment or continuous wastewater flow metering equipment, please indicate the present or future location of this equipment on the sewer schematic (Part H: Schematic Flow Diagram).

[2] If Yes, attach a description of these changes and their effects on the wastewater volume and characteristics.

PART I: SEWER INFORMATION

Existing Facility

43. If source is not connected to sanitary sewer, has the source applied for sanitary sewer hookup?

☒ Yes ☐ No

NEW FACILITY OR NEW DISCHARGER

44. Will the source be connected to the public sanitary sewer system?

☒ Yes ☐ No

PART J: TREATMENT

45. Is any form of wastewater treatment practiced at this facility?

☒ Yes ☐ No

46. Do you have a certified operator for your pretreatment facility?

☒ Yes ☐ No

47. Is any form of wastewater treatment (or changes to an existing wastewater treatment) planned for this facility within the immediate future?

☒ Yes* ☐ No

*If yes, please describe:

In current use.

48. Description of Pretreatment:

Include step-by-step procedure, including any process equipment, design capacity, and operating conditions. Attach a process-flow diagram of the pretreatment.

Please see attached information.

Attach a process-flow diagram of the pretreatment.

PART K: SAMPLING DATA

49. Attach any representative sampling data[3] pertaining to the facility discharge to the sewer system. Explain below and/or in the attachment(s) where and when the sampling was accomplished, what type of sample was taken (i.e., grab, composite), and how many samples were analyzed. Be sure the sampling and analytical methods conform to 40 CFR Part 136. If they do not, indicate what method was used.

Please see current sampling data pertaining to the facility discharge to the sewer system.

Attach any sampling data[3] pertaining to the facility discharge to the sewer system.

(Continued on page 8)

[3] If no sampling data is available, testing must be performed on the discharge for any pollutant believed to be present. The sample must be a 24-hour composite taken during normal production activity and/or representing typical wastewater flows. A representative list of pollutants is contained in Table I (on page 10 of this application). Please check the pollutants you know or suspect of being in your discharge. New facilities should use the table to indicate what pollutants will be present or suspected tobe present in proposed wastestreams.

PART L: SPILL PREVENTION

50. Do you have chemical storage containers, bins, or ponds at your facility?

☐ Yes ☒ No

51. Do you have floor drains in your manufacturing or chemical storage area(s)?

☒ Yes** ☐ No

**If yes, identify where they discharge to:

Power wash bay rooms only. Connected to the drain line of the sanitary sewer system.

▶ Attach a list of the types and quantity of chemicals used or planned for use. Copies of Manufacturer's Safety Data Sheets (MSDS) may be requested for additional information.

PART M: NON-DISCHARGED WASTES

52. Are any waste liquids or sludges generated and not disposed of in the sanitary sewer system?

☐ Yes* ☒ No

*If YES, provide the following information (attach additional sheets if necessary):

	Waste(s) Generated	Quantity (per year; specify units)	Disposal Method
a.	N/A		
b.			
c.			
d.			
e.			
f.			
g.			
h.			
i.			
j.			

PART N: ADMINISTRATIVE OPERATIONS AND PROCEDURES ACT (AOPA)

▶ On copies of the form entitled, "Identification Of Potentially Affected Persons" (Form # 49456) (available from the IDEM Office of Water Quality or on the Internet at http://www.IN.gov/icpr/webfile/formsdiv/49456.pdf), list the names and addresses of all persons who, to your knowledge, may be potentially affected by the discharge from your facility. The AOPA (Administrative Operations And Procedures Act) requires such parties to be individually notified by IDEM when the proposed and final permit is public noticed. Persons not notified may have the final permit rendered null and void if they have been substantially prejudiced by the lack of notice.

(Continued on page 9)

PART O: AUTHORIZED REPRESENTATIVE STATEMENT

"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."

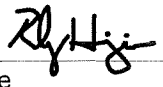
Randy Hinojosa	1/17/2024
Name/Title	Date (mm/dd/yyyy)
	(260) 758-9838
Signature	Phone # ((xxx) xxx-xxxx)

TABLE 1: POLLUTANTS OF CONCERN

PRIORITY POLLUTANTS LIST
(40 CFR 403, APENDIX B)

HEAVY METALS AND INORGANICS

- ☐ Antimony (Sb)md
- ☐ Arsenic (As)
- ☐ Asbestos
- ☐ Beryllium (Be)
- ☐ Cadmium (Cd)
- ☐ Chromium (Cr)
- ☐ Copper (Cu)
- ☐ Cyanides (CN)
- ☐ Lead (Pb)
- ☐ Mercury (Hg)
- ☐ Nickel (Ni)
- ☐ Selenium (Se)
- ☐ Silver (Ag)
- ☐ Thallium (Tl)
- ☐ Zinc (Zn)

TOXIC ORGANICS: 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

TOXIC ORGANICS: 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

TOXIC ORGANICS: NITROGEN COMPOUNDS

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

TOXIC ORGANICS: 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

TOXIC ORGANICS: AROMATICS

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

TOXIC ORGANICS: 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

TOXIC ORGANICS: 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

TOXIC ORGANICS: HALOGENATED ALIPHATIC HYDROCARBONS

- ☐ Methane, chloro-; methyl chloride
- ☐ Methane, dichloro-; Methylene chloride
- ☐ Methane, trichloro-; chloroform
- ☐ Methane, tetrachloro-; Carbon tetrachloride
- ☐ Methane, bromo-; methyl bromide
- ☐ Methane, dichlorobromo-
- ☐ Methane, chlorodibromom-
- ☐ Methane, tribromo-; bromoform
- ☐ Ethane, chloro-

TABLE 1: POLLUTANTS OF CONCERN (CONTINUED)	
TOXIC ORGANICS: HALOGENATED ALIPHATIC HYDROCARBONS	**CONVENTIONAL POLLUTANTS: (LISTED IN 40 CFR 401.16)**
☐ Ethane, 1,1-dichloro-	☐ Biochemical Oxygen Demand (BOD)
☐ Ethane, 1,2-dichloro-	☐ pH (Acid or Base)
☐ Ethane, 1,1,1-trichloro-	☐ Total Suspended Solids (TSS)
☐ Ethane, 1,1,2-trichloro-	☐ Oil and Grease (O&G)
☐ Ethane, 1,1,2,2-tetrachloro-	
☐ Ethane, hexachloro-	**NONCONVENTIONAL POLLUTANTS OF CONCERN: (NOT LISTED AS TOXIC OR CONVENTIONAL)**
☐ Ethylene, chloro-; Vinyl Chloride	
☐ Ethylene, 1,1-dichloro-; 1,1-DCE	☐ Ammonia (NH3)
☐ Ethylene, 1,2-trans-dichloro-	☐ Chlorides (Cl-1)
☐ Ethylene, trichloro-; TCE	☐ Sulfides (S-2)
☐ Ethylene, tetrachloro-; Perchloroethylene	☐ Total Dissolved Solids (TDS)
☐ Propane, 1,2-dichloro-	☐ Phosphate (PO4)
☐ Propylene, 1,3-dichloro-	☐ Chemical Oxygen Demand (COD)
☐ Butadiene, hexachloro-; HCBD	
☐ Cyclopentadiene, hexachloro-; HCCPD	
TOXIC ORGANICS: 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	
TOXIC ORGANICS: OXYGENATED COMPOUNDS	
☐ Acrolein	
TOXIC ORGANICS: MISCELLANEOUS	
☐ Isophorone	
☐ 2,3,7,8-tetrachlorodibenzo-p-dioxin; TCDD; dioxin	

APPENDIX: CONTACT PEOPLE AND MAILING ADDRESSES

The Office of Water Quality has a contact person for each of the areas that apply to pretreatment. The name and telephone number is listed below for each contact person. Correspondences should be sent to the address below to the attention of the appropriate contact.

General Address:

Indiana Department of Environmental Management
Office of Water Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

Contacts :

(Direct correspondence to the individuals below by adding "Attention: {Insert Contact Name Listed Below}" to the address)

For IWP Permits:

Contact: Industrial NPDES Permits Section
Telephone: 317/232-8760

For Construction Permits:

Contact: Facility Construction Section
Telephone: 317/232-8645

TABLE 1: POLLUTANTS OF CONCERN

PRIORITY POLLUTANTS LIST
(40 CFR 403, APENDIX B)

HEAVY METALS AND INORGANICS

Note: metals are expected to be in the waste water discharge in the approximate concentrations that they are present in the town water supply.

- ☐ Antimony (Sb)md
- ☐ Arsenic (As)
- ☐ Asbestos
- ☐ Beryllium (Be)
- ☐ Cadmium (Cd)
- ☐ Chromium (Cr)
- ☐ Copper (Cu)
- ☐ Cyanides (CN)
- ☐ Lead (Pb)
- ☐ Mercury (Hg)
- ☐ Nickel (Ni)
- ☐ Selenium (Se)
- ☐ Silver (Ag)
- ☐ Thallium (Tl)
- ☐ Zinc (Zn)

TOXIC ORGANICS: ETHERS N/A

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

TOXIC ORGANICS: PHTHALATES N/A

- ☐ 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

TOXIC ORGANICS: NITROGEN COMPOUNDS N/A

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

TOXIC ORGANICS: PHENOLS N/A

- ☐ 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

TOXIC ORGANICS: AROMATICS N/A

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

TOXIC ORGANICS: POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs) N/A

- ☐ 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

TOXIC ORGANICS: PCB's N/A

- ☐ 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

TOXIC ORGANICS: HALOGENATED ALIPHATIC HYDROCARBONS N/A

- ☐ Methane, chloro-; methyl chloride
- ☐ Methane, dichloro-; Methylene chloride
- ☐ Methane, trichloro-; chloroform
- ☐ Methane, tetrachloro-; Carbon tetrachloride
- ☐ Methane, bromo-; methyl bromide
- ☐ Methane, dichlorobromo-
- ☐ Methane, chlorodibromom-
- ☐ Methane, tribromo-; bromoform
- ☐ Ethane, chloro-

TABLE 1: POLLUTANTS OF CONCERN (CONTINUED)

TOXIC ORGANICS: HALOGENATED ALIPHATIC HYDROCARBONS N/A

- ☐ 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

TOXIC ORGANICS: PESTICIDES N/A

- ☐ 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

TOXIC ORGANICS: OXYGENATED COMPOUNDS N/A

- ☐ Acrolein

TOXIC ORGANICS: MISCELLANEOUS N/A

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

CONVENTIONAL POLLUTANTS: (LISTED IN 40 CFR 401.16)

- ☒ Biochemical Oxygen Demand (BOD)
- ☒ pH (Acid or Base)
- ☒ Total Suspended Solids (TSS)
- ☒ Oil and Grease (O&G)

NONCONVENTIONAL POLLUTANTS OF CONCERN: (NOT LISTED AS TOXIC OR CONVENTIONAL)

- ☐ Ammonia (NH3) N/A
- ☐ Chlorides (Cl-1) N/A
- ☐ Sulfides (S-2) N/A
- ☒ Total Dissolved Solids (TDS)
- ☒ Phosphate (PO4)
- ☒ Chemical Oxygen Demand (COD)

APPENDIX: CONTACT PEOPLE AND MAILING ADDRESSES

The Office of Water Quality has a contact person for each of the areas that apply to pretreatment. The name and telephone number is listed below for each contact person. Correspondences should be sent to the address below to the attention of the appropriate contact.

General Address:

Indiana Department of Environmental Management
Office of Water Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

Contacts :

(Direct correspondence to the individuals below by adding "Attention: {Insert Contact Name Listed Below}" to the address)

For IWP Permits:

Contact: Industrial NPDES Permits Section
Telephone: 317/232-8760

For Construction Permits:

Contact: Facility Construction Section
Telephone: 317/232-8645

Novae
NovaeCorp.com

Novae Corporation
Markle, Indiana

Waste Water Permit Application- Process Information

Information specified as Item 31 on page 3 in the "Application for Industrial Waste Water Pretreatment Permit is provided as follows:

Trailer Process:

1. Process Description: This facility will fabricate utility trailer frames for use in assembling complete trailers for dealer distribution.

2. Process Equipment: Trailer frame fabrication equipment includes metal and wood trimming, cutting, sawing, bending, and sizing units that convert structural steel and related into trailer frames via welding, bolting, joining, and other procedures.

   The trailer frames will be cleaned and then painted (powder coated) on site.

   The next step involves the use of additional purchased parts in assembling of a complete trailer (axles, wheels, tires, front, back, sides, and related items).

3. Raw Material Input: Production operations are utilized as follows:

   - Maximum potential production rate- 2 trailers per hour per line.

   Basic raw materials include structural steel for use in the fabrication of trailer frames and miscellaneous items, with all other purchased components including axles, wood decks, wheels, and tires related.

4. Additions and Modifications: The trailer fabrication, assembly systems and equipment will be installed in a building that owned and operated by Novae Corporation located in Markle, Indiana

IDENTIFICATION OF POTENTIALLY AFFECTED PARTIES
State Form 49456 (R2 / 3-15)
Approved by State Board of Accounts, 2009

IDEM
Office of Water Quality, Permits Branch
100 North Senate Ave.
MC 65-42PS
Indianapolis, IN 46204-2251

The Administrative Orders and Procedures Act (AOPA) IC 4-21.5-3-5(b), requires that the Indiana Department of Environmental Management (IDEM) give notice of its decision on your application to the following persons:

a) Each person to whom the decision is specifically directed;
b) Each person to whom a law requires notice to be given;
c) Each competitor who has applied to the IDEM for a mutually exclusive license, if issuance is the subject of the decision and the competitor's application has not been denied in an order for which all rights to judicial review have been waived or exhausted;
d) Each person who has provided the IDEM with a written request for notification of the decision;
e) Each person who has a substantial and direct proprietary interest in the issuance of the (permit/variance);
f) Each person whose absence as a party in the proceeding concerning the (permit/variance) decision would deny another party complete relief in the proceeding or who claims an interest related to the issuance of the (permit/variance) and is so situated that the disposition of the matter, in the person's absence may:
    1) As a practical matter impair or impede the person's ability to protect that interest, or
    2) Leave any other person who is a party to a proceeding concerning the permit subject to a substantial risk of incurring multiple or otherwise an inconsistent obligation by reason of the person's claimed interest.

IC 4-21.5-3-5(f) provides that we may request your assistance in identifying these people.

Additionally, IC 13-15-3-1 requires IDEM to send notice that the permit application has been received by the department to the following:

a) The board of county commissioners of a county affected by the permit application and
b) The mayor of a city that is affected by the permit application, or
c) The president of a town council of a town affected by the permit application.

Please provide on the following form the names of those persons affected by these statutes, and include mailing labels with your application. These mailing labels should have the names and addresses of the affected parties along with our mailing code (65-42PS) listed above each affected party listing.

Example: 65-42PS
John Doe
111 Circle Drive
City, State, Zip Code

I. Identification of Potentially Affected Persons

Please list here any and all persons whom you have reason to believe have a substantial or proprietary interest in this matter, or could otherwise be considered to be potentially affected under the law. Failure to notify any person who is later determined to be potentially affected could result in voiding our decision on procedural grounds. To ensure conformance with AOPA and to avoid reversal of a decision, please list all such parties. The letter attached to this form will further explain the requirements under the AOPA. Attach additional names and addresses on a separate sheet of paper, as needed. Please indicate below the type of action you are requesting.

Name: Huntington County United Economic Development	Name: William P. and Janet K Rice
Street address: 8 West Market Street	Street address: 5257 East 50 North
City/State/ZIP code: Huntington, IN 46750	City/State/ZIP code: Markle, IN 46770
Name: Shannon and Dewb Morgan	Name: NC2 LLC
Street address: 5253 East 50 North	Street address: 1 Novae Pkwy
City/State/ZIP code: Markle, IN 46770	City/State/ZIP code: Markle, IN 46770
Name: Stephen D. Rowe	Name: North Central Cooperative LP
Street address: 345 Woodbine Drive	Street address: P.O. Box 299
City/State/ZIP code: Wood Dale, IL 60191	City/State/ZIP code: Wabash, IN 46992
Name: Kyle E. and Lisa M. Lund	Name: J and L Enterprises
Street address: 604 North 500 East	Street address: 3230 East Maple Grove Avenue
City/State/ZIP code: Markle, IN 46770	City/State/ZIP code: Fort Wayne, IN 46806
Name: Town of Markle and Indiana Municipal Dept.	Name: SR 224 Development Company LLC
Street address: P.O. Box 367	Street address: 1 Novae Pkwy
City/State/ZIP code: Markle, IN 46770	City/State/ZIP code: Markle, IN 46770
Name:	Name:
Street address:	Street address:
City/State/ZIP code:	City/State/ZIP code:
Name:	Name:
Street address:	Street address:
City/State/ZIP code:	City/State/ZIP code:
Name:	Name:
Street address:	Street address:
City/State/ZIP code:	City/State/ZIP code:
Name:	Name:
Street address:	Street address:
City/State/ZIP code:	City/State/ZIP code:
Name:	Name:
Street address:	Street address:
City/State/ZIP code:	City/State/ZIP code:

II. Please complete this form by signing the following statement.

I certify to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.5.		
Signature:		
Printed name: Randy Hinojosa		Date *(month, day, year)*: 1/17/2024
Name of facility: Novae LLC		
Address of facility *(number and street)*: 6 Novae Pkwy		
City of facility: Markle	State of facility: Indiana	ZIP code: 46770

III. Type of Action (check one)

- ☐ NPDES Permit-327 IAC 5
- ☒ Pretreatment Permit -327 IAC 5
- ☐ Construction Permit-327 IAC 3

A $50.00 fee is required for a New permit, a Renewal or a Modification; if this is a renewal or modification request, include NPDES permit No. on check and return to:

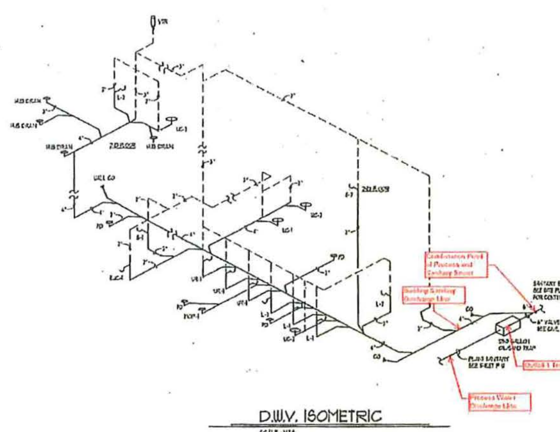
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Water Quality – Mail Code 65-42
Room N1255
Permits Branch
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Reference Item # 31 pg 3

PLUMBING FIXTURE CONNECTION SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	WASTE	VENT	HOT	COLD	REMARKS
WC-1	WATER CLOSET	AMERICAN STANDARD	4"	2"	...	1"	FLOOR MOUNTED - FLUSH VALVE
WC-2	WATER CLOSET - ACC.	AMERICAN STANDARD	4"	2"	...	1"	FLOOR MOUNTED - FLUSH VALVE ACC.
L-1	LAVATORY	AMERICAN STANDARD	1½"	2"	½"	½"	WALL HUNG
L-2	LAVATORY - ACC.	AMERICAN STANDARD	1½"	2"	½"	½"	WALL HUNG - ACC.
UR-1	URINAL	AMERICAN STANDARD	2"	2"	...	¾"	WALL HUNG (SEE PLAN FOR ACC. LOC.)
S-1	STAINLESS SINK	ELKAY OR EQUAL	1½"	2"	½"	½"	SINGLE BOWL W/ GOOSENECK
S-2	STAINLESS SINK	ELKAY OR EQUAL	1½"	2"	½"	½"	SINGLE BOWL W/ DISPOSAL
MOP-1	MOP BASIN	FIAT OR EQUAL	3"	2"	½"	½"	24x24 FLOOR MOUNTED
WF-1	WASH FOUNTAIN	BRADLEY OR EQUAL	2"	2"	¾"	¾"	36" AS ACC.
EWH-1	GAS WATER HEATER	LOCHINVAR OR EQUAL	...	...	¾"	¾"	50 GALLON (GAS)
FD	FLOOR DRAIN	ZURN OR EQUAL	3"	2"	...	...	ROUND - BRASS TOP
EEW	EMERG. EYE WASH	GUARDIAN OR EQUAL	...	...	...	1"	EMERGENCY SHOWER / EYEWASH
EWC-1	WATER COOLER	HALSEY OR EQUAL	1½"	2"	...	½"	DRINKING FOUNTAIN - BARRIER FREE
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER						

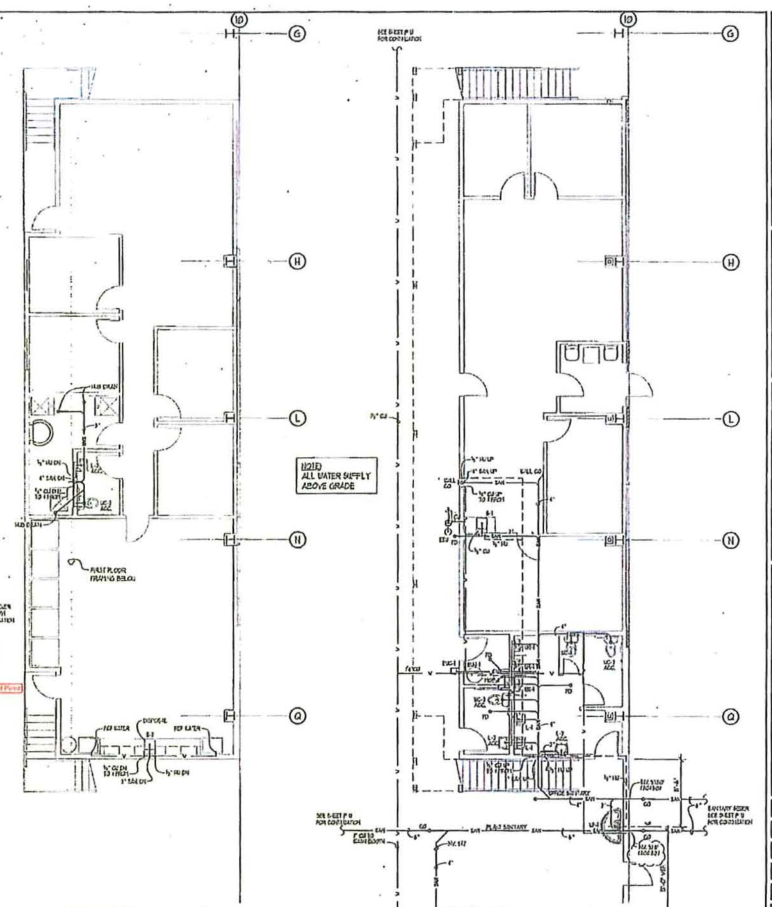
NOTES:
1. SEE SHEET AC 1 FOR MOUNTING HEIGHT OF ACCESSIBLE FIXTURES.
2. ROUGH ACCORDING TO ABOVE SCHEDULE UNLESS OTHERWISE INDICATED.
3. HEADERS INDICATED AT FIXTURES TO BE FULL SIZE THEIR ENTIRE LENGTH. FIXTURE CONNECTIONS AS PER ABOVE SCHEDULE OR AS NOTED OR INDICATED.
4. ALL WATER LINES INSULATED ABOVE FINISH FLOOR. NO WATER LINES LOCATED BELOW FINISH FLOOR.



