Anchorage Water & Wastewater Utility

Treatment Division

Mayor
Ethan Berkowitz

Board Chair
Aaron D. Dotson

July 19, 2019

NRC Alaska, LLC.
Attn: Rick Reimer, Director, Regulatory Compliance
425 Outer Springer Loop
Palmer, AK 99645

Re: **TEMPORARY INDUSTRIAL DISCHARGE PERMIT, TIDP 2019-006**

Dear Mr. Reimer,

This is to certify that NRC Alaska LLC has been issued a Temporary Industrial Discharge Permit for the ensuing discharge processes:

"Several sources, including Ted Stevens Airport. PFOS/PFOA contaminated waters will be transported to NRC Alaska to be treated to meet ADEC Groundwater discharge levels of 0.4 ug/L.

PFOS/PFOA wastewater will be processed thru NRC Alaska water treatment facility utilizing multiple vessels containing granulated carbon and organoclay, once treated discharged via facility Outfall 001"

The waters from this project will then be discharges to sanitary sewer connection.

This permit shall become effective 7/19/2019 0:00:00 and shall expire 12/31/2019 0:00:00. Emerald Alaska, Inc. shall also insure adherence to the limitations and conditions specified in the permit below.

If the permittee wishes to continue to discharge after this expiration date, a request for re-issuance shall be submitted with AWWU Pretreatment prior to the expiration of this permit otherwise a new permit application will be required.

Anchorage Water and Wastewater Utility

By: Mario Croce Date: 7-19-19

Mario Croce, AWWU Industrial Pretreatment Coordinator
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I. EFFLUENT LIMITATIONS

A. Points of Discharge. During the period of this permit (7/19/2019 0:00:00 to 12/31/2019 0:00:00) the permittee is authorized to discharge process wastewater to the AWWU sewerage system from the outfall listed below.

1. Outfall Description
   a. Outfall 001 : Manhole #1133-058, 1749 Ship Ave , Anchorage, Alaska 99501

B. EPA Pretreatment Standard. The permittee shall comply with all General Pretreatment Regulations as published in 40 CFR Part 403.

C. Municipality of Anchorage Sewer Use Ordinance Limitations. The permittee is subject to effluent limitations established in Title 26 of the Anchorage Municipal Code (AMC 26.50.060). The discharge limitations listed in Table 1 apply to the total discharge from NRC Alaska LLC where wastewater is discharged to the municipal sewerage system.

Table 1. Local Discharge Limitations[1]

Pollutant [2]	Limitation (mg/L)
Arsenic	3.7
Beryllium	14.5
Cadmium	0.69
Chromium	2.77
Copper	3.38
Cyanide	1.7
Lead	0.69
Mercury	0.2
Nickel	3.88
Oil or Grease of Animal or Vegetable Origin	250
Silver	2.5
Total Aromatic Hydrocarbons	5.0
Zinc	5.62

D. Specific Discharge Limitation based on site application.

Table 2. Site Specific Discharge Limitations[3]

Biochemical Oxygen Demand (BOD)	500 mg/L
Total Suspended Solids (TSS)	1,100 mg/L
Perfluorooctanoic acid (PFOA)	0.0004 mg/L
Perfluorooctane sulfonic acid (PFOS)	0.0004 mg/L
Flow in Gallons per minute	200 gpm
Oily Sheen on Water	ZERO

[1] Effluent limitations are applicable to all discharges.
[2] The limits for metals are for "total" metals
[3] Site Specific Limitations are applicable to all discharges.

E. There shall be no discharge of floating solids, visible foam or oily wastes which produce sheen on the surface of discharged wastewater.

F. In addition, the permittee shall comply with all applicable regulations and standards contained in AMC 26.50 and federal pretreatment regulations and standards. See Appendix A listing of AMC 26.50.050 Prohibited Acts.

II. SELF MONITORING REQUIREMENTS

A. Pollutant Monitoring. The permittee shall monitor its wastewater discharge to AWWU's sewerage system to ensure compliance with the conditions of this permit. Table 3 presents self-monitoring requirements. All monitoring conducted to demonstrate compliance with permit limitations shall be representative of operations and conditions occurring during the reporting period.