D.W.V. ISOMETRIC

SCALE: N.T.S.

BRINER BUILDING INC.
701 N. Main St.
Bluffton, IN 46714
RECEIVED
Date: ____
From: ____
Signed: ____



2ND FLOOR PLUMBING PLAN

1ST FLOOR PLUMBING PLAN

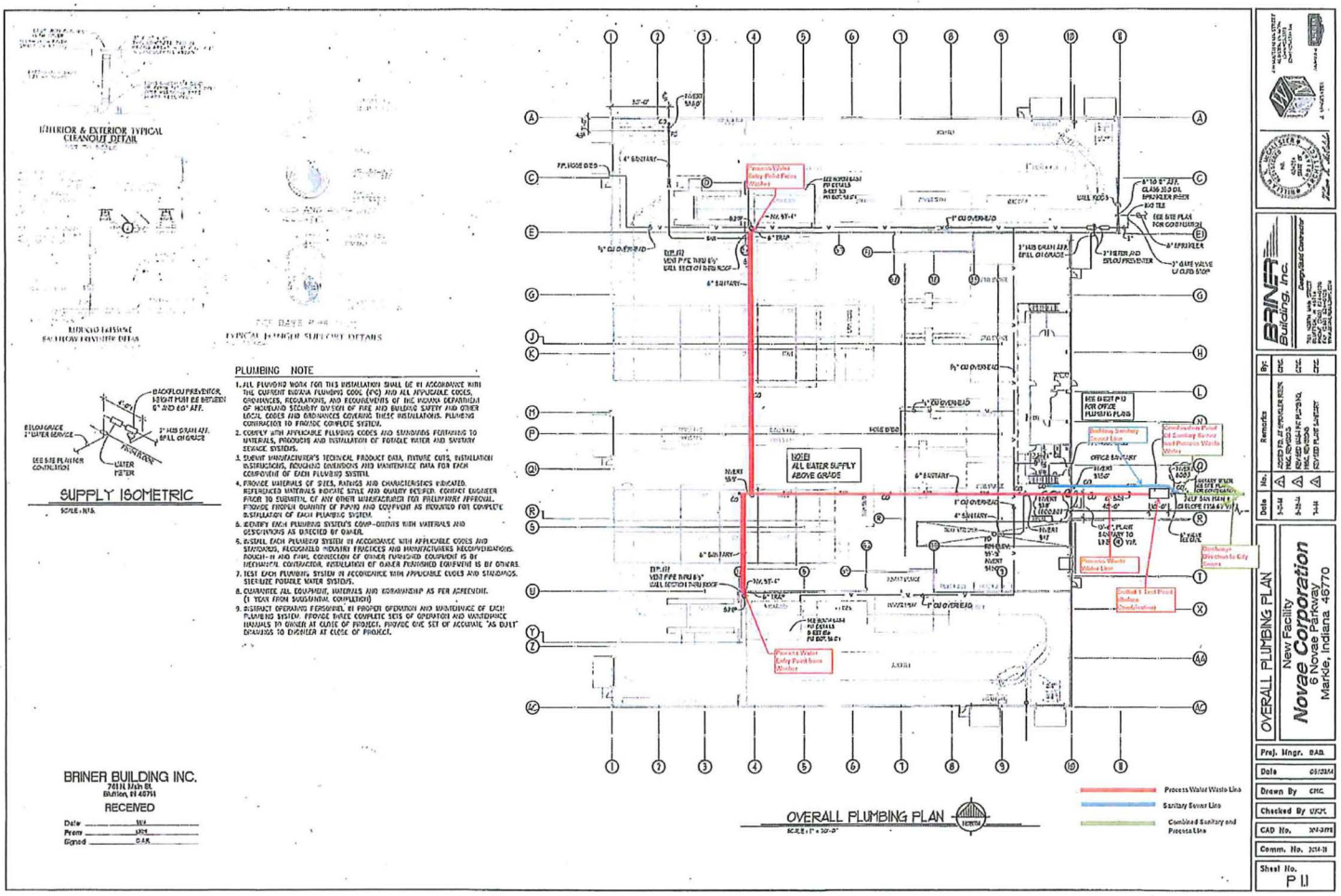
ENLGD. OFFICE PLUMBING PLANS

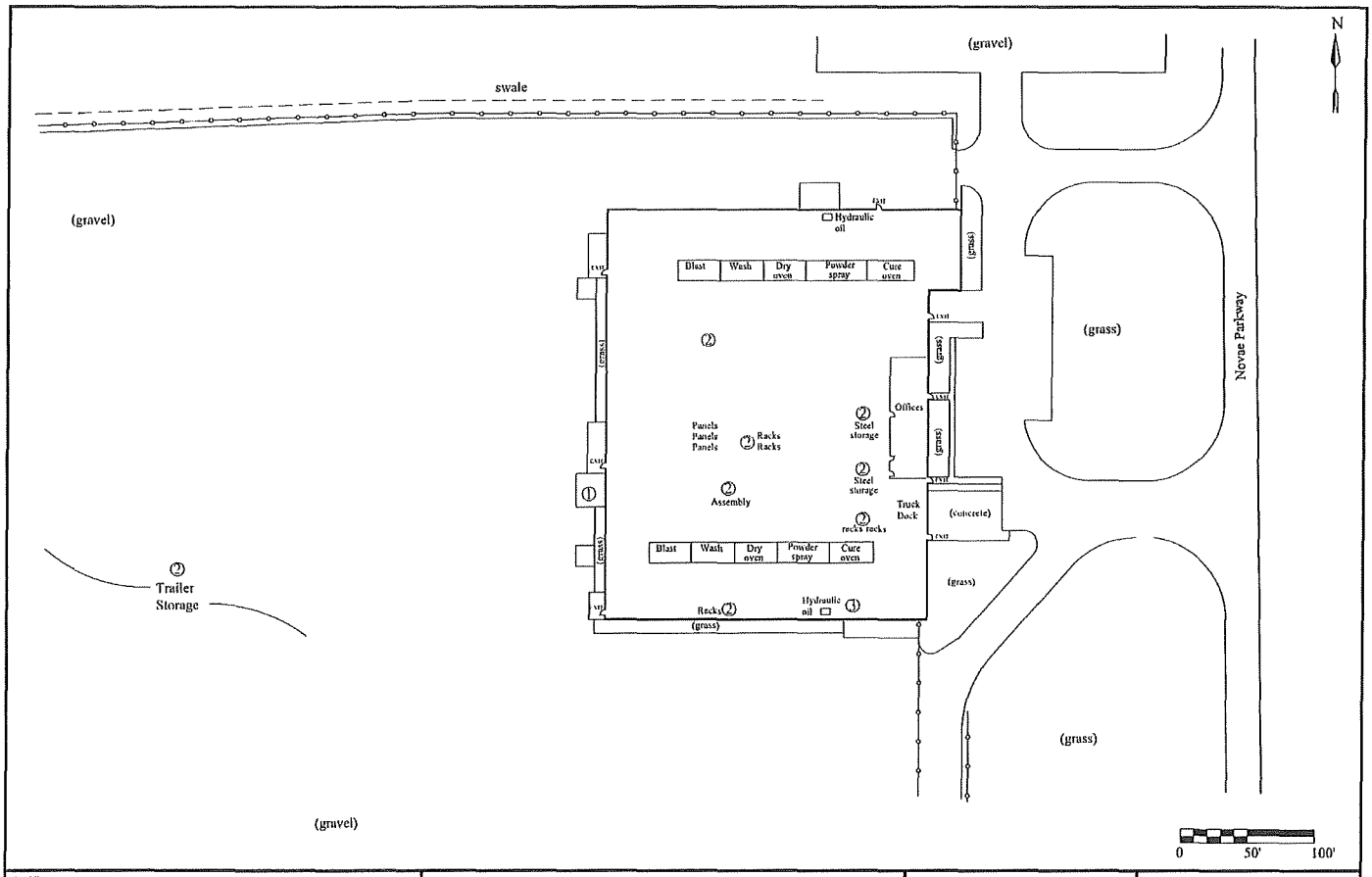
New Facility
Novae Corporation
6 Novae Parkway
Markle, Indiana 46770

BRINER Building, Inc.
Design/Build Contractor

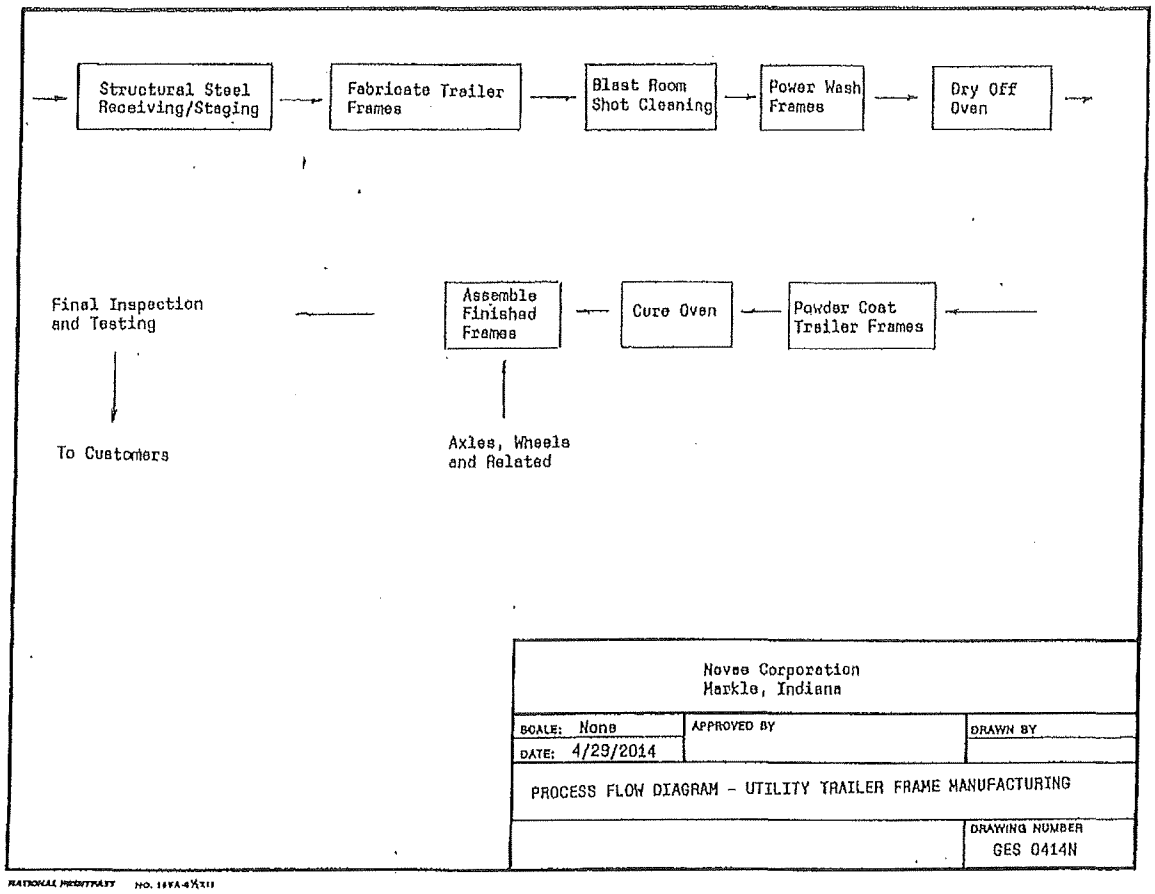
Proj. Mngr. BAB
Checked By UKM
Drawn By CMC

Sheet No. P 12

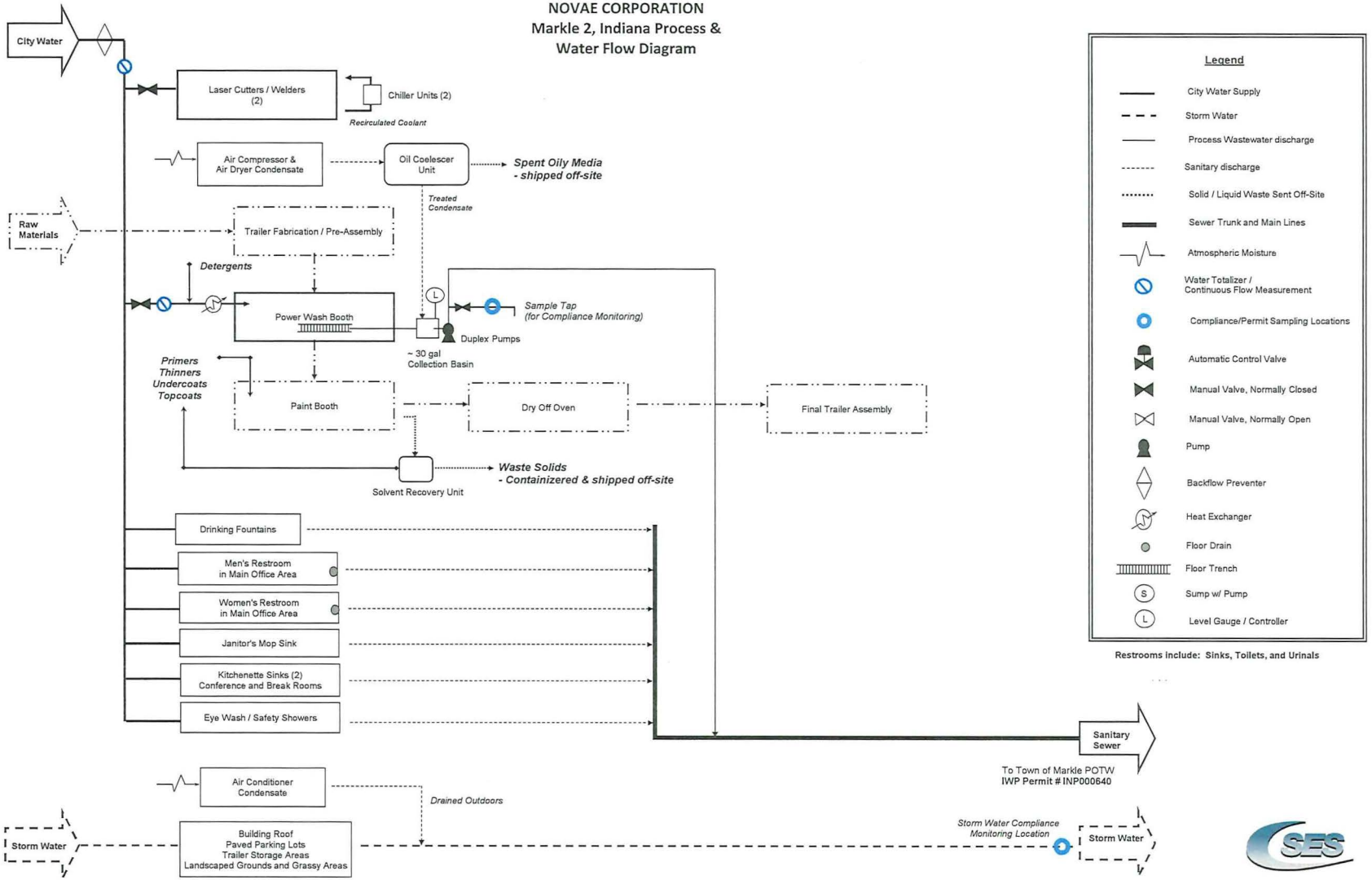

INTERIOR & EXTERIOR TYPICAL CLEANOUT DETAIL
TYPICAL FLOOR SURFACE DETAILS
SUPPLY ISOMETRIC
SCALE: N.T.S.
PLUMBING NOTE
1. ALL PLUMBING WORK FOR THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT INDIANA PLUMBING CODE (IPC) AND ALL APPLICABLE CODES, ORDINANCES, REGULATIONS, AND REQUIREMENTS OF THE INDIANA DEPARTMENT OF HOMELAND SECURITY DIVISION OF FIRE AND BUILDING SAFETY AND OTHER LOCAL CODES AND ORDINANCES COVERING THESE INSTALLATIONS. PLUMBING CONTRACTOR TO PROVIDE COMPLETE SYSTEM.
2. COMPLY WITH APPLICABLE PLUMBING CODES AND STANDARDS PERTAINING TO MATERIALS, PRODUCTS AND INSTALLATION OF POTABLE WATER AND SANITARY SEWAGE SYSTEMS.
3. SUBMIT MANUFACTURER'S TECHNICAL PRODUCT DATA, FIXTURE CUTS, INSTALLATION INSTRUCTIONS, ROUGH-IN DIMENSIONS AND MAINTENANCE DATA FOR EACH COMPONENT OF EACH PLUMBING SYSTEM.
4. PROVIDE MATERIALS OF SIZES, RATINGS AND CHARACTERISTICS INDICATED. REFERENCED MATERIALS INDICATE STYLE AND QUALITY DESIRED. CONTACT ENGINEER PRIOR TO SUBMITTAL OF ANY OTHER MANUFACTURER FOR PRELIMINARY APPROVAL. PROVIDE PROPER QUANTITY OF PIPING AND EQUIPMENT AS REQUIRED FOR COMPLETE INSTALLATION OF EACH PLUMBING SYSTEM.
5. IDENTIFY EACH PLUMBING SYSTEM'S COMPONENTS WITH MATERIALS AND DESIGNATIONS AS DIRECTED BY OWNER.
6. INSTALL EACH PLUMBING SYSTEM IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS, RECOGNIZED INDUSTRY PRACTICES AND MANUFACTURERS RECOMMENDATIONS. ROUGH-IN AND FINAL CONNECTION OF OWNER FURNISHED EQUIPMENT IS BY OTHERS. MECHANICAL CONTRACTOR, INSTALLATION OF OWNER FURNISHED EQUIPMENT IS BY OTHERS.
7. TEST EACH PLUMBING SYSTEM IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. STERILIZE POTABLE WATER SYSTEMS.
8. GUARANTEE ALL EQUIPMENT, MATERIALS AND WORKMANSHIP AS PER AGREEMENT. (1 YEAR FROM SUBSTANTIAL COMPLETION)
9. INSTRUCT OPERATING PERSONNEL IN PROPER OPERATION AND MAINTENANCE OF EACH PLUMBING SYSTEM. PROVIDE THREE COMPLETE SETS OF OPERATION AND MAINTENANCE MANUALS TO OWNER AT CLOSE OF PROJECT. PROVIDE ONE SET OF ACCURATE "AS BUILT" DRAWINGS TO OWNER AT CLOSE OF PROJECT.
BRINER BUILDING INC.
7611 N 16th St.
Burton, IN 46774
RECEIVED
Date
Prem
Signed
OVERALL PLUMBING PLAN
SCALE: 1" = 30'-0"
Process Water Waste Line
Sanitary Sewer Line
Combined Sanitary and Process Line
BRINER Building, Inc.
OVERALL PLUMBING PLAN
New Facility
Novae Corporation
Markle, Indiana 46770
Proj. Mngr. BAB
Date 03/23/21
Drawn By CMC
Checked By WCK
CAD No. 20-1-3PE
Comm. No. 2021-31
Sheet No. P1.1



TITLE TIER II SITE PLAN FID #111763	LEGEND ① ARGON STORAGE LOCATION ② MIXED METAL ALLOYS STORAGE LOCATION ③ HYDRAULIC OIL	PROJECT 2015579	
LOCATION Nove Corporation 6 Novae Parkway Markle, Huntington County, Indiana		SCALE 1"= 100'	DATE 2/14/18
		DRAWN dn	CHECKED ke
		FILE 2015579	FIGURE 2


Structural Steel Receiving/Staging
Fabricate Trailer Frames
Blast Room Shot Cleaning
Power Wash Frames
Dry Off Oven
Powder Coat Trailer Frames
Cure Oven
Assemble Finished Frames
Final Inspection and Testing
To Customers
Axles, Wheels and Related
Novae Corporation
Markle, Indiana
SCALE: None
APPROVED BY
DRAWN BY
DATE: 4/29/2014
PROCESS FLOW DIAGRAM - UTILITY TRAILER FRAME MANUFACTURING
DRAWING NUMBER
GES 0414N

NOVAE CORPORATION
Markle 2, Indiana Process & Water Flow Diagram



Restrooms include: Sinks, Toilets, and Urinals

Reference Item # 30 pg 3

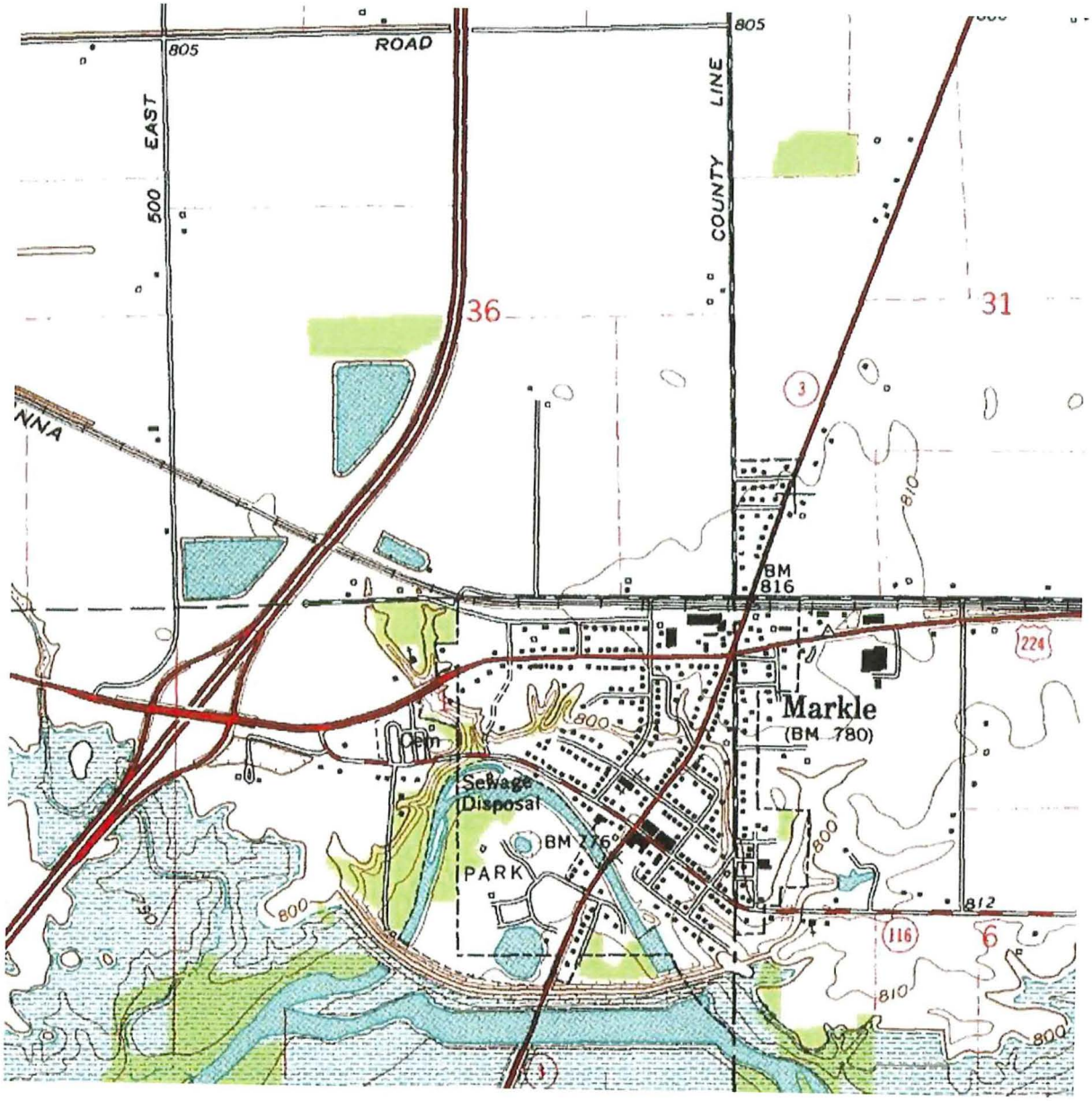
SURE-TRAC

SMART - CONFIDENT - PROVEN

THE TRAILER BOOK

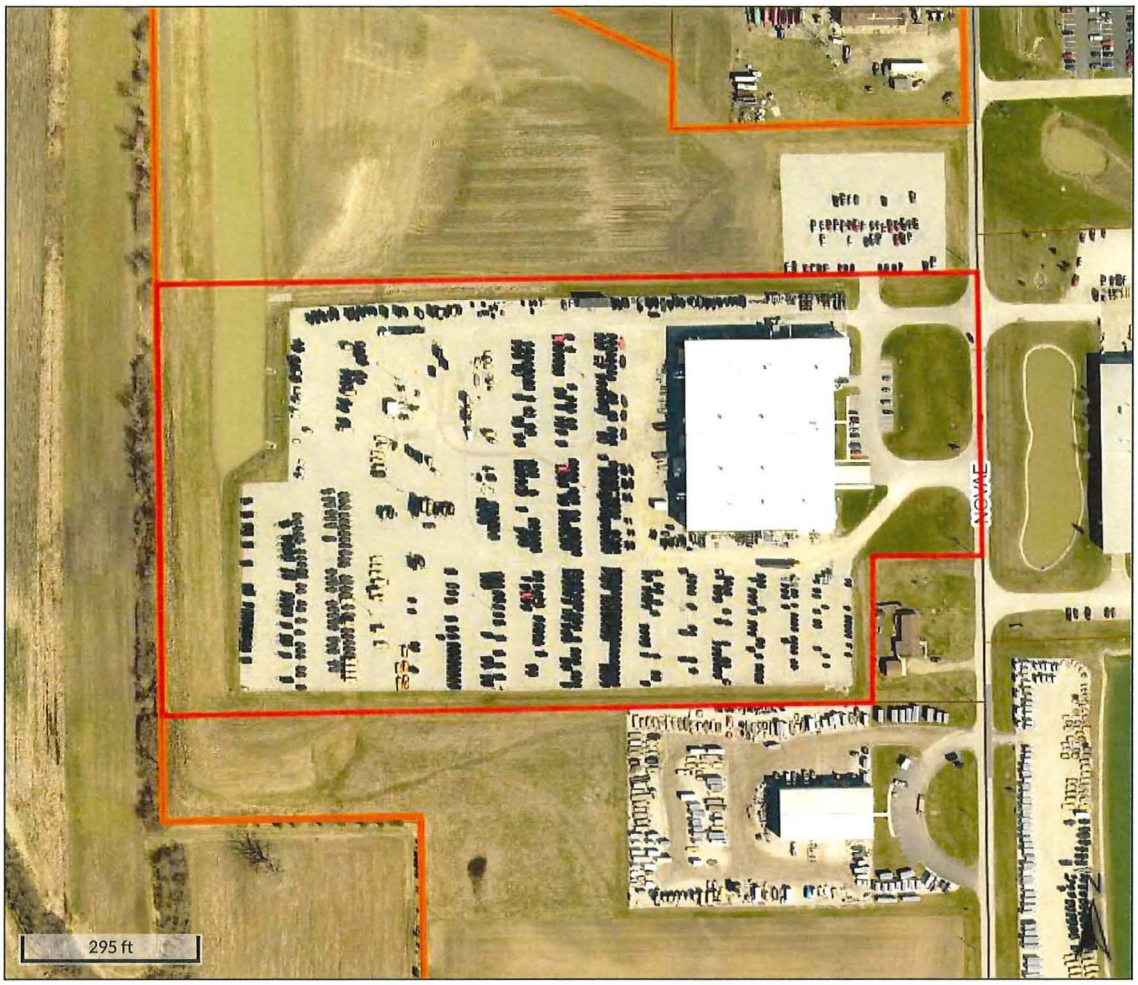
PROFESSIONAL OPEN & ENCLOSED TRAILERS

Topographic Map of Markle, Indiana

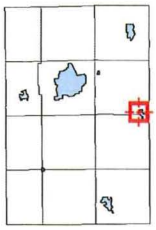


USGS Map Name: Markle, IN Map MRC: 40085G3
Map Center: N40.83186° W85.34172° Datum: NAD27 Zoom: 4m/pixel

Beacon™ Huntington County, IN



Overview



Legend

- City/Town Limits
- Parcels
- Railroad

Road Centerlines

- Private Drives
- County Roads
- Municpal Roads
- State Routes
- US Route
- Interstate

Parcel ID	35-06-35-400-014.302-022	**Alternate ID**	350635400014300022	**Owner Address**	NC2 LLC
Sec/Twp/Rng	--	**Class**	Light mfg & assembly		1 Novae
Property Address	6 NOVAE PKWY MARKLE	**Acreage**	20		Markle, IN 46770
District	MARKLE UNION R E				
Brief Tax Description	PT SE SEC 35 20.00 ac (Note: Not to be used on legal documents)				

Date created: 11/7/2018
Last Data Uploaded: 11/6/2018 7:48:14 PM

Developed by Schneider GEOSPATIAL

CF ENVIRONMENTAL

3711 Vanguard Dr
Suite D
Fort Wayne, IN 46809
ph: 260-449-9299
fax: 260-918-7128

Report of Analysis

Name: Novae LLC
6 Novae P kwy
Markle, IN 46770

Site: Outfall 001

Sample ID#: 077769
Sample Type: Wastewater
Sample Location: composite
Sampler: M F
Report Date: 12/18/2023

Sample Date: 12/5/2023 10:45 AM
Receipt Date: 12/6/2023 5:30 PM

Analysis	Sample Result	Units	Method	LOQ	Analysis Date	Analyst
Metals						
Cadmium, Total	<0.001	mg/L	EPA 200.7	0.001	12/13/23 3:00 PM	CSF
Chromium, Total	0.010	mg/L	EPA 200.7	0.004	12/13/23 3:00 PM	CSF
Copper, Total	0.0188	mg/L	EPA 200.7	0.002	12/13/23 3:00 PM	CSF
Lead, Total	<0.005	mg/L	EPA 200.7	0.005	12/13/23 3:00 PM	CSF
Nickel, Total	<0.01	mg/L	EPA 200.7	0.01	12/13/23 3:00 PM	CSF
Silver, Total	<0.004	mg/L	EPA 200.7	0.004	12/13/23 3:00 PM	CSF
Zinc, Total	0.0138	mg/L	EPA 200.7	0.003	12/13/23 3:00 PM	CSF

WASTESTREAM
Analytical
REPORT

Analysis Approved By: Cindi Fuhrman
Cindi Fuhrman, General Manager

Indiana Chemistry Certified Lab ID: C-02-05
Indiana Bacteriological Certified Lab ID: M-02-06

CF ENVIRONMENTAL

3711 Vanguard Dr
Suite D
Fort Wayne, IN 46809
ph: 260-449-9299
fax: 260-918-7128

Report of Analysis

Name: Novae LLC
6 Novae Pkwy
Markle, IN 46770

Site: Outfall 001

Sample ID#: 077770
Sample Type: Wastewater
Sample Location: grab
Sampler: M F
Report Date: 12/28/2023

Sample Date: 12/6/2023 4:30 PM
Receipt Date: 12/6/2023 5:30 PM

Analysis	Sample Result	Units	Method	LOQ	Analysis Date	Analyst
Conventional						
Cyanide, Total	<0.002	mg/L	SM4500CN C+E-16	0.002	12/11/23 3:00 PM	JPL

Comments: The TTO tests were subcontracted to Alloway Labs. The calculated TTO concentration is: <0.010 mg/L

Analysis Approved By: Cindi Fuhrman

Cindi Fuhrman, General Manager

Indiana Chemistry Certified Lab ID: C-02-05
Indiana Bacteriological Certified Lab ID: M-02-06

Alloway
Your Resource for Defensible Data

ANALYTICAL REPORT

Lab Project #	2345210
Received:	12/7/2023
Reported:	12/21/2023
Date/Time Sampled:	12/06/2023 16:30
Sampled By:	None Provided
Sampled Matrix:	Wastewater
Containers:	5

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Project Name: **Novae**

Sample ID: **Outfall 001**

Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
Method of Analysis: EPA 608.3								
Aldrin	<0.25	<0.06	ug/L	0.25	0.06	12/07/2023	12/09/2023	AOP
Alpha-BHC	<0.25	<0.06	ug/L	0.25	0.06	12/07/2023	12/09/2023	AOP
Beta-BHC	<0.25	<0.03	ug/L	0.25	0.03	12/07/2023	12/09/2023	AOP
Delta-BHC	<0.25	<0.03	ug/L	0.25	0.03	12/07/2023	12/09/2023	AOP
Gamma-BHC (Lindane)	<0.25	<0.07	ug/L	0.25	0.07	12/07/2023	12/09/2023	AOP
Chlordane	<0.50	<0.05	ug/L	0.50	0.05	12/07/2023	12/09/2023	AOP
4,4'-DDT	<0.50	<0.03	ug/L	0.50	0.03	12/07/2023	12/09/2023	AOP
4,4'-DDE	<0.50	<0.02	ug/L	0.50	0.02	12/07/2023	12/09/2023	AOP
4,4'-DDD	<0.50	<0.02	ug/L	0.50	0.02	12/07/2023	12/09/2023	AOP
Dieldrin	<0.50	<0.02	ug/L	0.50	0.02	12/07/2023	12/09/2023	AOP
Alpha Endosulfan	<0.25	<0.03	ug/L	0.25	0.03	12/07/2023	12/09/2023	AOP
Beta Endosulfan	<0.50	<0.02	ug/L	0.50	0.02	12/07/2023	12/09/2023	AOP
Endosulfan Sulfate	<0.50	<0.02	ug/L	0.50	0.02	12/07/2023	12/09/2023	AOP
Endrin	<0.50	<0.02	ug/L	0.50	0.02	12/07/2023	12/09/2023	AOP
Endrin Aldehyde	<0.50	<0.04	ug/L	0.50	0.04	12/07/2023	12/09/2023	AOP
Heptachlor	<0.25	<0.06	ug/L	0.25	0.06	12/07/2023	12/09/2023	AOP
Heptachlor Epoxide	<0.25	<0.03	ug/L	0.25	0.03	12/07/2023	12/09/2023	AOP
PCB-1016	<5.00	<1.78	ug/L	5.00	1.78	12/07/2023	12/09/2023	AOP

Analysis Certified By: [signature]

ANALYTICAL REPORT

Lab Project #	2345210
Received:	12/7/2023
Reported:	12/21/2023
Date/Time Sampled:	12/06/2023 16:30
Sampled By:	None Provided
Sampled Matrix:	Wastewater
Containers:	5

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Project Name: **Novae**

Sample ID: **Outfall 001**

Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
PCB-1221	<5.00	<0.68	ug/L	5.00	0.68	12/07/2023	12/09/2023	AOP
PCB-1232	<5.00	<1.76	ug/L	5.00	1.76	12/07/2023	12/09/2023	AOP
PCB-1242	<5.00	<0.68	ug/L	5.00	0.68	12/07/2023	12/09/2023	AOP
PCB-1248	<5.00	<1.01	ug/L	5.00	1.01	12/07/2023	12/09/2023	AOP
PCB-1254	<5.00	<0.38	ug/L	5.00	0.38	12/07/2023	12/09/2023	AOP
PCB-1260	<5.00	<1.16	ug/L	5.00	1.16	12/07/2023	12/09/2023	AOP
Toxaphene	<12.5	<0.62	ug/L	12.5	0.62	12/07/2023	12/09/2023	AOP
(Surrogate) TCMX	135.7 (23.6 - 140.1)		%			12/07/2023	12/09/2023	AOP
(Surrogate) DCB	80.6 (37.1 - 137.7)		%			12/07/2023	12/09/2023	AOP
Method of Analysis: EPA 624.1								
Acrolein	<50.0	<4.66	ug/L	50.0	4.66		12/11/2023	MS
Acrylonitrile	<50.0	<0.25	ug/L	50.0	0.25		12/11/2023	MS
Benzene	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
Bromodichloromethane (Dichlorobromomethane)	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
Bromoform	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
Carbon Tetrachloride	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
Chlorobenzene	<5.0	<0.5	ug/L	5.0	0.5		12/11/2023	MS
Chloroethane	<10.0	<0.43	ug/L	10.0	0.43		12/11/2023	MS

Analysis Certified By: Megan Y. Hurd

ANALYTICAL REPORT

Lab Project #	2345210
Received:	12/7/2023
Reported:	12/21/2023
Date/Time Sampled:	12/06/2023 16:30
Sampled By:	None Provided
Sampled Matrix:	Wastewater
Containers:	5

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Project Name: **Novae**

Sample ID: **Outfall 001**

Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
2-Chloroethyl Vinyl Ether	<10	<0.4	ug/L	10	0.4		12/11/2023	MS
Chloroform	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
Dibromochloromethane (Chlorodibromomethane)	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
1,2-Dichlorobenzene (o-Dichlorobenzene)	<5.0	<0.5	ug/L	5.0	0.5		12/11/2023	MS
1,3-Dichlorobenzene	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
1,4-Dichlorobenzene (p-Dichlorobenzene)	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
Dichlorodifluoromethane	<10	<0.4	ug/L	10	0.4		12/11/2023	MS
1,1-Dichloroethane	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
1,2-Dichloroethane	<5.0	<0.2	ug/L	5.0	0.2		12/11/2023	MS
1,1-Dichloroethene (1,1-dichloroethylene)	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
trans-1,2-Dichloroethene (1,2-dichloroethylene)	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
1,2-Dichloropropane	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
cis-1,3-Dichloropropene (1,3-dichloropropylene)	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
trans-1,3-Dichloropropene (1,3-dichloropropylene)	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
Ethylbenzene	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
Methyl Bromide (Bromomethane)	<10.0	<0.35	ug/L	10.0	0.35		12/11/2023	MS
Methyl Chloride (Chloromethane)	<10	<0.4	ug/L	10	0.4		12/11/2023	MS

Analysis Certified By: Meagan Y. Elwell

ANALYTICAL REPORT

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Lab Project # 2345210
Received: 12/7/2023
Reported: 12/21/2023
Date/Time Sampled: 12/06/2023 16:30
Sampled By: None Provided
Sampled Matrix: Wastewater
Containers: 5

Project Name: **Novae**

Sample ID: **Outfall 001**
Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
Methylene Chloride	<10	<0.5	ug/L	10	0.5		12/11/2023	MS
Tetrachloroethylene	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
1,1,2,2-Tetrachloroethane	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
Toluene	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
1,1,1-Trichloroethane	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
1,1,2-Trichloroethane	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
Trichloroethylene (Trichloroethene)	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
Trichlorofluoromethane	<10	<0.3	ug/L	10	0.3		12/11/2023	MS
Vinyl Chloride	<10	<0.4	ug/L	10	0.4		12/11/2023	MS
m,p-Xylene	<5.0	<0.4	ug/L	5.0	0.4		12/11/2023	MS
o-Xylene	<5.0	<0.3	ug/L	5.0	0.3		12/11/2023	MS
(Surrogate) 1,2-Dichloroethane d4	83.9 (79.1-128.4)		%				12/11/2023	MS
(Surrogate) Toluene d8	74.4 (63.2-122.7)		%				12/11/2023	MS
(Surrogate) 4-Bromofluorobenzene	87.8 (60.4-132.4)		%				12/11/2023	MS
Method of Analysis: EPA 625.1								
Acenaphthene	<10.0	<1.12	ug/L	10.0	1.12	12/11/2023	12/11/2023	JMT
Acenaphthylene	<10.0	<1.1	ug/L	10.0	1.1	12/11/2023	12/11/2023	JMT
Anthracene	<10.0	<0.98	ug/L	10.0	0.98	12/11/2023	12/11/2023	JMT

Analysis Certified By: Meggan M. Hurd

ANALYTICAL REPORT

Lab Project #	2345210
Received:	12/7/2023
Reported:	12/21/2023
Date/Time Sampled:	12/06/2023 16:30
Sampled By:	None Provided
Sampled Matrix:	Wastewater
Containers:	5

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Project Name: **Novae**

Sample ID: **Outfall 001**

Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
Benzo(a)anthracene	<10.0	<1.05	ug/L	10.0	1.05	12/11/2023	12/11/2023	JMT
Benzidine	<50.0	<2.65	ug/L	50.0	2.65	12/11/2023	12/11/2023	JMT
Benzo(b)fluoranthene (3,4-benzofluoranthene)	<10.0	<1.59	ug/L	10.0	1.59	12/11/2023	12/11/2023	JMT
Benzo(k)fluoranthene	<10.0	<0.93	ug/L	10.0	0.93	12/11/2023	12/11/2023	JMT
Benzo(g,h,i)perylene	<10.0	<1.42	ug/L	10.0	1.42	12/11/2023	12/11/2023	JMT
Benzo(a)pyrene	<10.0	<0.89	ug/L	10.0	0.89	12/11/2023	12/11/2023	JMT
bis(2-chloroethoxy)Methane	<10.0	<0.99	ug/L	10.0	0.99	12/11/2023	12/11/2023	JMT
bis(2-chloroethyl)Ether	<10.0	<0.82	ug/L	10.0	0.82	12/11/2023	12/11/2023	JMT
bis(2-chloroisopropyl)Ether	<10.0	<0.78	ug/L	10.0	0.78	12/11/2023	12/11/2023	JMT
bis(2-ethylhexyl)Phthalate (DEHP)	<5.0	<1.6	ug/L	5.0	1.6	12/11/2023	12/11/2023	JMT
4-Bromophenyl phenyl ether	<10.0	<0.68	ug/L	10.0	0.68	12/11/2023	12/11/2023	JMT
Butyl benzyl phthalate	<10.0	<1.63	ug/L	10.0	1.63	12/11/2023	12/11/2023	JMT
2-Chloronaphthalene	<10.0	<0.89	ug/L	10.0	0.89	12/11/2023	12/11/2023	JMT
4-Chlorophenyl phenyl ether	<10.0	<0.86	ug/L	10.0	0.86	12/11/2023	12/11/2023	JMT
Chrysene	<10.0	<1.44	ug/L	10.0	1.44	12/11/2023	12/11/2023	JMT
Dibenzo(a,h)anthracene	<10.0	<1.11	ug/L	10.0	1.11	12/11/2023	12/11/2023	JMT
Di-n-butyl phthalate	<10.0	<0.89	ug/L	10.0	0.89	12/11/2023	12/11/2023	JMT
3,3'-Dichlorobenzidine	<20.0	<1.96	ug/L	20.0	1.96	12/11/2023	12/11/2023	JMT
Diethyl phthalate	<10.0	<0.82	ug/L	10.0	0.82	12/11/2023	12/11/2023	JMT