Table 3. Self-Monitoring Requirements for Final Effluent

Pollutant Parameter	Units	Sampling Frequency	Sample Type (grab, composite, grab-composite, Visual)	Sample Location
Arsenic	mg/L	Once per Project	Grab	Outfall 001
Beryllium	mg/L	Once per Project	Grab	Outfall 001
Cadmium	mg/L	Once per Project	Grab	Outfall 001
Chromium	mg/L	Once per Project	Grab	Outfall 001
Copper	mg/L	Once per Project	Grab	Outfall 001
Cyanide	mg/L	Once per Project	Grab	Outfall 001
Lead	mg/L	Once per Project	Grab	Outfall 001
Mercury	mg/L	Once per Project	Grab	Outfall 001
Nickel	mg/L	Once per Project	Grab	Outfall 001
Oil and Grease of Animal or Vegetable Origin	mg/L	Once per Project	Grab	Outfall 001
Silver	mg/L	Once per Project	Grab	Outfall 001
Total Aromatic Hydrocarbons (TAH)	mg/L	Once per Project	Grab	Outfall 001
Zinc	mg/L	Once per Project	Grab	Outfall 001
pH	pH	Once per Project	Grab	Outfall 001
Biochemical Oxygen Demand (BOD)	mg/L	Once per Project	Grab	Outfall 001
Total Suspended Solids (TSS)	mg/L	Once per Project	Grab	Outfall 001
Perfluorooctanoic acid (PFOA)	mg/L	Every Batch	Grab	Outfall 001
Perfluorooctanesulfonic acid (PFOS)	mg/L	Every batch	Grab	Outfall 001
Flow in Gallons per Minute	GPM	Daily	Measurement	Outfall 001
Oily Sheen on Water		Daily	Visual	Outfall 001

B. Analytical Methods. Sample analysis shall be performed in accordance with the testing procedures established for analysis of pollutants as required in 40 CFR Part 136 and amendments thereto, unless other testing procedures have been specified in this permit. The method chosen for analysis must have a "Method Reporting Limit" less than the permit limit.

1. All samples/aliquots shall be collected and preserved in accordance with guidelines set forth in 40 CFR Part 136 or specific techniques approved by AWWU. Analysis for metals shall be for "total" metal.

C. Sample Locations. The permittee shall collect self-monitoring samples from one location. In order to demonstrate compliance with Sewer Use Ordinance effluent limitations and permit conditions, sample shall be collected at Outfall 001.

D. Representative Sampling. Samples shall be collected during a period of discharge and must be representative of the discharge using representative sampling techniques. All monitoring shall be representative of operations and conditions occurring during the reporting period.

E. Repeat Sampling. Repeat sampling following a violation, shall be completed prior to resuming discharge of wastewater to the sewerage system.

III. REPORTING REQUIREMENTS

A. Reports shall be summarization of required information on a form in a format acceptable to AWWU. Monthly reports include the following:

1. Monthly Report summarizing the estimated amount of waste discharged into the sewerage system and water used daily shall be submitted to AWWU Field Services for billing.

2. Monitoring reports summarizing the analytical results of all self-monitoring. For each sample collected, the following information shall be recorded and reported to AWWU Pretreatment:

   a. Date and time of sampling.
   b. Laboratory that conducted the analyses.
   c. Results of all analyses from laboratory. (Report form and Electronic Data Deliverable)
      i. If using SGS: request a Level II report with Linkopipe EDD for AWWU.
      ii. If using Analytica: request a Linkopipe EDD for AWWU.
   d. Chain of Custody forms.

3. If the permittee monitors any pollutant more frequently than required by this permit or monitors additional parameters, the results of such monitoring shall be submitted to AWWU Pretreatment.

B. Certification Statement

1. Monitoring reports shall be signed and certified by an authorized representative in an acceptable format. The following certification statement must be included.