Analysis Certified By: Meagan M Harrell

ANALYTICAL REPORT

Lab Project #	2345210
Received:	12/7/2023
Reported:	12/21/2023
Date/Time Sampled:	12/06/2023 16:30
Sampled By:	None Provided
Sampled Matrix:	Wastewater
Containers:	5

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Project Name: **Novae**

Sample ID: **Outfall 001**
Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
Dimethyl phthalate	<10.0	<1.2	ug/L	10.0	1.2	12/11/2023	12/11/2023	JMT
2,4-Dinitrotoluene	<20.0	<1.17	ug/L	20.0	1.17	12/11/2023	12/11/2023	JMT
2,6-Dinitrotoluene	<10.0	<1.05	ug/L	10.0	1.05	12/11/2023	12/11/2023	JMT
Di-n-octyl phthalate	<10.0	<1.83	ug/L	10.0	1.83	12/11/2023	12/11/2023	JMT
1,2-Diphenylhydrazine	<10.0	<1.34	ug/L	10.0	1.34	12/11/2023	12/11/2023	JMT
Fluoranthene	<10.0	<0.89	ug/L	10.0	0.89	12/11/2023	12/11/2023	JMT
Fluorene	<10.0	<1.01	ug/L	10.0	1.01	12/11/2023	12/11/2023	JMT
Hexachlorobenzene	<10.0	<1.58	ug/L	10.0	1.58	12/11/2023	12/11/2023	JMT
Hexachlorobutadiene	<10.0	<0.51	ug/L	10.0	0.51	12/11/2023	12/11/2023	JMT
Hexachlorocyclopentadiene	<10.0	<0.86	ug/L	10.0	0.86	12/11/2023	12/11/2023	JMT
Hexachloroethane	<10.0	<0.93	ug/L	10.0	0.93	12/11/2023	12/11/2023	JMT
Indeno(1,2,3-cd)pyrene	<20.0	<1.16	ug/L	20.0	1.16	12/11/2023	12/11/2023	JMT
Isophorone	<10.0	<0.77	ug/L	10.0	0.77	12/11/2023	12/11/2023	JMT
Naphthalene	<10.0	<0.73	ug/L	10.0	0.73	12/11/2023	12/11/2023	JMT
Nitrobenzene	<10.0	<0.86	ug/L	10.0	0.86	12/11/2023	12/11/2023	JMT
N-Nitrosodimethylamine	<10.0	<1.07	ug/L	10.0	1.07	12/11/2023	12/11/2023	JMT
N-Nitrosodiphenylamine	<10.0	<1.07	ug/L	10.0	1.07	12/11/2023	12/11/2023	JMT
N-Nitrosodi-n-propylamine	<10.0	<1.05	ug/L	10.0	1.05	12/11/2023	12/11/2023	JMT
Phenanthrene	<10.0	<1.04	ug/L	10.0	1.04	12/11/2023	12/11/2023	JMT

Analysis Certified By: Megan M. Ward

ANALYTICAL REPORT

Lab Project # 2345210
Received: 12/7/2023
Reported: 12/21/2023

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Date/Time Sampled: 12/06/2023 16:30
Sampled By: None Provided
Sampled Matrix: Wastewater
Containers: 5

Project Name: **Novae**

Sample ID: **Outfall 001**
Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
Pyrene	<10.0	<1.09	ug/L	10.0	1.09	12/11/2023	12/11/2023	JMT
1,2,4-Trichlorobenzene	<10.0	<0.73	ug/L	10.0	0.73	12/11/2023	12/11/2023	JMT
4-Chloro-3-methylphenol (p-chloro-m-cresol)	<50.0	<3.42	ug/L	50.0	3.42	12/11/2023	12/11/2023	JMT
2-Chlorophenol	<10.0	<2.38	ug/L	10.0	2.38	12/11/2023	12/11/2023	JMT
2,4-Dichlorophenol	<10.0	<2.55	ug/L	10.0	2.55	12/11/2023	12/11/2023	JMT
2,4-Dimethylphenol	<10.0	<2.12	ug/L	10.0	2.12	12/11/2023	12/11/2023	JMT
2,4-Dinitrophenol	<50.0	<8.24	ug/L	50.0	8.24	12/11/2023	12/11/2023	JMT
2-Methyl-4,6-dinitrophenol (4,6-dinitro-o-cresol)	<50.0	<9.74	ug/L	50.0	9.74	12/11/2023	12/11/2023	JMT
2-Nitrophenol	<10.0	<2.33	ug/L	10.0	2.33	12/11/2023	12/11/2023	JMT
4-Nitrophenol	<50.0	<10.7	ug/L	50.0	10.7	12/11/2023	12/11/2023	JMT
Pentachlorophenol	<50.0	<8.05	ug/L	50.0	8.05	12/11/2023	12/11/2023	JMT
Phenol	<10.0	3.09	ug/L	10.0	0.84	12/11/2023	12/11/2023	JMT
2,4,6-Trichlorophenol	<20.0	<2.8	ug/L	20.0	2.8	12/11/2023	12/11/2023	JMT
(Surrogate) 2-Fluorophenol	41.4 (7.9-46.1)		%			12/11/2023	12/11/2023	JMT
(Surrogate) Phenol d6	31.2 (4.9-37.4)		%			12/11/2023	12/11/2023	JMT
(Surrogate) Nitrobenzene d5	44.8 (15.0-314)		%			12/11/2023	12/11/2023	JMT
(Surrogate) 2-Fluorobiphenyl	36.2 (18.4-63.2)		%			12/11/2023	12/11/2023	JMT

Analysis Certified By: Megan M. Yahrel

ANALYTICAL REPORT

Lab Project #	2345210
Received:	12/7/2023
Reported:	12/21/2023
Date/Time Sampled:	12/06/2023 16:30
Sampled By:	None Provided
Sampled Matrix:	Wastewater
Containers:	5

CF Environmental Laboratory
Attn: Cindi Fuhrman
3711 Vanguard Dr. Suite D
Fort Wayne, IN 46809

Project Name: **Novae**

Sample ID: **Outfall 001**

Lab Sample # **2345210-01**

Analyte	Results	Estimated Value	Units	PQL	MDL	Extraction Date	Analysis Date	Analyst
(Surrogate) 2,4,6-Tribromophenol	66.2 (21.9-98.9)		%			12/11/2023	12/11/2023	JMT
(Surrogate) p-Terphenyl-d14	33.1 (20.4-83.5)		%			12/11/2023	12/11/2023	JMT
Method of Analysis: EPA 625.1 SIM								
Dioxin Screen	* Non Detect		Y/N			12/11/2023	12/12/2023	JMT

Analysis Certified By: Meggan M. Wheel

Alloway
Your Resource for Defensible Data

Chain of Custody Record

This is a legal document that authorizes Alloway to perform testing on samples submitted under this agreement.

Project: 2345210

Report To:	Cindi Fuhrman
Name:	CF Environmental Laboratory
Company:	3711 Vanguard Dr., Ste D
Address:	Fort Wayne, IN 46809
Phone #:	260-449-9299
Fax #:	
E-mail:	cindi@cf-environmental.com
PO#:	
Project Name	Novae
Sampler (Print)	(Signature)

Invoice To (If Different):
Name:
Company:
Address:

Notes/Comments:
Reporting limits to 10 ug/L.

Turnaround: *(Rush Charges May Apply)*
Next Day ☐ 3 Working Days ☐ Routine ☒
2 Working Days ☐ 5 Working Days ☐

	Customer Sample ID / Sample Location	Sample Date	Sample Time	Composite	Grab	Matrix Code	Number of Containers	Preservation Code #	Analysis Required	Alloway LIMS # For Lab Use Only
1	Outfall 001	12/6/23	1130		X	WW	2	1	608, 625 + Dioxin Screen	234521 0 01
2		12/6/23	↓		X	WW	3	4	624	↓
3										
4										
5										
6										
7										
8										

	Relinquished by:	Received by:	Date	Time
1				
2				
3				
4				
5				
6				

Method of Delivery:
UPS ☐
Fed Ex ☐
Client ☒
Alloway Pick Up ☐
Alloway Sampling ☐
Other ☐

Matrix Codes:
ww - wastewater
gw - groundwater
dw - drinking water
sw - surface water
w - water
oil - oil
s - solid
sg - sludge
l - leachate
a - acid
p - product
o - other

Preservation Codes:
1 - None
2 - HNO_3
3 - H_2SO_4
4 - HCl
5 - NaOH
6 - NaOH & Zinc Acetate
7 - Sodium Thiosulfate
8 - Ascorbic Acid
9 - Maleic Acid
10 - EDA
11 - Ammonium Chloride
12 - $(NH_4)_2SO_4$ & NH_4OH
13 - Zinc Acetate
14 - Sodium Sulfite
15 - Potassium Dihydrogen Citrate
16 - Sodium Sulfite/Sodium Bisulfate

Sample Receiving *(For Lab Use Only)*
Ice Present? Y ☒ N ☐
Proper Preservation? Y ☒ N ☐
Container Temperature: 4.3°C

Received for Laboratory By: (circle one): Mansfield (Lima) Marion
(Signature) M Laplace 12/7/23 1102

Transported to: Lima Marion By: _____ Received By: _____ Date: _____ Time: _____

Transported to: Lima Marion By: _____ Received By: _____ Date: _____ Time: _____

CF Environmental Laboratory LLC

SAMPLE CHAIN OF CUSTODY FORM

Company Name:	Novae Corporation
Contact:	Randy Hinojosa
Address:	6 Novae Parkway Markle, IN 46770
Phone:	260-758-9838
Fax:	260-758-9838
Email:	

If billing address is different please list in comments section

Prior approval from the lab is needed for Rush analysis

PO Number:

Project Name: Industrial Discharge Permit No. INP000640

PWSID Number:

Quote Number: 00154

Samplers Signature:

Standard Turn Time [X] Rush [ ]

Standard turn time is normally 6-10 business days

Preservatives: None, HNO_3 (nitric acid), HCl (hydrochloric acid) H_2SO_4 (sulfuric acid), NaT (sodium thiosulfate), ZnOAc (zinc acetate) NaOH (sodium hydroxide)

Sample Matrix Codes

AQ = Aqueous; GW= Ground Water; DI = Deionized Water; O= Oil; DW = Drinking Water; L = Liquid (non-aqueous); S = Solid; RGW = reagent grade water; SL = Sludge; SW = Storm Water; WW = Wastewater; SO = Soil

Container Type: P=plastic, G=glass, V=vial, O=other

COLLECTION DATE	COLLECTION TIME	SAMPLE LOCATION DESCRIPTION	SAMPLE PRESERVATIVE	SAMPLE TYPE Grab	SAMPLE TYPE Comp	SAMPLE TYPE Matrix	CONTAINER Type	CONTAINER Quantity	ANALYTICAL TESTS REQUESTED	CF Environmental workorder number
		2/month sampling and testing								
12-4-23 12-5-23	1045 1040	Outfall 001	HNO3		X	WW	P	1	Cd, Cr, Cu, Ni, Pb, Zn, Ag	077769
12-6-23	1635	Outfall 001	NaOH	X		WW	P	1	Total Cyanide	077770
		2/year (June and December)								
12-6-23	1630	Outfall 001	NONE	X		WW	G	2	TTO (608, 625) - outside lab	
"	"	Outfall 001	HCl	X		WW	V	3	TTO (624)	

Relinquished by (signature)	DATE	TIME	Received by (signature)	DATE	TIME
	12-6-23	1730		12/6/23	1730
Relinquished by (signature)	DATE	TIME	Received by (signature)	DATE	TIME
Relinquished by (signature)	DATE	TIME	Received by (signature)	DATE	TIME

Received at lab on ice? Yes No

Temperature Upon Receipt at lab: 1.0 °C

Delivery Method: UPS FED-EX CF ENV USPS Walk-in Other

Field Data:

COMMENTS: The composite sample consists of grab samples of equal volume collected at equal time intervals over the daily discharge period of 24 hours using an automated composite sampler.

3711 Vanguard Dr. Suite D Fort Wayne, IN 46809 Phone: 260-449-9299 Fax:260-918-7128 www.cf-environmental.com

SAFETY DATA SHEET

HOUGHTON®

Revision Date 08-26-2018 SOAP DETERGENT **Version** 6

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code(s) 84546600-M
Product Name HOUGHTO-PREP 5466

Recommended Use Metal finishing
Uses advised against Any other purpose.

Manufacturer, Importer, Supplier

Houghton International Inc.
Madison & Van Buren Aves.
Valley Forge, PA 19482
Telephone: 610-666-4000 FAX: 610-666-1376
Website: www.houghtonintl.com
Customer Service: 888-459-9844

Houghton Canada
915 Meyerside Drive
Mississauga
ON
L5T 1R8

Emergency telephone number

United States of America/Canada : 3E Company - 1-866-519-4752 (Code 333938)

SECTION 2: HAZARDS IDENTIFICATION

Classification

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Workplace Hazardous Materials Information System (WHMIS) 2015

Skin sensitization	Category 1

Label elements

Signal word
WARNING

Hazard statements
May cause an allergic skin reaction

PRODUCT IS SDS FOR CLEANING OF TOOLS

Precautionary Statements

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Precautionary Statements - Response

Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Health	Not Applicable.
Physical	Not Applicable.

Other Information
Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture. Health hazard information is based on its ingredients.

Chemical name	CAS No	Weight-%
Sodium chlorate	7775-09-9	5% - 10%
Phosphoric acid	7664-38-2	1% - 5%
Sodium 3-nitrobenzenesulphonate	127-68-4	1% - 5%

The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

Description of first-aid measures

General advice	Do not get in eyes, on skin, or on clothing. May produce an allergic reaction. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	Move to fresh air.
Skin contact	If symptoms persist, call a physician. Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use.
Eye contact	Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Most important symptoms and effects, both acute and delayed

Main Symptoms	Itching, May cause allergic skin reaction, Rash, Redness

Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically. May cause sensitization of susceptible persons.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment:, Use CO2, dry chemical, or foam, Water spray or fog

Extinguishing media which shall not be used for safety reasons
None

Special hazards arising from the substance or mixture

Special Hazard
Water runoff can cause environmental damage.

Hazardous decomposition products
None under normal use

Advice for firefighters

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Advice for non-emergency personnel Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

Reference to other sections

See Section 8/12/13 for additional information

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions
Keep container tightly closed in a dry and well-ventilated place.

Recommended Shelf Life
Shelf life 12 months.

Incompatible materials
Strong oxidizing agents, Strong acids, Strong bases

Specific end uses

Specific use(s) Metal finishing

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Legend:
(s) - Skin; TWA - Time-Weighted Average; STEL - Short Term Exposure Limit; Ceiling - Ceiling Value; TLV® - Threshold Limit Value; PEL (Permissible Exposure Limit); IDLH (immediately dangerous to life and health); WEEL (Workplace Environmental Exposure Level Guides)

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA WEEL
Phosphoric acid 7664-38-2	TWA: 1 mg/m³ STEL: 3 mg/m³	TWA: 1 mg/m³	IDLH: 1000 mg/m³ TWA: 1 mg/m³ STEL: 3 mg/m³	

OSHA - Occupational Safety and Health Administration of the US Department of Labor
NIOSH - National Institute for Occupational Safety and Health
ACGIH - American Conference of Governmental Industrial Hygienists

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	**Appearance**	clear yellow
Odor	Slight	**Odor threshold**	Not Determined

Property	Values	Remarks
pH	~ 2.6	
Melting point / freezing point	Not Determined	
Boiling point / boiling range	Not Determined	
Flash point	Not Determined	
Evaporation rate	Not Determined	
Flammability (solid, gas)	Not Determined	
Flammability Limit in Air		
Upper flammability limit:	Not Determined	
Lower flammability limit:	Not Determined	
Vapor pressure	Not Determined	
Vapor density	Not Determined	
Relative density	1.18	g/cm3 @15.5°C
Solubility(ies)	Soluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	Not Determined	
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	

Other Information

Viscosity, kinematic (100°C)	Not Determined
Pour Point	Not Determined
VOC Content (ASTM E-1868-10)	Not Determined
VOC content	Not Determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None under normal use conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

None under normal use conditions

Conditions to avoid

Heat.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

None under normal use conditions

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information There is no data available for this product.

Inhalation Based on available data, the classification criteria are not met
Eye contact Based on available data, the classification criteria are not met
Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
Ingestion Based on available data, the classification criteria are not met

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chlorate 7775-09-9	= 1200 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 5.59 mg/l (Rat) 4 h
Phosphoric acid 7664-38-2		= 2730 mg/kg (Rabbit)	> 850 mg/m³ (Rat) 1 h
Sodium 3-nitrobenzenesulphonate 127-68-4	= 11000 mg/kg (Rat)		> 5.1 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met

Sensitization May cause sensitization by skin contact.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium chlorate	1.9: 72 h Nitzschia closterium mg/L EC50	>1000: 96 h Pimephales promelas mg/L LC50 >1000: 96 h Oncorhynchus mykiss mg/L LC50 >1000: 96 h Cyprinodon variegatus mg/L LC50	>1000: 48 h Daphnia magna mg/L EC50
Phosphoric acid		3 - 3.5: 96 h Gambusia affinis mg/L LC50	4.6: 12 h Daphnia magna mg/L EC50

Sodium 3-nitrobenzenesulphonate	500: 72 h Desmodesmus subspicatus mg/L EC50		8665: 48 h Daphnia magna mg/L LC50

Persistence and degradability No information available.

Bioaccumulation

Chemical name	Partition coefficient
Sodium 3-nitrobenzenesulphonate 127-68-4	-2.61

Mobility No information available.

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

DOT Not Regulated

TDG Not Regulated

IATA Not Regulated

IMDG Not Regulated

SECTION 15: REGULATORY INFORMATION

International Inventories

Inventory information may be utilizing alternative CAS#s or exemptions beyond those stated within this document For further information, please contact: ProductStewardship@houghtonintl.com

TSCA	Complies
DSL	All Components are NOT on the Chemical Inventory
AICS	Does not Comply
PICCS	Does not Comply
KECL	Does not Comply
IECSC	Complies
ENCS	Does not Comply
TCSI	Does not Comply
NZIoC	Does not Comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
AICS - Australian Inventory of Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
ENCS - Japan Existing and New Chemical Substances
TCSI - Taiwan National Existing Chemical Inventory
NZIoC - New Zealand Inventory of Chemicals

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
- Respiratory or skin sensitization

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric acid	5000 lb			X

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Phosphoric acid	5000 lb	

U.S. State Regulations

SCAQMD Rule 1144
This product has not been tested for VOC content by the ASTM E-1868-10 method and is not approved for sale or distribution in the SCAQM District of California if the product is used as a metal forming, metal removal, metal treating, metal protection fluid or as a direct-contact lubricant.

California Proposition 65
This product does not contain any Proposition 65 chemicals.

International Regulations

Ozone-depleting substances (ODS)
Not applicable

Persistent Organic Pollutants
Not applicable

Chemicals Subject to Prior Informed Consent (PIC)
Not applicable

Other Information
Not applicable

SECTION 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

STOT SE - Specific target organ systemic toxicity (Single exposure)
STOT RE - Specific target organ systemic toxicity (repeated exposure)
VOC - Volatile organic compounds
NIOSH IDLH: Immediately Dangerous to Life or Health

Revision Date 08-26-2018

Revision Note Not applicable

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

HOUGHTON®

Revision Date 08-26-2018 Zirconium Sealer **Version** 6

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code(s) 89500300-M
Product Name HOUGHTO-SEAL ZG

Recommended Use Metalworking fluid, Surface treatment
Uses advised against Any other purpose.

Manufacturer, Importer, Supplier

Houghton International Inc.
Madison & Van Buren Aves.
Valley Forge, PA 19482
Telephone: 610-666-4000 FAX: 610-666-1376
Website: www.houghtonintl.com
Customer Service: 888-459-9844

Houghton Canada
915 Meyerside Drive
Mississauga
ON
L5T 1R8

Emergency telephone number

United States of America/Canada : 3E Company - 1-866-519-4752 (Code 333938)

SECTION 2: HAZARDS IDENTIFICATION

Classification

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Workplace Hazardous Materials Information System (WHMIS) 2015

Serious eye damage/eye irritation	Category 2A

Label elements

Signal word
WARNING

Hazard statements
Causes serious eye irritation

Precautionary Statements

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Precautionary Statements - Response

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Hazards not otherwise classified (HNOC)

Health	Not Applicable.
Physical	Not Applicable.

Other Information
Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture. Health hazard information is based on its ingredients.

Chemical name	CAS No	Weight-%
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	120313-48-6	1% - 5%
Alcohols, C6-10, ethoxylated propoxylated	68987-81-5	1% - 5%

The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

Description of first-aid measures

General advice	Do not get in eyes, on skin, or on clothing. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Most important symptoms and effects, both acute and delayed

Main Symptoms Eye damage/irritation

Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment:, Use CO2, dry chemical, or foam, Water spray or fog

Extinguishing media which shall not be used for safety reasons
None

Special hazards arising from the substance or mixture

Special Hazard
Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous decomposition products
None under normal use

Advice for firefighters

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Advice for non-emergency personnel Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

Reference to other sections

See Section 8/12/13 for additional information

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Advice on safe handling.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions
Keep container tightly closed in a dry and well-ventilated place.

Recommended Shelf Life
Shelf life 12 months.

Incompatible materials
Strong oxidizing agents, Strong acids, Strong bases

Specific end uses

Specific use(s) Metalworking fluid, Surface treatment

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	**Appearance**	clear water-white
Odor	Mild	**Odor threshold**	Not Determined

Property	Values	Remarks
pH	7.0	
Melting point / freezing point	Not Determined	
Boiling point / boiling range	Not Determined	
Flash point	Not Determined	
Evaporation rate	Not Determined	
Flammability (solid, gas)	Not Determined	
Flammability Limit in Air		
Upper flammability limit:	Not Determined	
Lower flammability limit:	Not Determined	
Vapor pressure	Not Determined	

Vapor density	Not Determined	
Relative density	1.016	g/cm3 @15.5°C
Solubility(ies)	Soluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	Not Determined	
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	

Other Information

Viscosity, kinematic (100°C)	Not Determined	
Pour Point	Not Determined	
VOC Content (ASTM E-1868-10)	Not Determined	
VOC content	8.8 g/L	EPA 24

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None under normal use conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

None under normal use conditions

Conditions to avoid

To avoid thermal decomposition, do not overheat.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

None under normal use conditions

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Based on available data, the classification criteria are not met
Eye contact	Irritating to eyes.
Skin contact	Based on available data, the classification criteria are not met
Ingestion	Based on available data, the classification criteria are not met

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Alcohols, C12-15-branched and linear, ethoxylated propoxylated 120313-48-6	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	
Alcohols, C6-10, ethoxylated	2745 mg/kg (Rat)	>2000 mg/kg (Rabbit)	>50 mg/l (Rat)(4h)

propoxylated 68987-81-5			

Information on toxicological effects

Symptoms Moderately irritating to the eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Irritating to eyes

Sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

Chemical name	Algae/aquatic plants	Fish	Crustacea
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		0.1 - 1: 96 h Brachydanio rerio mg/L LC50	
Alcohols, C6-10, ethoxylated propoxylated			10 - 100: 48 h Daphnia magna mg/L EC50

Persistence and degradability No information available.

Bioaccumulation No information available

Mobility Will likely be mobile in the environment due to its water solubility.

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Observe all label precautions until container is cleaned, reconditioned or destroyed.

SECTION 14: TRANSPORT INFORMATION

DOT Not Regulated

TDG Not Regulated

IATA Not Regulated

IMDG Not Regulated

SECTION 15: REGULATORY INFORMATION

International Inventories

Inventory information may be utilizing alternative CAS#s or exemptions beyond those stated within this document For further information, please contact: ProductStewardship@houghtonintl.com

TSCA	Complies
DSL	All Components are NOT on the Chemical Inventory
AICS	Complies
PICCS	Does not Comply
KECL	Does not Comply
IECSC	Complies
ENCS	Does not Comply
TCSI	Complies
NZIoC	Does not Comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
AICS - Australian Inventory of Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
ENCS - Japan Existing and New Chemical Substances
TCSI - Taiwan National Existing Chemical Inventory
NZIoC - New Zealand Inventory of Chemicals

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
- Serious eye damage/eye irritation

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrogen fluoride	100 lb			X

CERCLA
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this

regulation, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

SCAQMD Rule 1144
This product has not been tested for VOC content by the ASTM E-1868-10 method and is not approved for sale or distribution in the SCAQM District of California if the product is used as a metal forming, metal removal, metal treating, metal protection fluid or as a direct-contact lubricant.

California Proposition 65
WARNING: This product contains a chemical(s) known to the State of California to cause cancer and/or birth defects or other reproductive harm.

Chemical name	CAS No	California Prop. 65
Ethylene oxide	75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
1,4-Dioxane	123-91-1	Carcinogen

International Regulations

Ozone-depleting substances (ODS)
Not applicable

Persistent Organic Pollutants
Not applicable

Chemicals Subject to Prior Informed Consent (PIC)
Not applicable

Other Information
Not applicable

SECTION 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

STOT SE - Specific target organ systemic toxicity (Single exposure)
STOT RE - Specific target organ systemic toxicity (repeated exposure)
VOC - Volatile organic compounds
NIOSH IDLH: Immediately Dangerous to Life or Health

Revision Date 08-26-2018

Revision Note Not applicable

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

An Ovivo Company

SAFETY DATA SHEET

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

29 CFR 1910.1200 (OSHA HazCom 2012)

Revision Date: 01/09/18

Product Name: **859 BS NEU FLOCCULENT**

Supplier: **Alar Water Treatment LLC - An Ovivo Company**
9651 W. 196th Street
Mokena, IL 60448
Phone : 708-479-6100

Emergency Telephone Number : 844-765-3647 606-329-5705

Product Information : 844-765-3647

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910.1200:
Combustible Dust.

GHS LABEL ELEMENT:
Signal Word: Warning
Hazard Statements: May form combustible dust concentrations in air.

OTHER HAZARDS: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE: Mixture.

Hazardous Components

Chemical Name	CAS No.	Classification	Concentration (%)
AMIDE	254504001-5518	Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).	>=10.00 - < 15.00
CITRIC ACID, MONOHYDRATE	5949-29-1	Eye Irrit. 2A; H319	>= 1.50 - < 5.00

4. FIRST AID MEASURES

GENERAL ADVICE: No hazards which require special first aid measures.

IF INHALED:
If breathed in, move person into fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

IN CASE OF SKIN CONTACT:
First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

IN CASE OF EYE CONTACT:
Remove contact lenses. Protect unharmed eye.

IF SWALLOWED:
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
Stomach or intestinal upset (nausea, vomiting, diarrhea)
Irritation (nose, throat, airways)

NOTES TO PHYSICIAN:
No hazards which require special first aid measures.

5. FIREFIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam

SPECIFIC HAZARDS DURING FIREFIGHTING:
Organic dusts at sufficient concentration can form explosive mixtures in air.
Do not allow run-off from firefighting to enter drains or water courses.

HAZARDOUS COMBUSTION PRODUCTS:
Carbon monoxide
Carbon dioxide (CO2)
Nitrogen oxides (NOx)
Acid vapors
Ammonia

SPECIFIC EXTINGUISHING METHODS:
Product is compatible with standard fire-fighting agents.

FURTHER INFORMATION:
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:
In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
Avoid dust formation.
Avoid breathing dust.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations

ENVIRONMENTAL PRECAUTIONS:
Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains, inform respective authorities.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:
Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

ADVICE ON PROTECTION AGAINST FIRE AND EXPLOSION
Take measures to prevent the buildup of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed.

ADVICE ON SAFE HANDLING:
Avoid dust formation.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see Section 8.

CONDITIONS FOR SAFE STORAGE:
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
No smoking.
Electrical installations / working materials must comply with the technological safety standards.

MATERIAL TO AVOID:
No materials to be especially mentioned.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS No.	Value Type (Form of Exposure)	Control Parameters/ Permissible Concentration	Basis
AMIDE	254504001-5518	TWA	10 mg/m3 Total particulate	WEEL

ENGINEERING MEASURES:

Provide appropriate exhaust ventilation at places where dust is formed. General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:

No personal respiratory protective equipment normally required.

EYE PROTECTION:

Safety glasses.

SKIN AND BODY PROTECTION:

Wear as appropriate: Safety shoes.
Wear resistant gloves (consult your safety equipment supplier).

HYGIENE MEASURES:

Avoid breathing dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Powder
COLOR:	White
ODOR:	Mild
ODOR THRESHOLD:	No data available
pH:	ca. 7 (20° C), Concentration: 10 g/l
MELTING POINT/FREEZING POINT:	No data available
BOILING POINT/BOILING RANGE	No data available
FLASH POINT:	Not applicable
EVAPORATION RATE:	No data available
FLAMMABILITY (SOLID, GAS):	No data available
UPPER EXPLOSION LIMIT:	No data available
LOWER EXPLOSION LIMIT:	No data available
VAPOR PRESSURE:	Not applicable
RELATIVE VAPOR DENSITY:	No data available
RELATIVE DENSITY:	No data available
DENSITY:	ca. 0.72 g/cm3
BULK DENSITY:	ca. 600 kg/m3
SOLUBILITY(IES):	
WATER SOLUBILITY:	Soluble
SOLUBILITY IN OTHER SOLVENTS:	No data available
PARTITION COEFFICIENT: n-octanol/water	No data available
THERMAL DECOMPOSITION:	> 150° C
VISCOSITY:	
VISCOSITY, DYNAMIC:	No data available
VISCOSITY, KINEMATIC:	No data available
OXIDIZING PROPERTIES:	No data available

10. STABILITY AND REACTIVITY

REACTIVITY:
No decomposition if stored and applied as directed.

CHEMICAL STABILITY:
Stable under recommended storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:
Product will not undergo hazardous polymerization.

CONDITIONS TO AVOID:
Heat, flames and sparks.
Keep away from heat, flame, sparks, and other ignition sources.

INCOMPATIBLE MATERIALS:
Acids
Chlorine
Metals
Nitrates
Strong bases
Strong oxidizing agents
Strong reducing agents

HAZARDOUS DECOMPOSITION PRODUCTS:
Acid vapors
Carbon monoxide
Carbon dioxide (CO2)
Nitrogen oxides (NOx)
Ammonia

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:
Not classified based on available information.

Product:
Acute oral toxicity: LD 50 (Rat): Estimated > 2,000 mg/kg

Components:
ORGANIC ACID:
Acute oral toxicity: LD 50 (Rat): 3 g/kg

SKIN CORROSION/IRRITATION:
Not classified based on available information.

Components:
AMIDE:
Result: Not irritating to skin.

Components:
ORGANIC ACID:
Result: Slightly irritating to skin.

SERIOUS EYE DAMAGE/EYE IRRITATION:

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury. Product dust may be irritating to eyes, skin and respiratory system.

Components:

AMIDE:

Result: Not irritating to eyes.

Components:

ORGANIC ACID

Result: Severely irritating to eyes.

RESPIRATORY OR SKIN SENSITIZATION:

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

GERM CELL MUTAGENICITY:

Not classified based on available information.

Components:

AMIDE:

Genotoxicity in vitro:	Test Type:	Ames test
	Result:	Negative

CARCINOGENICITY:

Not classified based on available information.

IARC:

No component of this product present at levels greater than or euql to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

REPRODUCTIVE TOXICITY:

Not classified based on available information.

STOT – SINGLE EXPOSURE:

Not classified based on available information.

STOT – REPEATED EXPOSURE:

Not classified based on available information.

ASPIRATION TOXICITY:

Not classified based on available information.

Product:

No aspiration toxicity classification.

FURTHER INFORMATION:

Product:

Remarks: No data available.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Product:

Toxicity to fish: LC 50 (Danio rerio (zebra fish)): > 1 – 10 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:
EC 50 (Water flea (Daphnia magna)): ca. 35 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Components:

AMIDE:

Toxicity to fish: LC 50 (Leuciscus idus (Golden orfe)): > 6,810 mg/l
Exposure time: 96 h

LC 50 (Poecilia reticulata (guppy)): 17,500 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:
EC 50 (Water flea (Daphnia magna)): 3,910 mg/l
Exposure time: 48 h
Method: Static

ORGANIC ACID:

Toxicity to fish: LC 50 (Carassius auratus (goldfish)): 440 – 706 mg/l
Exposure time: 96 h

PERSISTENCE AND DEGRADABILITY:

Product:

Physico-chemical removability:

Remarks: At natural pHs (>6) the product degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.

Components:

AMIDE:

Biodegradability: Remarks: Expected to be ultimately biodegradable.

BIOACCUMULATIVE POTENTIAL:

Components:

AMIDE:

Bioaccumulation:	Species: Green algae (Chlorella fusca vacuolata) Bioconcentration factor (BCF): 11,700 Exposure time: 24 h Concentration: 0.05 mg/l Method: Static
Partition coefficient: n-octanol/water:	logPow: -2.11

MOBILITY IN SOIL:

No data available.

OTHER ADVERSE EFFECTS:

No data available.

Product:

Additional ecological information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:

WASTE FROM RESIDUES

This product should not be allowed to enter drains, water courses or the soil.
Dispose of in accordance with all applicable local, state, and federal regulations.

CONTAMINATED PACKAGING:

Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

INTERNATIONAL TRANSPORT REGULATIONS:

REGULATION:

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT/ LTD. QTY.

U.S. DOT – ROAD:
Not dangerous goods.

U.S. DOT – RAIL:
Not dangerous goods.

U.S. DOT – INLAND WATERWAYS:
Not dangerous goods.

TRANSPORT CANADA – ROAD:
Not dangerous goods.

TRANSPORT CANADA – RAIL:
Not dangerous goods.

TRANSPORT CANADA – INLAND WATERWAYS:
Not dangerous goods.

INTERNATIONAL MARITIME DANGEROUS GOODS:
Not dangerous goods.

INTERNATIONAL AIR TRANSPORT ASSOCIATION – CARGO:
Not dangerous goods.

INTERNATIONAL AIR TRANSPORT ASSOCIATION – PASSENGER:
Not dangerous goods.

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES:
Not dangerous goods.

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

MARINE POLLUTANT: No

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

EPCRA – EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

CERCLA Reportable Quantity

Components	CAS No.	Component RQ (lbs)	Calculated Product RQ (lbs)
DIETHANOLAMINE	111-42-2	100	446428.571429

SARA 311/312 HAZARDS:

Fire hazard.

SARA 313

Component(s) SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65: Proposition 65 warnings are not required for this product based on the results of a risk assessment.

The components of this product are reported in the following inventories:

TSCA:	On TSCA Inventory
DSL:	All components of this product are on the Canadian DSL.
AUSTR:	On the inventory, or in compliance with the inventory.
ENCS:	On the inventory, or in compliance with the inventory.
KECL:	On the inventory, or in compliance with the inventory.
PHIL:	On the inventory, or in compliance with the inventory.
IECSC:	On the inventory, or in compliance with the inventory.

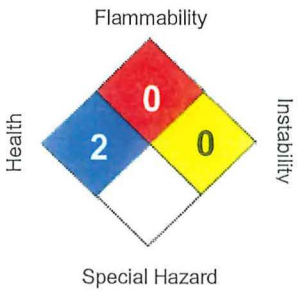
Inventories:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan, ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA).

Registration: Trade Secret

Chemical Name	Identification Number
AMIDE	254504001-5518

16. OTHER INFORMATION

NFPA:	HMIS III:
	

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = Not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

NFPA Flammable and Combustible Liquids Classification:
Not applicable.

Full text of H-Statements referred to under Sections 2 and 3:
H319: Causes serious eye irritation.

List of abbreviations and acronyms that could be, but not necessarily are, used in this Safety Data Sheet:

ACGIH: American Conference of Industrial Hygienists
BEI: Biological Exposure Index
CAS: Chemical Abstracts Service (Division of the American Chemical Society)
CMR: Carcinogenic, Mutagenic or Toxic for Reproduction
FG: Food grade
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
H-statement: Hazard Statement
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"
IMDG: International Maritime Code for Dangerous Goods
ISO: International Organization for Standardization
logPow: octanol-water partition coefficient
LCxx: Lethal Concentration, for xx percent of test population
LDxx: Lethal Dose, for xx percent of test population
ICxx: Inhibitory Concentration for xx of a substance
Ecxx: Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD: Organization for Economic Co-operation and Development
OEL: Occupational Exposure Limit

P-Statement: Precautionary Statement
PBT: Persistent, Bioaccumulative and Toxic
PPE: Personal Protective Equipment

STEL:	Short-Term Exposure Limit
STOT:	Specific Target Organ Toxicity
TLV:	Threshold Limit Value
TWA:	Time-Weighted Average
vPvB:	Very Persistent and Very Bioaccumulative
WEL:	Workplace Exposure Level
CERCLA:	Comprehensive Environmental Response, Compensation, and Liability Act
DOT:	Department of Transportation
FIFRA:	Federal Insecticide, Fungicide and Rodenticide Act
HMIRC:	Hazardous Materials Information Review Commission
HMIS:	Hazardous Materials Identification System
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
OSHA:	Occupational Safety and Health Administration
PMRA:	Health Canada Pest Management Regulatory Agency
RTK:	Right to Know
WHMIS:	Workplace Hazardous Materials Information System

MANUFACTURER DISCLAIMER:

NOTICE: We believe that the information contained on the Safety Data Sheet is accurate. The suggested procedures are based on experience as the date of publication. They are not necessarily either all-inclusive or fully adequate in every circumstance. Also, these suggestions should not be confused with or followed in violation of applicable laws, regulation, rules or insurance requirements.

NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

Alar Water Treatment LLC - An Ovivo Company ("Alar") shall not be responsible for the use of any information, product, method, or apparatus herein presented ("Information"), and you must make your own determination as to its suitability and completeness for your own use, for the protection of the environment, and for health and safety purposes. You assume the entire risk of relying on this Information. In no event shall Alar be responsible for damages of any nature whatsoever resulting from the use of this product or products, or reliance upon this Information. By providing this Information, Alar neither can nor intends to control the method or manner by which you use, handle, store, or transport Alar products. If any materials are mentioned that are not Alar's products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should beobserved. Alar makes no representations or warranties, either expressed or implied of merchantability, fitness for a particular purpose or of any other nature regarding this information, and nothing herein waives any of Alar's conditions of sale. This information could include technical inaccuracies or typographical errors. Alar may make improvements and/or changes in the product(s) and/or the program(s) described in this information at any time. If you have any questions, please contact Alar at 708-479-6100 or e-mail Alar at alarinfo@ovivowater.com.

An Ovivo Company

SAFETY DATA SHEET
ALAR FA-120-F, FA-140-F, FA-200-F, FA-400-F, FA-500-F

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Original Issue Date: November 18, 1985

Date of Preparation: May 21, 2018 **Revision No. 15**

Product Name: FA-120-F, FA-140-F, FA-200-F, FA-400-F, FA-500-F
Chemical Name: Diatomaceous Earth, Flux-Calcined
Chemical Family: Silica
Material Use: Filter Aid
Restriction On Use: None Known

Supplier: **Alar Water Treatment LLC - An Ovivo Company**
9651 W. 196th Street
Mokena, IL 60448
Phone : 708-479-6100

Emergency Phone: 775-824-7600
(Monday – Friday 8 :00 am – 5 :00 pm PST)

2. HAZARDS IDENTIFICATION

OSHA GHS HAZARD CLASSIFICATION:
Carcinogen Category 1A
Specific Target Organ Toxicity, Repeated Exposure Category 1

HAZARDS NOT OTHERWISE CLASSIFIED: None

LABEL ELEMENTS:

DANGER
May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated exposure.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wear eye protection.
If exposed or concerned: Get medical advice.
Dispose of contents in accordance with local, state, and federal regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT IDENTIFICATION	APPROXIMATE CONCENTRATION %	C.A.S. NUMBERS
Diatomaceous Earth, Flux-Calcined (kieselguhr) (Contains 35–50% Crystalline Silica - Cristobalite)	100%	68855-54-9 14464-46-1

4. FIRST AID MEASURES

EYE: Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.

SKIN: Use moisture renewing lotions if dryness occurs.

INGESTION: Drink generous amounts of water to reduce bulk and drying effects.

INHALATION: Remove to fresh air. Blow nose to evacuate dust.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:
Dust may cause abrasive irritation to eyes. Prolonged skin contact may cause dryness. Dust may cause nose, throat, and upper respiratory tract irritation. Prolonged inhalation of respirable dust containing silica may cause a progressive lung disease, silicosis and lung cancer. See Section 11 for additional information.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NECESSARY:
Immediate medical attention is not normally required. If dust irritates the eyes, seek medical attention.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Not applicable, the material is not combustible.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:
Not applicable, the material is not combustible.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:
Not applicable, the material is not combustible.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:
If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles. Do not breathe dust.

ENVIRONMENTAL PRECAUTIONS:
This material is not a significant environmental concern.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:
Vacuum clean spillage or wet sweep. Avoid creating airborne dust. Place in a container for use or disposal.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

Minimize dust generation. Avoid contact with eyes. Do not breathe dust. Repair or dispose of broken bags. Observe all label precautions and warnings. In the U.S., refer to theOSHA Respirable Crystalline Silica Standards; 29CFR1910.1053, 1915, 1053 and 1926.1053 for specific handling and use requirements.