> "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."

C. Discharge Violation Report and Repeat Analysis. In addition, the permittee shall review self-monitoring data in a timely manner to identify any violations of this permit. Analytical data from self-monitoring reports shall be reviewed within five days of receipt of the report. The permittee shall conduct repeat sampling and analysis, and submit the results of the repeat analysis to AWWU immediately when becoming aware of the violation. The report shall include the date of violation, the nature of the violation, and corrective actions taken.

D. Immediate Reporting Requirements and Halt of Discharge , Permittee shall notify AWWU immediately and halt all discharge upon becoming aware of:

1. Any accidental release of prohibited or regulated materials or substances established in AMC 26.50 or which may endanger public health or the environment.

2. Any spill of material prohibited by AMC 26.50.050 or slug discharge, which may enter the sanitary sewer system.

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

4. Violation of any of the pollutant discharge limitations and/or conditions set forth in the permit.

Table 4. Contact Information

Contacts	Phone Numbers	Email
Industrial Pretreatment Program Office hours (7:00 AM to 4:30 PM, M-F)	751-2253	AWWUpretreatment @awwu.biz
AWWU Field Services	564-2762	

IV. TREATMENT SYSTEM OPERATION

A. Proper Operation and Maintenance. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities when necessary to achieve compliance with the conditions of this permit.

B. Need to Halt of Reduce Activity not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt of reduce the permitted activity in order to maintain compliance with this permit.

C. Bypass of Treatment Facilities

1. Bypass is prohibited and AWWU may take enforcement action against the permittee for a bypass, unless:
   a. The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage or no feasible alternatives exist.
   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent bypass which occurred during normal periods of equipment downtime of preventative maintenance; and

V. STANDARD CONDITIONS

These Standard Conditions shall become a part of the Industrial Wastewater Discharge Permit issued to the permittee by AWWU. In all instances, AMC 26.50 shall take precedence.

A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification or for denial of a permit renewal application.

B. Duty to Mitigate. The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health of the environment.

C. Prohibited Discharge Standards. The permittee shall comply with the Prohibited Discharge Standards in AMC 26.50.050, Prohibited Acts as listed in Appendix A.

D. Right of Entry. The permittee shall allow AWWU or its representatives, exhibiting proper credentials and identification, to enter upon the premises of the permittee at all reasonable hours, for the purposes of inspection, sampling, or records inspection.

E. Reasonable hours in the context of inspection and sampling includes any time the permittee is operating any process which results in a process wastewater discharge to the AWWU sewerage system.

F. Confidential Information. Except for data determined to be confidential under AMC 26.50.310, all reports required by this permit shall be available for public inspection at AWWU.

G. Records Retention. The permittee shall retain and preserve for no less than five (5) years, any records, books, documents, memoranda, reports, correspondence and any and all summaries thereof, related to monitoring, sampling and chemical analyses made by or in behalf of the permittee in connection with its discharge.

All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by AWWU or the EPA shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

Records required by the permit shall be available for review at reasonable times.

H. Falsifying Information or Tampering With Monitoring Equipment. Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal laws as well as being subjected to civil penalties and relief.

I. Modification or Revision of Permit

1. The terms and conditions of this permit are subject to modification by AWWU at any time as limitations or requirements identified in AMC 26.50 are modified or other just cause exists.

2. This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.

3. The terms and conditions may be modified as a result of EPA promulgating new federal pretreatment standards.

4. Any modifications which result in new conditions in the permit shall include a reasonable time schedule for compliance if necessary.

5. The permittee may request permit modification or revision for just cause. Requests for permit modification shall contain reasons supporting the request.

J. Dilution. The permittee shall not increase the use of potable or process water in an attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

K. Proper Disposal of Pretreatment Sludges and Spent Chemicals. The disposal of sludges and spent chemicals generated within wastewater pretreatment systems shall be done in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

L. Emergency Suspension of Service. AWWU may suspend wastewater service in accordance with AMC 26.50.330.

M. Limitations on Permit Transfer. Wastewater discharge permits are issued to a specific user for a specific operation and are not assignable to another user or transferable to any other location without the prior written approval of AWWU. Sale or rental of the permittee's facility shall obligate the purchaser or tenant to seek prior written approval of AWWU for continued discharge to the AWWU sewerage system.