CONDITIONS FOR SAFE STORAGE:

Store in a dry place to maintain packaging integrity and product quality. Do not store near hydrofluoric acid or concentrated caustic solutions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUILDELINES:

Component	OSHA PEL	ACGIH TLV	MSHA PEL	NIOSH REL
Diatomaceous Earth, Flux-Calcined (kieselguhr)	5 mg/m^3 respirable dust 15 mg/m^3 total dust	None Established	5 mg/m^3 respirable dust 15 mg/m^3 total dust	None Established
Crystalline Silica (Cristobalite)	$\frac{1}{2} \times \frac{30\ mg/m^3}{\%\ SiO_2+2}$ total dust $\frac{1}{2} \times \frac{10\ mg/m^3}{\%\ SiO_2+2}$ Respirable dust	0.025 mg/m^3 Respirable dust	$\frac{1}{2} \times \frac{30\ mg/m^3}{\%\ SiO_2+2}$ total dust $\frac{1}{2} \times \frac{10\ mg/m^3}{\%\ SiO_2+2}$ Respirable dust	0.05 mg/m^3 Respirable dust
Crystalline Silica (Cristobalite) (effective 6/23/17 for Construction and 6/23/2018 for General Industry and Oil and Gas	0.05 mg/m3 Respirable dust	0.025 mh/m3 Respirable dust	$\frac{1}{2} \times \frac{30\ mg/m^3}{\%\ SiO_2+2}$ total dust $\frac{1}{2} \times \frac{10\ mg/m^3}{\%\ SiO_2+2}$ Respirable dust	0.05 mg/m3 Respriable dust

ENGINEERING CONTROLS:

Use general or local exhaust ventilation to control dust within recommended exposure limits. Refer to ACGIH publication "Industrial Ventilation" or similar publications for design of ventilation systems.

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Goggles to protect from dust.

SKIN PROTECTION: No special equipment is needed.

RESPIRATORY:

Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL), use a quarter or half-mask respirator with a N95 dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet.

GENERAL HYGIENE: Avoid breathing dust. Avoid contact with eyes.
Wash hands after handling and before eating or drinking.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOR	Light pink to white powder
PHYSICAL STATE	Solid
VAPOR PRESSURE:	Not applicable
BOILING POINT:	Not applicable
FLASH POINT:	Not applicable
FLAMMABILITY LIMITS:	Not applicable
DECOMPOSITION TEMPERATURE:	> 1300° C
AUTOIGNITION TEMPERATURE:	Not applicable
FLAMMABILITY (solid/gas):	Not applicable
ODOR:	Odorless
ODOR THRESHOLD:	Not applicable
VAPOR DENSITY:	Not applicable
MELTING POINT:	> 1300° C
pH (10% SUSPENSION):	10
EVAPORATION RATE:	Not applicable
SPEC. GRAVITY / RELATIVE DENSITY:	2.3
PARTITION COEFFICIENT – n-OCTANOL/WATER	Not applicable
SOLUBILITY – WATER:	< 1%
VISCOSITY:	Not applicable

10. STABILITY AND REACTIVITY

REACTIVITY: Material is not reactive.

CHEMICAL STABILITY: Material is stable.

POSSIBILITY OF HAZARDOUS REACTIONS:
Material is not reactive under normal conditions of handling unless mixed with incompatible substances below.

CONDITIONS TO AVOID: Not applicable.

INCOMPATIBLE MATERIALS:
Hydrofluoric acid and concentrated caustic solutions may react violently with the product.

HAZARDOUS DECOMPOSITION PRODUCTS: Not applicable.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

LIKELY ROUTES OF EXPOSURE: See below.

EYE: May cause irritation (tear formation and redness) if dust gets in eyes.

SKIN: Not absorbed by the skin, but may cause dryness if prolonged exposure.

INGESTION:
Ingestion of small quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.

INHALATION:
Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Acute inhalation of high concentrations of respirable crystalline silica may cause acute silicosis.

CHRONIC EFFECTS:
This product contains crystalline silica. Respirable crystalline silica may cause lung cancer and lung disease (silicosis) if inhaled for prolonged periods. Symptoms of silicosis include wheezing, cough and shortness of breath.

CARGINOGENICITY:
Flux-calcined diatomaceous earth (Kieselguhr) is composed of amorphous and crystalline silica. Respirable crystalline silica (cristobalite) is classified by IARC and NTP as a known human carcinogen. Crystalline silica is only known to cause cancer when inhaled in a respirable form. It is not known to cause cancer by any other route of exposure.

NTP: Respirable crystalline silica (cristobalite) is classified as a known human carcinogen.

IARC: Respirable crystalline silica (cristobalite) is classified as a known human carcinogen.

NUMERICAL MEASURES OF TOXICITY: No data available.

CORROSIVENESS, SENSITIZATION, IRRITANCY: Not applicable.

REPRODUCTIVE TOXICITY: Not available.

TERATOGENICITY, MUTAGENICITY: Not available.

12. ECOLOICAL INFORMATION

ECOTOXICITY:
Diatomaceous earth products have shown some efficacy as a natural insecticide, but otherwise have not demonstrated toxicity in regards to aquatic of terrestrial life.

PERSISTENCE AND DEGRADABILITY: Non-biodegradable, inert.

BIOACCUMULATIVE POTENTIAL: Little potential for bioaccumulation.

MOBILITY IN SOIL: No mobility.

OTHER ADVERSE EFFECTS: None known.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:
If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations or in slurry to sumps. Not considered a hazardous waste under RCRA (4OCFR Part 261).

PACKAGING DISPOSAL:
Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.

14. TRANSPORT INFORMATION

BASIC SHIPPING INFORMATION:
DOT shipping classification 55 (no restrictions). Technical name is "Diatomaceous Earth".

ADDITIONAL INFORMATION:
No special requirements or placarding necessary.

15. REGULATORY INFORMATION

U.S. FEDERAL:

TSCA: Diatomaceous Earth and Cristobalite appear on the EPA TSCA inventory list.

CERCLA: Diatomaceous Earth is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.

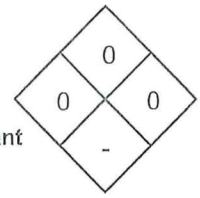
SARA TITLE III: Not listed.

CALIFORNIA PROPOSITION 65:

WARNING: This product can expose you to crystalline silica, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

16. OTHER INFORMATION

NFPA
4 - Extreme
3 - High
2 - Moderate
1 - Slight
0 - Insignificant



HMIS
0* Health
0 Flammabilty
0 Reactivity
E Protective Equipment

ALAR
An Ovivo Company

SAFETY DATA SHEET

1. IDENTIFICATION

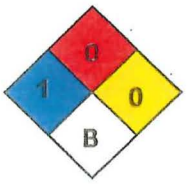
Product/Chemical Name: **ALAR DF-4030** **Prepared: 7/11/19**
Product Description: Water Based Antifoam
Chemical Name: Mixture
Chemical Family: Mixture
Chemical Formula: Mixture
CAS Registry: Mixture
General Use: Antifoam/Defoamer

Supplier: **Alar Wastewater Treatment LLC - An Ovivo Company**
9651 W. 196th Street
Mokena, IL 60448

Phone: 708-479-6100
24-Hour Emergency Number:
1-800-535-5053 (Infotrac)

2. HAZARD(S) IDENTIFICATION

HAZARD CLASSIFICATION: Non Hazardous – Not Regulated
SIGNAL WORD: None
HAZARD STATEMENT: None



HMIS

Health	1
Flammability	0
Reactivity	0
Personal Protection	B

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS No.	% Weight	OSHA PEL

None of the ingredients in this product are known to be hazardous.

4. FIRST AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT:
Eye contact may cause redness and tearing. Do not rub eyes. Wash eyes under slowly running water for at least fifteen minutes, making sure eyes are held wide open and moved slowly in every direction. If irritation persists, consult an ophthalmologist.

SKIN CONTACT:
Remove contaminated clothing and wash affected area thoroughly with mild soap and water. Wash contaminated clothing before reusing.

INGESTION:
Consult a physician and treat symptoms. If bowel obstruction ocurs, immediately see a physician.

INHALATION:
Not an expected route of exposure.

ROUTES OF ENTRY:

INHALATION:	Product may cause irritation of respiratory system.
SKIN:	Product may cause skin irritation.
INGESTION:	Product may cause discomfort.
EYES:	Product may cause redness and tearing.
TARGET ORGANS:	None known
EFFECTS OF OVEREXPOSURE:	
Acute:	Irritation to eyes and skin. Redness and/or burning sensation
Chronic:	None known
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY LONG-TERM EXPOSURE:	
CHRONIC EFFECTS:	None expected
CARCINOGENICITY:	None known
NTP:	None known
IARC MONOGRAPHS:	None known
OSHA REGULATIONS:	None known
ACGIH:	None known

5. FIRE-FIGHTING MEASURES

UNUSUAL FIRE-FIGHTING PROCEDURES:	No unusual procedures
FLASH POINT:	None at 200° F
FLASH POINT METHOD:	PMCC
BURNING RATE:	Does not burn
AUTOIGNITION TEMPERATURE:	None
FLAMMABLE LIMITS IN AIR (% BY VOLUME):	None
LEL:	None
UEL:	None
FLAMMABILITY CLASSIFICATION:	Not flammable
EXTINGUISHING MEDIA:	Dry chemical, carbon dioxide, water spray or foam.
UNUSUAL FIRE OR EXPLOSION HAZARDS:	Use media appropriate to primary source of fire.
FIRE-FIGHTING INSTRUCTIONS:	Do not release runoff from fire control to waterways.
FIRE-FIGHTING EQUIPMENT:	Wear appropriate protective equipment; avoid breathing fumes or dust.

6. ACCIDENTAL RELEASE MEASURES

SPILL/LEAK PROCEDURES: Recover usable material if possible. Do not allow spill to enter waterways.
SMALL SPILLS: Absorb with clay or sand and sweep up into recovery drum.
LARGE SPILLS: Dike spill and pump into recovery drums.

CONTAINMENT: Dike ahead of large spills to contain.

REGULATORY REQUIREMENTS: Follow applicable OSHA regulations (29CFR1910.120).

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS:
Avoid contact with eyes. After handling product, always wash hands and face thoroughly with soap and water before eating, drinking or smoking.

STORAGE REQUIREMENTS:
Keep container closed when not in use. Keep away from freezing and excessive heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS VENTILATION:
Normal plant ventilation is usually adequate for liquid product.

ADMINISTRATIVE CONTROLS RESPIRATORY PROTECTION:
None required at ambient temperatures.

PROTECTIVE CLOTHING/EQUIPMENT:
Impervious gloves during manual handling of product. Normal protective workers clothing.
Safety glasses with side-shields or tight fitting goggles.

WORK AND HYGIENIC PRACTICES: Wash hands after handling.

SAFETY STATIONS: Eyewash, safety shower.

CONTAMINATED EQUIPMENT: Wash contaminated equipment and clothing prior to re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Viscous, white liquid. Little odor.
ODOR THRESHOLD:	N/A
BOILING POINT (760 MM Hg):	>212°
FREEZING/MELTING POINT:	<30° F
FLASH POINT:	None at 200° F (PMCC)
FLAMMABILITY (SOLID OR GAS):	N/A
SPECIFIC GRAVITY (water = 1):	1.00 – 1.10
VAPOR DENSITY (air = 1):	N/A
PERCENT VOLATILE BY VOLUME:	N/A
PARTITION COEFFICIENT: n-octanol/water):	N/A
AUTO-IGNITION TEMPERATURE:	N/A
DECOMPOSITION TEMPERATURE:	N/A
EVAPORATION RATE (butyl acetate = 1):	N/A
SOLUBILITY IN WATER (% by wt):	dispersible
VAPOR PRESSURE (AT 20° C):	N/A
VISCOSITY:	N/A
pH:	6.0 - 9.0

10. STABILITY AND REACTIVITY

REACTIVITY:	
STABILITY:	Stable
POLYMERIZATION:	Will not occur
CHEMICAL INCOMPATIBILITIES:	Strong oxidizers and acids
CONDITIONS TO AVOID:	Excessive heat or cold
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of carbon and nitrogen

11. EXPOSURE TOXICOLOGICAL INFORMATION

EYE EFFECTS:	May irritate eyes
SKIN EFFECTS:	May irritate skin
ACUTE INHALATION EFFECTS:	May irritate respiratory system
ACUTE ORAL EFFECTS:	Can irritate mouth and throat
CHRONIC EFFECTS:	Not known
CARCINOGENICITY:	Not known
MUTAGENICITY:	Not known
TERATOGENICITY:	Not known

12. ECOLOGICAL INFORMATION

ECOTOXICITY:	Not determined
ENVIRONMENTAL FATE:	Biodegradable
ENVIRONMENTAL DEGRADATION:	Biodegradable
SOIL ABSORPTION/MOBILITY:	Not determined

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Landfill or incinerate in accordance with all applicable regulations.

DISPOSAL REGULATORY REQUIREMENTS:

Does not meet RCRA criteria for being listed as a hazardous waste.

CONTAINER CLEANING AND DISPOSAL:

Containers should be cleaned of residual product. Dispose of in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME:	Not regulated under DOT
SHIPPING SYMBOLS:	N/A
HAZARD CLASS:	N/A
DOT IDENTIFICATION NO.:	N/A
PACKING GROUP:	N/A
LABEL:	N/A
SPECIAL PROVISIONS (172.102):	N/A
PACKAGING AUTHORIZATIONS:	N/A
a) Exceptions:	N/A
b) Non-bulk Packaging:	N/A
c) Bulk Packaging:	N/A
QUANTITY LIMITATIONS:	N/A
a) Passenger, Aircraft, or Railcar:	N/A
b) Cargo Aircraft Only:	N/A
VESSEL STOWAGE REQUIREMENTS:	N/A
a) Vessel Stowage:	N/A
b) Other:	N/A

15. REGULATORY INFORMATION

EPA REGULATIONS

RCRA HAZARDOUS WASTE NUMBER AND RCRA HAZARDOUS WASTE CLASSIFICATION:
Not classified as a hazardous waste under RCRA.

CERCLA HAZARDOUS SUBSTANCE AND CERCLA REPORTABLE QUANTITY:
Does not contain ingredients listed as a CERCA hazardous substance.

SARA TOXIC CHEMICAL AND SARA EHS:
Not subject to reporting under SARA Title 3.

OSHA REGULATIONS: Not an OSHA hazardous material.

STATE REGULATIONS: Not regulated.

16. OTHER INFORMATION

Prepared by: Alar Wastewater Treatment LLC - An Ovivo Company

Additional Hazard Rating Systems: None

MANUFACTURER DISCLAIMER:

NOTICE: We believe that the information contained on the Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily either all-inclusive or fully adequate in every circumstance. Also, these suggestions should not be confused with or followed in violation of applicable laws, regulation, rules or insurance requirements.

NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

An Ovivo Company

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Revision Date: 1/28/21

Product Name: Hydrated Lime (High Calcium Pure-Cal)

Other Means of Identification: Hydrated Lime, Calcitic Hydrated Lime, Lime, Slaked Lime, Lime Putty, Lime Slurry, Milk of Lime, Calcium Hydroxide

Recommended Use: Neutralization, flocculation, stabilization, absorption

Supplier:
Alar Water Treatment LLC -
An Ovivo Company
9651 W. 196th Street
Mokena, IL 60448
Phone: 708-479-6100

Emergency Telephone Numbers :
CANUTEC (613) 996-6666
CHEMTREC, US (800) 424-9300
INTERNATIONAL (708) 527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

SKIN CORROSION/IRRITATION (2)
SERIOUS EYE DAMAGE/EYE IRRITATION (1)
CARCINOGENICITY (Inhalation) (1A)
TARGET ORGAN TOXICITY - Single Exposure (Respiratory tract irritation) (3)
TARGET ORGAN TOXICITY - Repeated Exposure (1)

GHS LABEL ELEMENTS:

Signal Word: Danger

Hazard Statements:
H318 – Causes serious eye damage.
H315 – Causes skin irritation.
H350 – May cause cancer if inhaled.
H335 – May cause respiratory irritation.
H372 – Causes damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS:

PREVENTION:
P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P281 – Use personal protective equipment as required.
P280 – Wear protective gloves. Wear eye or face protection.
P271 – Use only outdoors or in a well-ventilated area.
P260 – Do not breathe dust.
P270 – Do not eat, drink or smoke when using this product.
P264 – Wash hands thoroughly after handling.

RESPONSE:
P314 – Get medical attention if you feel unwell.
P308 + P313 – IF exposed or concerned: Get medical attention.
P304 + P340 + P312 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
P302 + P352 + P362 + P363 – IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.
P332 + P313 – If skin irritation occurs: Get medical attention.
P305 + P351 + P338 + P310 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

STORAGE:
P401 – Store to minimize dust generation.

DISPOSAL:
P501 – Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE:

CHEMICAL NAME	CAS NUMBER	Wt/Wt%
Calcium Hydroxide	1305-62-0	90 - 100%
Crystalline Silica, Quartz	14808-60-7	0.0001 - 1%

4. FIRST AID MEASURES

EYE CONTACT:
Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Get medical attention immediately. Call a poison center or physician.

INHALATION:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband.

SKIN CONTACT:

Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

INGESTION:

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures, if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband.

NOTES TO PHYSICIAN:

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: No specific fire or explosion hazard.

SPECIAL FIRE FIGHTING PROCEDURES: Use standard firefighting procedures and consider the hazards of other involved materials. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Exercise caution when fighting any chemical fire.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: No action shall be taken involving any personal risk or without suitable training.Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protectiveequipment.

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil, waterways,drains and sewers. Inform the relevant authorities if the product has causedenvironmental pollution (sewers, waterways, soil or air).

MEASURES FOR CONTAINMENT AND CLEANING UP: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Put on appropriate personal protective equipment. Avoid exposure – obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store to minimize dust generation. Keep container tightly closed and sealed until ready to use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Ingredient Name	Exposure Limits
Calcium Hydroxide	**OSHA PEL (United States, 2/2013).** TWA: 5 mg/m^3 8 hours. Form: Respirable fraction TWA: 15 mg/m^3 8 hours. Form: Total dust **ACGIH TLV (United States, 4/2014).** TWA: 5 mg/m^3 8 hours. **NIOSH REL (United States, 10/2013).** TWA: 5 mg/m^3 10 hours. **MSHA PEL** TWA 8/40 hours: 5 mg/m^3

Crystalline silica, quartz	**OSHA PEL Z3 (United States, 2/2013).** TWA: 10 mg/m^3 8 hours. Form: Respirable TWA: 250 mppcf 8 hours. Form: Respirable **NIOSH REL (United States, 10/2013).** TWA: 0.05 mg/m^3 10 hours. Form: Respirable dust **ACGIH TLV (United States, 4/2014).** TWA: 0.025 mg/m^3 8 hours. Form: Respirable fraction **MSHA PEL** TWA 8/40 hours: 30 mg/m^3/(%SiO2)+2 mg/m^3 Form: Total dust 10 mg/m^3/(%SiO2)+2 mg/m^3 Form: Respirable dust

APPROPRIATE ENGINEERING CONTROLS: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Engineering controls may be required to control the primary or secondary risks associated with this product.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Wear an appropriate NIOSH approved respirator if concentration levels exceed the safe exposure limits.

SKIN PROTECTION: Chemical-resistant, impervious gloves complying with an approved standard should be worn atall times when handling chemical products if a risk assessment indicates this is necessary.Considering the parameters specified by the glove manufacturer, check during use that thegloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In thecase of mixtures, consisting of several substances, the protection time of the gloves cannot beaccurately estimated. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling thisproduct. Appropriate footwear and any additional skin protection measures should be selected based onthe task being performed and the risks involved and should be approved by a specialist beforehandling this product.

EYE PROTECTION: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

ADDITIONAL MEASURES: Ensure that eyewash stations and safety showers are close to the workstationlocation.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ ODOR:	White, Solid (Fine Powder) / Sweet, Soil Like Odor
ODOR THRESHOLD:	N.A.
pH:	12.45 [Sat. soln.] at 25°C/ 77°F
MELTING/ FREEZING POINT:	N.A.
BOILING POINT/ RANGE:	N.A.

FLASH POINT:	N.A.
EVAPORATION RATE:	N.A.
FLAMMABILITY:	N.A.
LOWER EXPLOSIVE LIMIT:	N.A.
UPPER EXPLOSIVE LIMIT:	N.A.
VAPOR PRESSURE:	N.A.
VAPOR DENSITY (Air = 1):	N.A.
SPECIFIC GRAVITY OR RELATIVE DENSITY:	2.3 to 2.4
SOLUBILITY(IES):	0.165 g/ 100 g at 20°C/ 68°F
PARTITION COEFFICIENT:	N.A.
AUTOIGNITION TEMP:	N.A.
DECOMPOSITION TEMP:	540°C (1004°F)

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: Under normal conditions of storage and use, hazardous reactions will not occur.

CONDITIONS TO AVOID: Do not allow quicklime to come into contact with incompatible materials (e.g., water, acids, reactive fluoridated compounds, reactive brominated compounds, reactive powdered metals, organic and anhydrides, nitro-organic compounds, reactivephosphorous compounds, interhalogenated compounds.

INCOMPATIBLE MATERIALS: Reactive or incompatible with the following materials: Oxidizing materials and acids.

HAZARDOUS DECOMPOSITION PRODUCTS: No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation, ingestion, akin, and/or eye contact

SYMPTOMS OF EXPOSURE:

EYE CONTACT: Causes serious eye damage. Adverse symptoms may include the following: pain, watering, redness.

INHALATION: May cause respiratory irritation. Adverse symptoms may include the following: respiratory tract irritation, coughing, burning sensation.

SKIN CONTACT: Causes skin irritation. Adverse symptoms may include the following: pain or irritation, redness, blistering may occur.

INGESTION: No known significant effects or critical hazards. Adverse symptoms may include the following: burning sensation, abdominal cramps and pain, vomiting.

ACUTE TOXICITY:
LD/LC50 VALUES THAT ARE RELEVANT FOR CLASSIFICATION: N.A.

CARCINOGENIC CATERGORIES: May cause cancer if inhaled. Risk of cancer depends on duration and level of exposure.

12. ECOLOGICAL INFORMATION

ECOTOXICITY (Aquatic and Terrestrial, Where Available):
Calcium Hydroxide
Fish - Clarias gariepinus - Fingerling
Acute LC50 33884.4 µg/L Fresh water 96 hours

PERSISTENCE AND DEGRADABILITY: N.A.

BIOACCUMULATIVE POTENTIAL: N.A.

MOBILITY IN SOIL: N.A.

OTHER ADVERSE EFFECTS: No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product should be disposed in an environmentally safe manner in accordance with local, state, and federal regulations.

UNLEANED PACKAGING: 'Empty' containers retain residue and may be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. Do not attempt to clean since residue is difficult to remove. 'Empty' containers should be disposed of in an environmentally safe manner and in accordance with local, state, and governmental regulations.

14. TRANSPORT INFORMATION

UN/NA NUMBER: N.A.
UN PROPER SHIPPING NAME: Not classified according to the United Nations. Not classified as hazardous under DOT or US Transport Recommendations.
TRANSPORT HAZARD CLASS: N.A.
PACKAGING GROUP: N.A.
MARINE POLLUTANT: N.A.
REPORTABLE QUANTITY: N.A.
SPECIAL REGULATIONS: N.A.

15. REGULATORY INFORMATION

Contents of this SDS comply with OSHA Hazard Communication Standard 29CFR 1910.1200

FEDERAL REGULATIONS:

SARA 302/304: Not applicable.
SARA 311/312: Calcium Hydroxide - Immediate (acute) health hazard.
Crystalline Silica, Quartz - Delayed (chronic) health hazard.
SARA 313: Not listed.

TSCA 8(a) CDR EXEMPT/PARTIAL EXEMPTION: Not determined.

UNITED STATES INVENTORY (TSCA 8b): Calcium Hydroxide is subject to inventory update reporting (IUR).

RCRA CLASSIFICATION: Calcium Hydroxide is not listed or classified.

CWA-311: Calcium Hydroxide has been withdrawn from the Clean Water Act (CWA) list of hazardous substances. (11/13/79) (44FR65400).

CERCLA: Calcium Hydroxide is not listed.

FDA: Calcium Hydroxide has been determined as Generally Recognized As Safe (GRAS) by FDA. See 21CFR184.1205. (CFR Title 21 Part 184 - Direct food substances affirmed as generally recognized as safe).

INTERNATIONAL INVENTORY:

AUSTRALIA: All components are listed or exempted.
CHINA: All components are listed or exempted.
EUROPE: All components are listed or exempted.
JAPAN: All components are listed or exempted.
MALAYSIA: Not determined.
NEW ZEALAND: All components are listed or exempted.
PHILIPPINES: All components are listed or exempted.
REPUBLIC OF KOREA: All components are listed or exempted.
TAIWAN: Not determined.

CANADA:
Canadian NPRI: None of the components are lsited.
CEPA Toxic Substances: None of the components are listed.
Canada Inventory: All components are listed or exempted.

16. OTHER INFORMATION

ABBREVIATIONS AND ACRONYMS:

ACGIH - American Conference of Governmental Industrial Hygienists
CAS - Chemical Abstract Service Number
DOT - Department of Transportation
IDLH - Imeediately dangerous to life and health
N.A. - Not Available
NIOSH - National Institute of Occupational Safety and Health

NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL - Permissible exposure limit
ppm - Parts per million
RCRA - Resource Conservation and Recovery
SARA - Superfund Amendments and Reauthorization Act
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act

MANUFACTURER DISCLAIMER: NOTICE: We believe that the information contained on the Safety Data Sheetis accurate. The suggested procedures are based on experience as the date ofpublication. They are not necessarily either all-inclusive or fully adequate in everycircumstance. Also, these suggestions should not be confused with or followed inviolation of applicable laws, regulation, rules or insurance requirements.

NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

An Ovivo Company

SAFETY DATA SHEET

ALAR L-F201 Inorganic Solution

1. Identification Of The Substance/Mixture And Of The Company/Undertaking

Date Revised: 1/28/2021

Product Name: ALAR L-F201 INORGANIC SOLUTION
Chemical Family: Inorganic Salts
Recommended Use: ALL PROPER AND LEGAL PURPOSES/FOR WASTEWATER TREATMENT
Recommended Restrictions: None known

Manufacturer:
Alar Water Treatment LLC - An Ovivo Company
9651 W. 196th Street
Mokena, IL 60448
Phone: 708-479-6100

Emergency Number: CHEMTREC: 1-800-424-9300

2. Hazards Identification

Physical Hazards:	Not classified	
Health Hazards:	Skin corrosion/irritation	Category 1C
Environmental Hazards:	Not classified	Category 1
OSHA defined hazards:	Not classified	

Label elements:
Signal word : Danger
Hazard statement: Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement:

Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response
If swallowed – Rinse mouth. Do NOT induce vomitting.
If on skin (or hair) – Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled – Remove person to fresh air and keep comfortable for breathing.
If in eyes - Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known

Supplemental Information: None

3. Composition/information on ingredients

Mixtures

Chemical Name	Common name and synonyms	CAS number	%
Sulfuric Acid		7664-93-9	0.24
Other components below reportable levels			99.76

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret

4. First-aid measures

Inhalation **Skin contact**	Move to fresh air. Call a physician if symptoms develop or persist. Immediately take off all contaminated clothing. Rinse skin with water/shower. Call a physician or poison to control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before resuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continiue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most Important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothers which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General Information	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioixide (CO2)
Unsuitable extinguishing media	Do not use water jet as an extinguisher as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6 . Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not toch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For perosnal protection, see Section 8 of the SDS.

Methods and materials for **Large spills** –Dike the spilled material, where this is possible. Cover with plastic sheet to prvent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Never return spills to original containers for re-use. For waste disposal, see Section 13 of the SDS

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Do not breath mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage Store locked up. Store in original tightly closed container. Store away from incompatible materials. (See Section 10 of the SDS).

8. Exposure controls/ personal protection

Occupational exposure limits

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	
SULFURIC ACID (CAS 7664-93-9)	PEL	1 mg/m3	
U.S. ACGIH Threshold Limit Values Components	**Type**	**Value**	**Form**
SULFURIC ACID (CAS 7664-93-9)	TWA	0.2 mg/m3	Thoracic fraction
U.S. NIOSH: Pocket Guide to Chemical Hazards Components	**Type**	**Value**	
SULFURIC ACID (CAS 7664-93-9)	TWA	1 mg/m3	

Biological limit values No biological exposure limits noted for the ingredient(s)

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment

Thermal hazards Wear appropriate thermal protective clothing. when necessary.

General hygiene considerations Always observe good personal hysgiene measures, such as washing after handling the material before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical State	Liquid
Form	Liquid
Color	Reddish brown
Odor	ACIDIC
Odor Threshold	Not available
pH	Not available
Melting point/freezing point	-4° F (-20° C)
Initial boiling point and boiling range	213.95° F (101.09° C) estimated
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not available
Flammaility limit – upper (%)	Not available
Explosive limit – lower (%)	Not available
Explosive limit – upper (%)	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	Not available
Solubility(ies)	
Solubility (water)	Not available
Partition coefficient (in-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	12.28 lbs/gal
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing
Percent volatile	41.76% estimated
Specific gravity	1.47

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical stability	Material is stable under normal conditions
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials
Incompatible materials	Strong oxidizing agents
Hazardous decomposition	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns
Eye bontact	Causes serious eye damage
Ingestion	Causes digestive tract burns
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage, including blindness, could result.

Information on toxicological effects

Acute toxicity	Not available.
Skin corrosions/irritation	Causes severe skin burns and eye damage
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA

IARC Monographs. Overall Evaluation of Carcinogenicity

Not available

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

US National Toxicology Program (NTP) Report on Carcinogens

Not available

Reproductive toxicity -	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified
Specific target organ toxicity – repeated exposure	Not classified
Aspiration hazard	Not an aspiration hazard
Chronic effects	Prolonged inhalation may be harmful

12. Ecological information

Ectotoxicity This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
SULFURIC ACID (CAS 7664-93-9)		
Aquatic		
Fish LC50	Western mosquito fish (Gambusia affinis)	42 mg/l, 96 hours

*Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues/unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal Instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS FERRIC SULFATE SOLUTION)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packaging group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	154

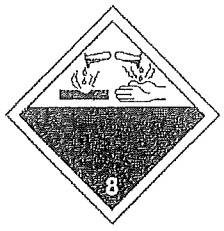
DOT information on packaging may be different from that listed.

IATA

UN number	3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS FERRIC SULFATE SOLUTION)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packaging group	III
Environmental hazards	No
ERG Code	154
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

DOT

IATA



15. Regulatory information

US Federal Regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)
SULFURIC ACID (CAS 7664-93-9) Listed

SARA 304 Emergency release notification
SULFURIC ACID (CAS 7664-93-9) 1000 Lbs.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard	Yes
Delayed Hazard	No
Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
SULFURIC ACID	7664-93-9	1000	1000 lbs		

SARA 311/312 Hazardous Chemical Yes

SARA 313 (TRI reporting) Not regulated

Other Federal regulations

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR f68.130)
Not regulated

Safe Drinking Water Act (SDWA)
Not regulated

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
SULFURIC ACID (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 13.10.12(c))
SULFURIC ACID (CAS 7664-93-9) 20%WV

DEA Exempt Chemical Mixtures Code Number
SULFURIC ACID (CAS 7664-93-9) 6552

US State Regulations

US California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US Massachusetts RTK -Substance List
SULFURIC ACID (CAS 7664-93-9)

US New Jersey Worker and Community Right-to-Know Act
SULFURIC ACID (CAS 7664-93-9)

US Pennsylvania Worker and Community Right-to-Know Law
SULFURIC ACID (CAS 7664-93-9)

US Rhode Island RTK
SULFURIC ACID (CAS 7664-93-9)

US California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(ies)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

16. Other information, including date of preparation or last revision

Issue date	06-11-2015
Revision date	01-28-2021
Version	08
HMIS ® ratings	**Health: 3**
	Flammability: 0
	Physical hazard: 0
NFPA ratings	**Health: 3**
	Flammability: 0
	Instablity: 0

MANUFACTURER DISCLAIMER: NOTICE: We believe that the information contained on the Safety Data Sheet is accurate. The suggested procedures are based on experience as the date of publication. They are not necessarily either all-inclusive or fully adequate in every circumstance. Also, these suggestions should not be confused with or followed in violation of applicable laws,regulation, rules or insurance requirements. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, OR MERCHANTABILITY, FITNESSFOR A PARTICULAR PURPOSE OR OTHERWISE.

Alar Water Treatment LLC - An Ovivo Company ("Alar") shall not be responsible for the use of any information, product, method, or apparatus herein presented ("Information"), and you must make your own determination as to its suitability and completeness for your own use, for the protection of the environment, and for health and safety purposes. You assume the entire risk of relying on this Information. In no event shall Alar be responsible for damages of any nature whatsoever resulting from the use of this product or products, or reliance upon this Information. By providing this Information, Alar neither can nor intends to control the method or manner by which you use, handle, store, or transport Alar products. If any materials are mentioned that are not Alar's products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed. Alar makes no representations or warranties, either expressed or implied of merchantability, fitness for a particular purpose or of any other nature regarding this information, and nothing herein waives any of Alar's conditions of sale. This information could include technical inaccuracies or typographical errors. Alar may make improvements and/or changes in the product(s) and/or the program(s) described in this information at any time. If you have any questions, please contact Alar at 708-479-6100 or e-mail Alar at alarinfo@ovivowater.com.

The systems that Alar is highly recommending is the **Alar Flex-o-star Series II 360**

The series II system treats in 2,000 gallon batches. The first 2,000 gallon (Tank A) is where the chemical steps are added in the proper amounts and sequence. After treatment the 2,000 gallon (treated) batch is now transferred to a 2,000 gallon filter feed tank (Tanks B). The filter feed tank is pumped to the filter where both dry solids and clean water are produced.

Once the filter is processing - treated waste water (tank A) is refilled and the chemical process starts again. This process is called a **continuous batch process**. The filter is never waiting for treated water thus maximizing the gallons per shift that can be filtered.

The advantages of the process are two fold...
1.) Controlled treatment steps – That can be easily adjusted utilizing the PLC
2.) Flexibility of adding additional chemical treatments steps in the future if needed without affecting the process

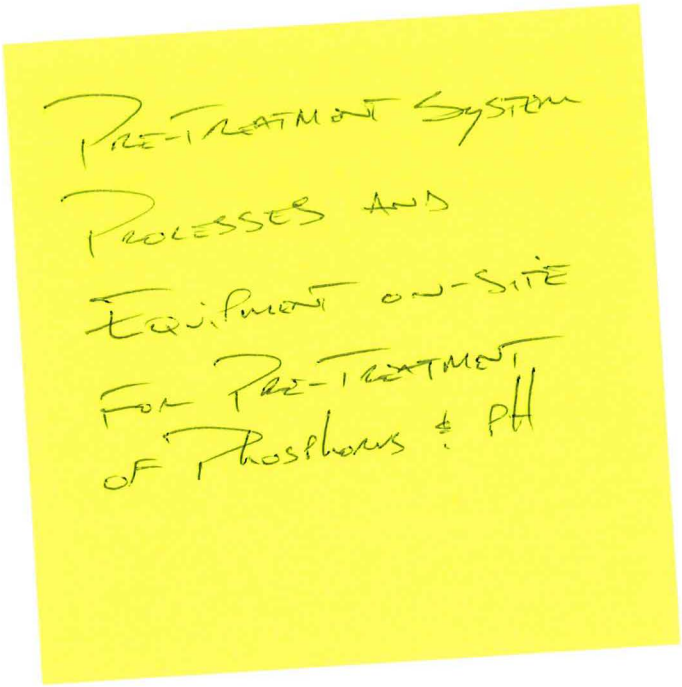
Alar is also recommending a **360 Drum filter** over a filter press. The drum filter provides the **dries solids** (typically 20%-25% drier – **reducing haul off cost**) with **no manual cleaning** of the filter press plates (thus less labor).
In this process 100% of your waste water will be pass through a less than 1 micron filter (Alar 360 filter). This will produce the best quality water for re-use. You will not be relying on chemistry to settle solids (clarification) or a press getting plugged and reducing flow rates.

In addition the sealers you have present in your waste stream will be much better suited being filtered through a **self- cleaning** filter (Alar auto-vac drum filter).

Alar Flex-o-star Series II 360

Chemical treatment – Controlled treatment steps / ability to add two step treatment for re-use or discharge / Flexibility for the future

Alar – Drum Vacuum Filter - Best quality filtered water for re-use / Self-cleaning / drier solids



Water Pollution Control Systems Since 1970

Phone: 708-479-6100
Fax: 708-479-9059
Email: steveg@alarcorp.com

9651 West 196th Street
Mokena, IL 60448
www.alarcorp.com

November 6, 2020

ALAR Proposal 17153G

For

Flex-O-Star Series II-360 System

Automatic Continuous Batch Wastewater Treatment System
Automatic Auto-Vac® AV360 #304SS Dewatering Filter Technology

To

Novae Corporation
One Novae Parkway
Markle, IN 46770

ATTN: Mr. Randy Hinojosa

Flex-O-Star®

Each Flex-O-Star® is custom designed and built in ALAR's production facility.

Skid-mounted, pre-piped, pre-wired wastewater treatment and dewatering system that incorporates a two-step filtration process: Chemical & Mechanical.

The first step, chemical treatment, breaks the solids and liquids apart by automatically adding chemical treatment.

The second step, mechanical filtration, physically removes the precipitated solid particles using the Auto-Vac® technology.

The Auto-Vac® is a self-cleaning rotary vacuum drum filter that separates water from the solids generating one-micron clean water; and producing dry landfill-ready solids.

ALAR Engineering Corporation, established in 1970, is a 2nd generation, family owned and operated business headquartered in the Chicago suburbs. ALAR is a direct-manufacturer with worldwide distribution of industrial chemical treatment and dewatering equipment.

The National Minority Business Council, Inc recognizes ALAR Engineering Corporation as a Minority-Owned Business.

The services provided at ALAR Engineering Corp involve the applied manufacturing and maintenance of ALAR-built mechanical equipment. ALAR does not provide contractor/ installer services or structural engineering design of buildings, trench drains, pits, flooring or any type of remodeling.

Made in the USA

ALAR Flex-O-Star® Series II

Chemical Treatment Tank and Chemical Feed Skid

Filter Feed Tank and Dewatering Filter Skid

The ALAR Flex-O-Star® Series II filtration system is a batch chemical treatment system, that has the capability of continuously feeding a semi-independent rotary vacuum filter.

Just as with the standard ALAR Flex-O-Star®, depressing the chemical start button on a Series II system is all that is needed to commence the automated wastewater treatment. Once complete, the treated wastewater transfers to a filter feed tank, where it will await filtration. As the filter feed tank empties out, the transfer pump will automatically pump treated wastewater from the treatment tank to the filter feed tank; providing continuous waste material for the filter. After the treatment tank is empty, raw wastewater is pumped into the treatment tank for a new chemical treatment cycle.

The Series II system is capable of operating the filtration portion independent of the chemical treatment portion. The operator can start the filtration portion before or during the chemical treatment cycle. If the treated wastewater is not ready by the time the filter cake is built, the Series II will automatically enter a "Stand-By-Mode" until the treated wastewater is ready to be filtered. Additionally, after the creation of the filter cake, the operator can reload the diatomaceous earth and program the system to automatically rebuild the filter cake after the current one is spent. The Series II will continue operating until it runs out of filter aid material or treated wastewater to filter.

ALAR Engineering Corporation proposes to furnish the following equipment and serves, subject to the specifications, terms and conditions of this proposal

QUOTATION:

NOTE: All ALAR Controls will be mounted in Auto-Vac® Control Panel

A. ONE (1) EQUALIZATION (EQ) / HOLDING TANK

- **Tank to be 6,000 gallon – construction to be HDPE, dome top tank to include level controls.**
- **Tank to be shipped loose for interconnections by others.**
- **Includes ALAR Level Control in EQ/ Holding Tank – Installed by Others**

B. TRANSFER PUMP (Shipped Loose)

- **One 2" Air Diaphragm Transfer Pump (from EQ Tank to Reactor Skid)**
  - Regulator, Valve, Solenoid
  - Santioprene Diaphragm and Balls
  - Polypropylene Seats
- **2" Control Valve**
- **Miscellaneous Valves**

C. ONE CHEMICAL REACTOR SKID

- **One (1) Structural Steel Support Skid [Painted] with Pre-Piped, Pre-Wired Ancillary Components**
- **One (1) 2000gal FRP Dish Bottom Open Top Reactor [Treatment] Tank**
  - One (1) Stainless Steel Mixer Shaft and Propeller
  - One (1) Custom Carbon Steel Mixer Support
  - One (1) Non-Contact Level Control
- **Three (3) Chemical Treatment Steps**
  - F201 Chemical metering Pump – Pedestal mounted
  - Caustic Metering Pump – Pedestal mounted
  - Polymer Make-down tank – to include make down tank, mixer, and metering pump
- **One (1) NEMA 12 Junction Box**
- **One (1) Automatic Polypropylene 2" AOD Transfer Pump with Regulator, Valve and Solenoid**
- **One (1) Digital Probe for PH**
  - Digital Probes Pre-calibrated at ALAR
- **Miscellaneous Stainless / PVC Piping and Valves**
- **One (1) Sampling Port with Ground Access for Operator** (No higher than 5' from ground)
- **One (1) Probe "T" for pH with Ground Access for Operator** (No higher than 5' from ground)

D. ONE (1) FILTER FEED SKID

- **One (1) Structural Steel Support Skid [Painted] with Pre-Piped, Pre-Wired Ancillary Components**
- **One (1) 2000 gallon FRP Dish Bottom Open Top Filter Feed Tank**
  - One (1) Stainless Steel Mixer Shaft and Propeller
  - One (1) Custom Carbon Steel Mixer Support
  - One (1) Non-contact Level Control
- **One (1) Automatic Stainless Steel 1½" AOD Filter Feed Pump with Regulator, Valve and Solenoid**
- **Miscellaneous Stainless / PVC Piping and Valves**

E. AUTOMATIC FILTER (AUTO-VAC)

- **One (1) Alar Automatic Auto-Vac® Model AV360**
- **3' x 6' Filter Drum – 56.5 Ft^2**
- **Stainless Steel Process Wetted Parts**
- **One (1) NEMA 12 Control Panel**
  - Allen Bradley MicroLogix 1400 PLC with PanelView Plus
  - Increased Control Cabinet for Treatment Skid and Mixer Controls
  - Step-Down Transformer
  - Fused Disconnect
  - Automatic "Stand-By-Mode" Programmed into Control Panel
- **Automatic Wash-Down Pump**
- **Automatic Filter Aid Water Recycling During Precoat**
- **Automatic Anti-Foam w/ Solenoid & Timer**
- **Limit Switch (End of Cycle) with Alarm & Horn**
- **Filter Aid Bag Breaker / Dust Collector with Steps**
- **Pilot "Stack" Lights Elevated Above Control Panel w/ Horn**
  - Green for "Running"
  - Yellow for "Stand-By"
  - Red "Fault Alarm" [Horn]
- **VPN Router Package**
  Enables Alar Engineering to connect to remotely via internet to the PLC and other ethernet components. This price includes four (4) hours of logon time / programming changes to the equipment. If not used, the four (4) hours will expire one (1) year after the equipment ships or after startup (if taken by customer).