N. Signatory Requirements. All reports required by this permit shall be signed and certified by a duly authorized representative of the permittee in accordance with AMC 26.50.250.C.

O. Property Rights. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges.

P. Penalties. Violations of permits, utility rules and regulations, or special orders may subject the user to Compliance Order (AMC 26.60.360), Revocation of permit (AMC 26.50.340), Notice of violation (AMC

26.50.350), Publication (AMC 26.50.380), and administrative and/or civil penalties up to $1,000.00 (AMC 26.50.400).

Q. Civil and Criminal Liability. Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under Anchorage Municipal Code or State or Federal laws or regulations.

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

S. Revocation of Permit. The permit may be revoked as outlined in AMC 26.50.340

T. Permit Reapplication. Should the permittee wish to continue the discharge of process wastewater regulated by this permit after the expiration date, it must submit a written request for a permit reapplication form (DDF) at least 180 days prior to the current permit's expiration date.

U. Annual Publication. A list of all industrial users which were in significant noncompliance with applicable pretreatment standards and requirements during the previous twelve (12) months shall be published annually by AWWU in a daily newspaper of general circulation that provides meaningful public notice within the Municipality of Anchorage. Accordingly, the permittee is apprised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

V. Recovery of Cost Incurred. In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or Anchorage Municipal Code 26.50, or who discharges or causes a discharge producing a deposit or obstruction, or causes damage to impairs the AWWU wastewater disposal system, shall be liable to AWWU for any expense, loss or damage caused by such violation or discharge. AWWU will bill the permittee for the costs incurred by AWWU for any cleaning, repair or replacement work caused by the violation or discharge. Refusal to pay the assessed costs shall constitute a separate violation of Anchorage Municipal Code enforceable under section 26.50.330 and through 26.50.390

APPENDIX A
PROHIBITED ACTS
Anchorage Municipal Code 26.50.050

A. It shall be unlawful for any user to:

1. Introduce or cause to be introduced into the municipal sewerage system any pollutant or wastewater which causes pass through or interference. This general prohibition and the specific prohibitions below apply to all users whether or not they are subject to categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements.

2. Discharge or cause to be discharged any of the following described pollutants, substances, or wastewater into the municipal sewerage system:

   a. Any stormwater, surface water, surface runoff, groundwater, roof runoff, subsurface drainage, cooling water or other unpolluted water.

   b. Any water or wastewater which contains petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through or which in the opinion of the utility are in amounts greater than that which would be normally construed as incidental in normal discharges.

   c. Any solid or viscous substance, or liquid that can become viscous when cooled, in amounts capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewerage system such as, but not limited to, fat, grease, uncomminuted garbage, animal guts or tissues, hair, hide, fleshings or entrails.

   d. Any wastewater which creates a fire or explosive hazard, including, but not limited to, wastewaters with a closed-cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21. At no time shall two (2) successive readings on an explosion meter, at the point of discharge into the system (or at any point in the system), be more than five (5%) percent nor any single reading over ten (10%) percent of the lower explosive limit (LEL) of the meter.

   e. Any wastewater having a pH lower than 5.0 or higher than 12.5 at any time, or having any corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewerage works.

   f. Any wastewater which results in the presence of toxic gases, vapors, or fumes in a quantity that, in the opinion of the utility, may cause acute worker health and safety problems.

   g. Any wastewater containing radioactive substances except in compliance with applicable state or federal regulations.

   h. Any noxious or malodorous liquids, gases or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance, or hazard to life or health, or that are sufficient to prevent entry into the municipal sewerage system for its maintenance and repair.

   i. Any substance that will cause the utility to violate its NPDES permit.