NOTE: FILTER AID ECONOMIZER – NO CHARGE

F. ONE (1) TYPE IIIB VACUUM COOLING WATER RECIRCULATION SYSTEM

- **One (1) 360-gal HDPE Flat Bottom Tank with Overflow**
- **One (1) Automatic City Water Make-Up System with Level Controls**
- **One (1) Temperature Gauge with Thermocouple and High Temperature Alarm**
- **One (1) 1" Centrifugal Pump to Cool & Seal the Vacuum Pump**
- **One (1) 10 – 15 psi Pressure Switch for Vacuum Pump Interlock**
- **One (1) Brazed Plate/ Fan Cooled Heat Exchanger**
- **One (1) "Y" Strainer**

PRICE.....$

(LESS Discount) $

ADJUSTED TOTAL $

FOB Mokena, IL USA

Exclusive of State & Local Taxes

OPTIONS

Option 1

One (1) Equalization (EQ) / Holding Tank

- Tank to be 6,000 gallon – construction to be HDPE, dome top tank to include level controls.
- Tank to be shipped loose for interconnections by others.

Transfer Pump (Shipped Loose)

One (1) 2" Air Diaphragm Transfer Pump (from EQ Tank to Reactor Skid)

- Regulator, Valve, Solenoid
- Santioprene Diaphragm and Balls
- Polypropylene Seats

- 2" Control Valve
- Miscellaneous Valves

PRICE.....$

Option 2

Chemical Treatment

Using lime - This is a provision if Novae wants to discharge the wash water to sewer.

PRICE.....$

Option 3

Post filtration pH Adjustment Skid

Skid mounted system containing:

One (1) 500 gallon HDPE Treatment Tank
One (1) 3 Phase S.S. Mixer
One (1) Pedestal Mounted LMI Metering pump
One (1) Non-Contact Level Control
One (1) Digital pH Probe with Kynar Holder
One (1) Discharge Pump with 3-Way Valve
One (1) Junction Box

All controls will be integrated into the main Alar control panel. If pH reads out of specification, the system will alarm and change the valve to send water back to the holding tank, and put the system in stand-by.

pH on this tank will be Data logged
The PLC will receive data from the pH transmitter and the HMI will data log the pH seen. Data will be taken at time-based intervals and saved on a customer provided flash drive (in the form of a CSV file).

PRICE.....$

Option 4

Mobile Transfer Pump

One (1) 2" Air Diaphragm Pump (polypropylene with santoprene diaphragm and balls) mounted to a cart.
Pump to have Regulator, Ball Valve, and Quick Connect Air Connection
Includes 10 ft of 2" hose on the Intake and Output Side with SS Ball Valves and Quick Connect Cam Locks

One (1) Wheeled Cart with 12" tall, 24" x 36" platform, 9" wheels with replaceable castors and floor lock

PRICE.....$

CUSTOMER TO SUPPLY THE FOLLOWING ITEMS: (Not included in equipment price)

- Plant supplied clean/dry air or air compressor
- City water for Filter Aid tank and wash-up
- 3-Phase 460V plant supplied power
  - UL Labeling is available for an additional charge
- Weatherproof environment – protected from the elements
- Customer to supply plumbing and electrical connections between skids
- ALAR to supply drawings of interconnecting pipes and wires (P&ID)
- ALAR **does not** install equipment

FREIGHT: (Not included in equipment price)

ALAR is not a freight company, but, as a courtesy, can provide competitive rates due to volume trucking. Customers are welcome to use/outsource their own logistics.

Destination: TBD
Estimated Freight Price: TBD

ENGINEERING EQUIPMENT START-UP: (Not included in equipment price)

Startup is for operator instruction, safety, and mechanical inspection.

The system should be connected to all plumbing, electrical, and air requirements (this includes tanks, mixers, and pumps), prior to the engineer arriving at the facility.

- Two (2) days engineering start-up (**travel time**).....**$**
- Three (3) days engineering start-up (**labor time**).....**$**
- Expenses such as: Airfare, lodging, meals, etc.....**At Cost**

Services provided at ALAR Engineering Corp., involve the applied manufacturing and maintenance of ALAR-built mechanical equipment. ALAR does not provide contractor/ installer services or structural engineering design of buildings, trench drains, pits, flooring or any type of remodeling.

If further information is required, please contact Steve Gorski at 708-479-6100 ext. 25, or at steveg@alarcorp.com

FINANCING AVAILABLE

LIMITED WARRANTY

The Seller warrants each machine will be free from defects in material and workmanship arising under normal usage and care for a period of eighteen (18) months from the date of delivery or one (1) year from date of installation whichever is earlier; provided that damage by chemical action or the presence of abrasive material shall not constitute a defect. The Seller reserves the right to substitute component parts listed in this proposal of equal or greater quality due to availability. The Seller's obligation herein is limited to repairing or replacing, at its option, any such part which is returned to the Seller, transportation prepaid, within the warranty period and is found to be defective in material or workmanship and does not include the cost of furnishing any labor in connection with the installation of such repaired or replaced parts or the responsibility or cost for transportation. Except as otherwise provided herein THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. **THE EQUIPMENT IS DESIGNED TO OPERATE INSIDE YOUR PLANT IN A FROST AND WEATHER FREE ENVIRONMENT, AND NOT FOR OUTSIDE USE.**

In consideration of providing the limited warranty period above, during such warranty period, all filter aid and treatment chemicals must be purchased through the seller, or the buyer must have prior written consent to purchase elsewhere. Without prior written consent, the LIMITED WARRANTY shall be rendered null and void. The system's performance can vary based on variance of incoming waste stream. Alar's filters are liquid/solid separation filters that will remove any precipitated non-dissolved particles greater than one (1) micron.

The Seller assumes no liability for failure or delay in performing its obligations herein if such failure or delay results, directly or indirectly, from any cause beyond its control, including but not limited to acts of God, acts of government, flood, fire, strike, boycotts or other labor strife, shortage of materials, and/or transportation difficulties, war, domestic disturbance or terrorist attacks. The Seller may substitute components of equal quality due to availability.

This warranty extends only to the original purchaser and is unassignable and shall not apply to defects or damages of the machine or its parts which has been subject to accident, negligence, misuse or improper shipment; installation or maintenance; nor will it extend to unauthorized repairs of claimed defects.

THE SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OR FITNESS OR OF MERCHANTABILITY OTHER THAN AS EXPRESSLY SET FORTH HEREIN WITH RESPECT TO THE MACHINE NOR SHALL THE SELLER HAVE INCURRED ANY OTHER OBLIGATIONS OR LIABILITIES ON ITS PART OR BE LIABLE FOR ANY ANTICIPATED OR LOST PROFITS, INCIDENTAL DAMAGES, CONSEQUENTIAL DAMAGES, TIME CHARGES OR ANY OTHER LOSSES INCURRED IN CONNECTION WITH THE PURCHASE, INSTALLATION, REPAIR, OPERATION OR SHUT DOWN OF THE MACHINE, OR ANY PARTS THEREOF (INCLUDING ANY PART REPAIRED BY THE SELLER), WHETHER ORIGINAL EQUIPMENT OR INSTALLED AS A REPLACEMENT, AND WHETHER COVERED BY THIS WARRANTY OR OTHERWISE.

LIMITED WARRANTY (Continued)

Liability and Indemnification. Each party ("Indemnitor") shall defend, indemnify and hold harmless the other party ("Indemnitee") from and against and shall pay all losses, damages, liabilities, penalties, fines, assessments, claims and actions, and all related expenses (including reasonable consultants' and attorneys' fees and expenses and the actual costs of litigation) incurred by Indemnitee by reason of injury or death to any person, damage to any property or any other occurrence arising or resulting from performance of the Work, defects in the Work or from any other cause, including, but not limited to, pollution or other environmental degradation, to the extent attributable to the negligence or willful misconduct of Indemnitor. Seller shall obtain from all Subcontractors similar indemnity protection for Buyer.

Successors and Assigns. This Agreement shall be binding upon and insure to the benefit of Seller and Buyer and their respective successors and assigns, except that Buyer may not assign its rights under this Agreement without the prior written consent of Seller.

Integration. This Agreement contains the entire understanding of the parties with respect to the subject matter of this Agreement. There are no restrictions, agreements, promises, warranties, covenants or undertakings other than those expressly set forth herein. This Agreement supersedes all prior agreements and undertakings between the parties with respect to its subject matter. This Agreement may be amended only by a written instrument duly executed by all parties or their successors and assigns.

Severability. The invalidity of any provision of this Agreement shall not impair the validity of any other provision. If any provision of this Agreement is determined by any court of competent jurisdiction to be unenforceable, that provision shall be deemed severable and this Agreement may be enforced with such provision severed or as modified by this Court.

ILLINOIS LAW AND VENUE APPLY. The validity, construction and interpretation of this Agreement shall be governed by the laws of the State of Illinois. The parties hereto irrevocably agree that all actions or proceedings in any way, manner or respect arising out of or from or related to this Agreement shall be litigated only in the Circuit Court Twelfth Judicial Circuit, Will County, Illinois. Each party hereby consents and submits to the personal jurisdiction in the State of Illinois and waives any right such party may have to transfer the venue of any such action or proceeding. This agreement and the rights and liabilities of the parties hereto shall be governed by the internal laws of the State of Illinois. The Circuit Court Twelfth Judicial Circuit, Will County, Illinois shall have exclusive jurisdiction over all disputes between the parties hereto relating to the equipment that is subject matter herein.

ENTIRE AGREEMENT; WAIVER. Except as may be otherwise agreed in writing, this instrument relating to the sale of the equipment described herein constitutes the entire agreement between the parties and may hereafter be amended or modified only by a written agreement by Alar Engineering Corporation of any provision hereof.

TERMS AND CONDITIONS OF PAYMENT

Alar Engineering will supply the following:

Three (3) sets of Installation Drawings; one (1) hard copy of the manual; and one (1) manual in the form of CD ROM for the above equipment.

Terms of Payment are 30% with order, 70% upon notification that the unit is ready to be shipped. There will be a late payment charge of 1½% per month on all invoices that are not paid within 30 days.

Delivery of equipment is approximately 12-16 weeks from the date Alar Engineering receives drawing approval.

If the equipment remains at Alar for more than 15 business days after completion, storage fees will be charged at cost. All storage fees must be paid in full prior to shipment.

The prices quoted herein will be held firm for a period of 90 days from the date of the proposal. F.O.B. Mokena, Illinois exclusive of state and local taxes.

Upon request, the services of a qualified Application Engineer are available for start-up or service at a nominal charge per hour, or fraction thereof, plus fare, maintenance, and traveling expenses from Mokena, Illinois and return (including travel, Saturdays, Sundays, and holidays away from Mokena, whether worked or not).

Following are the charges for this service:

Travel time.....$
Start-up and service time.....$
Expenses.....At cost

Buyer may cancel its order only upon written consent of Alar Engineering and upon terms which will indemnify Alar Engineering against loss or damage plus prospective profits, which profits are hereby fixed at thirty (30) percent of the contract price.

ALAR ENGINEERING CORPORATION

Paula J. Jackfert
President

ACCEPTED BY:

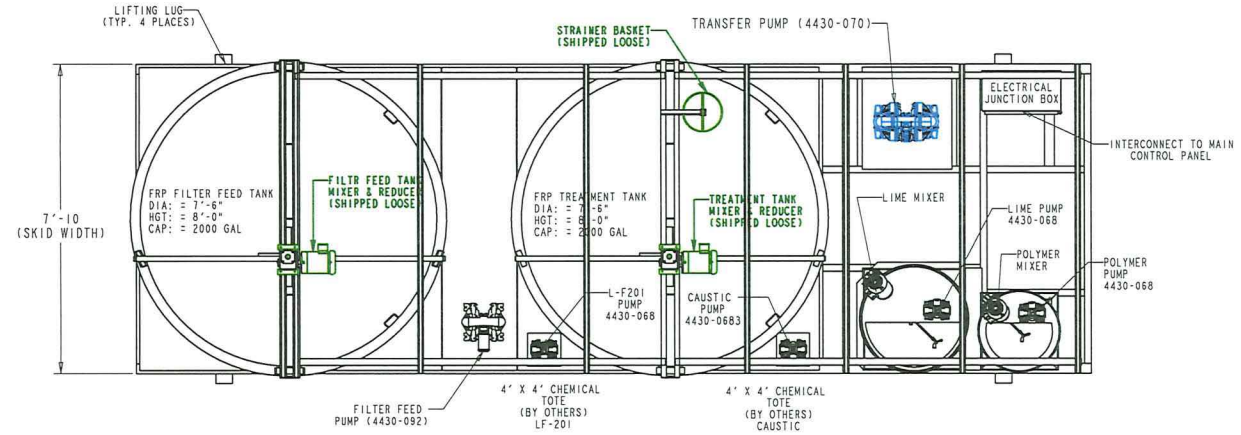
Authorized Signature: _____

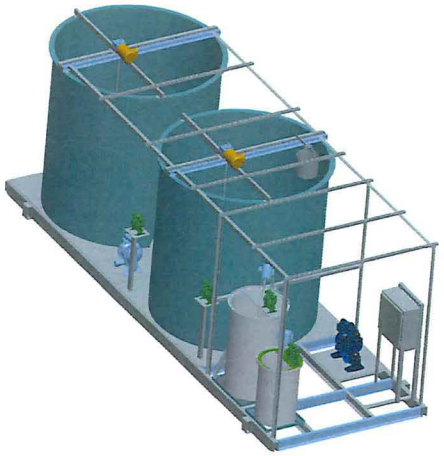
Name: _____

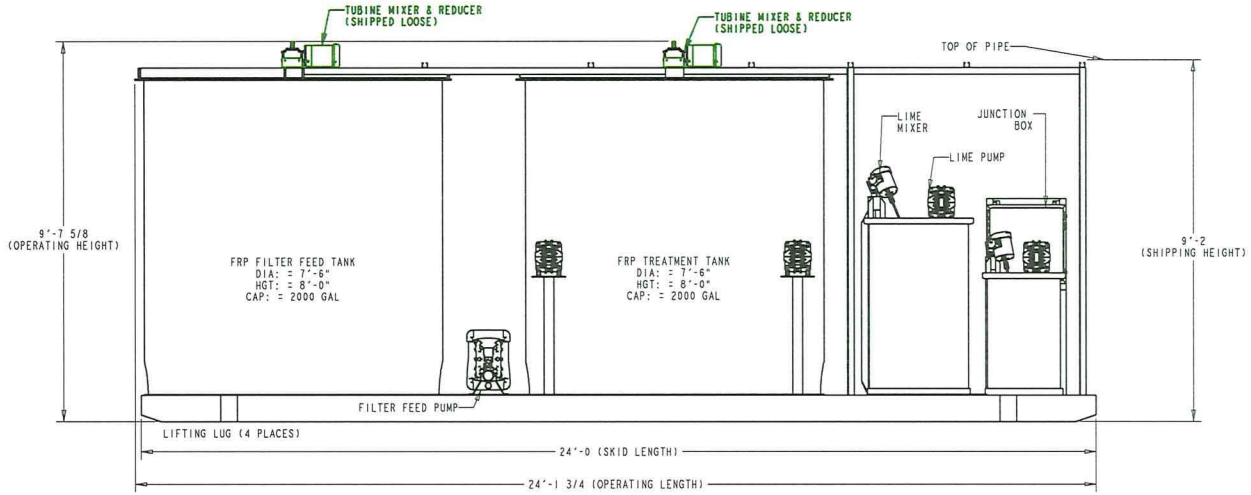
Title: _____

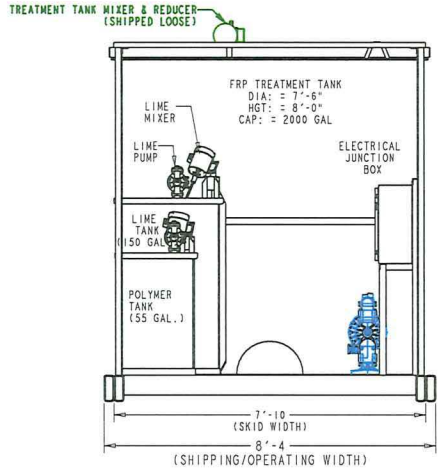
Company Name: _____

Date: _____









NOTES:

ALL SKID-MOUNTED MOTORS AND CONTROLS ARE PREWIRED
ALL SKID-MOUNTED PROCESS AND SERVICE LINES ARE PREPIPED
ANY CONNECTIONS BETWEEN SKIDS ARE BY OTHERS

DO NOT USE ANY TYPE OF CHLORIDE WITH ALAR EQUIPMENT. VARYING CHEMICAL TREATMENT FROM THE RECOMMENDED ALAR TREATMENT CHEMICALS AND STEPS MAY ADVERSELY AFFECT THE EQUIPMENT AND VOID ANY WARRANTY.

Approved by: Randy Hinojosa
Date: 2/4/2021

FOR APPROVAL

APPROVED BY: DATE:

REV.	DATE	DESCRIPTION	DRW.	CHK.
D	02-04-21	ADJUST CHEMICAL PUMP AND J-BOX LOCATIONS	CMC	ECC
C	01-29-21	ADJUSTED LIME TANK LOCATION	CMC	WDF

DATE 12-09-20
DRAWN BY: BDS
SCALE: 0.055

ALAR Engineering Corporation
MOKENA, IL 60448

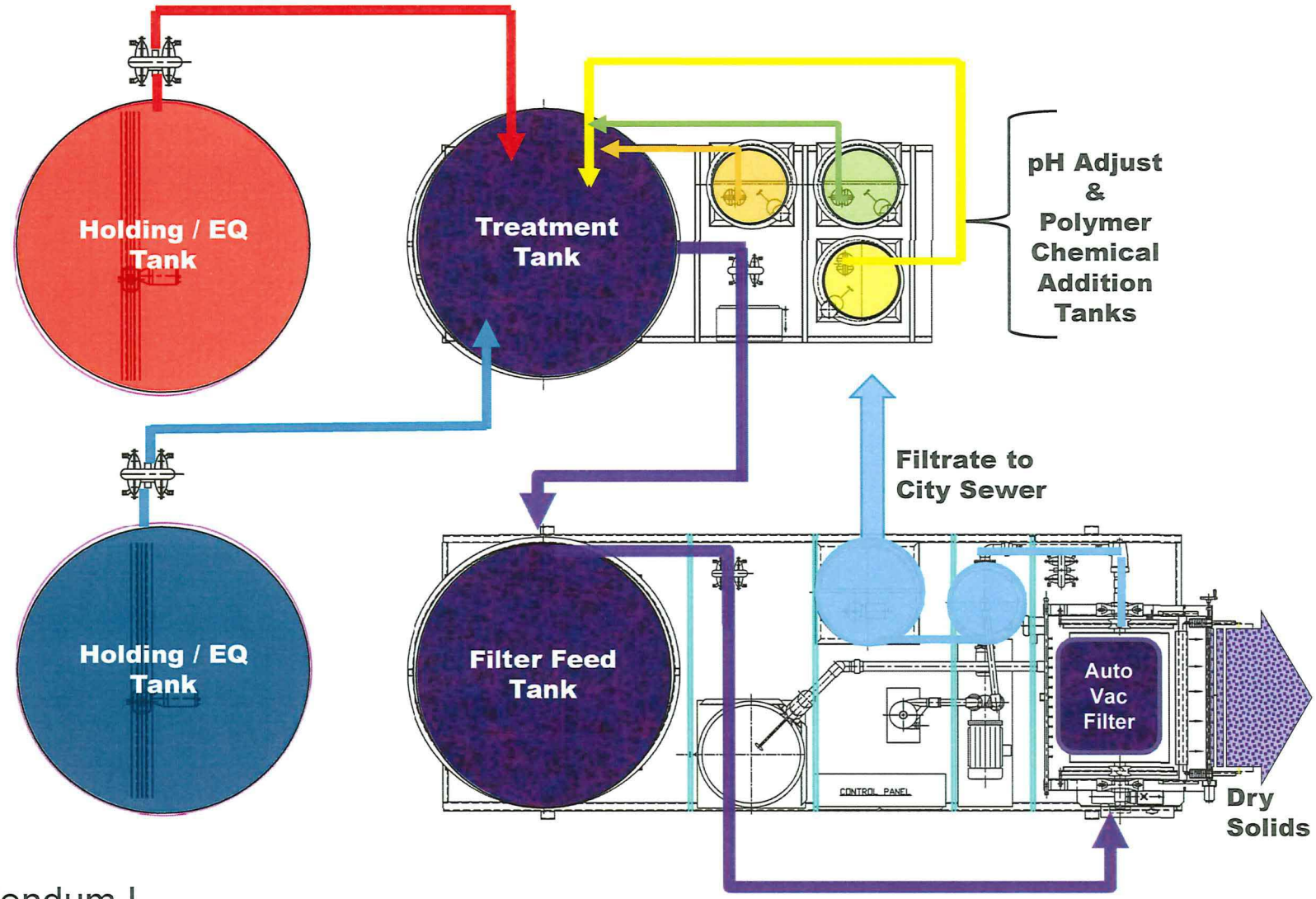
TREATMENT SKID FOR FLEX-O-STAR SERIES II-360 W/ LIME, F-201, POLYMER, & CAUSTIC

SHIPPING WEIGHT: 6397 LBS.
OPERATING WEIGHT: LBS.

REV.D

17153G-L01

Dry Solids Fall into a Dumpster / Filtrate Pumps to Sewer



Addendum I

Wastewater Treatment Process