   j. Any substance that may cause the municipal sewerage system's treatment residues, sludges, incinerator ash or scums to be unsuitable for reclamation and reuse or to interfere with the reclamation process.

   k. Any wastewater that causes the temperature at the treatment works influent to exceed 40 degrees Celsius (104 degrees Fahrenheit).

   l. Any pollutants, including oxygen demanding pollutants, released at a flow rate or concentration that, either singly or by interaction with other pollutants, will interfere with operation of the municipal sewerage system.

m. Any wastewater containing medical wastes from industrial users including but not limited to hospitals, clinics, offices of medical doctors, convalescent homes, medical laboratories or other medical facilities.

3. Prohibited connection of sanitary sewer with storm sewer system. Interconnect or cause to be interconnected directly or indirectly any part of a sanitary sewer system with any part of a storm sewer system.

4. Prohibited discharge at unapproved location. Discharge or cause to be discharged into a sanitary sewer any waters or wastes whatsoever other than through an approved, permanent sewer extension, or at a sewage dump station or other location that has been specifically so designated by the utility.

B. Vandalism. No person or entity shall willfully or negligently break, damage, destroy, uncover, deface, tamper with, or prevent access to any structure, appurtenance or equipment, or other part of the municipal sewerage system.

C. Any person or entity found in violation of this section shall be subject to the sanctions set out in this chapter.

APPENDIX B

SIGNATORY REQUIREMENTS FOR PRETREATMENT REPORT SUBMITTALS

Pursuant to the signatory requirements contained in the General Pretreatment Regulations (40 CFR 403.12 (l)), pretreatment reports submitted to AWWU shall include the following certification 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."

and shall be signed by an authorized representative of the permittee as follows:

A. If the user is a corporation:

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

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

B. If the user is an LLC, the managing member. If there is no managing member then any member.

C. If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.

D. If the user is a Federal, State, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or his/her designee.

E. The individuals described in paragraphs 1 through 4 above may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company and the written authorization is submitted to the Utility.

APPENDIX C

DEFINITIONS AND PROTOCOLS

A. Grab sample or Single grab sample. A single discreet sample collected over a time period not exceeding 15 minutes, without any regard to the waste stream's flow.

B. Composite sample or 24-hour composite. Used to measure the average amount of pollutants discharged during a specific period of time. Composite samples are preferred when evaluating compliance with 24-hour or daily average concentration limits. Composite samples may be obtained with the use of an automatic wastewater sampler, which collected aliquots based on time or wastewater flow.

C. Grab-composite. A series of grab samples (aliquots) collected over an operating day and combined in a larger container (usually poured manually). Grab composite samples shall be collected during hours of operation when process wastewater discharge actually occurs, within the 24 hour period (midnight to midnight) that includes the normal process day. During this period, 4 to 8 individual samples (aliquots) shall be collected in separate containers two hours apart so as to be representative of the volume and nature of the wastewater discharged over the process day. Each aliquot shall be a grab sample of not less than 250 ml for most parameters. Operational personnel (or laboratory personnel depending upon parameter) shall combine equal volumes from each aliquot to create a composite sample from analysis.

D. Measurement of Pollutants for Regulated Processes. Where feasible, the permittee shall monitor for regulated pollutants utilizing flow proportional sampling equipment. Where flow-proportional sampling is not feasible, time-proportional composite samples or a minimum of four (4) grab samples where the permittee can demonstrate that this will provide a representative sample of the effluent being discharged.

E. Cyanide Sampling Protocol. Samples obtained for cyanide analysis, shall be grab composites collected during hours of operation when process wastewater discharge actually occurs. During this period, the permittee shall collect 4 to 8 individual aliquots in separate containers, and combine equal volumes for each aliquot to create a composite sample for analysis.

Self-monitoring for cyanide must be conducted after cyanide treatment and before dilution with other waste streams. Each of the grab-composite aliquots must immediately be checked for the presence of sulfides and oxidizers (e.g., chlorine) prior to compositing. Any presence of either must be removed. If not interferences are detected or once the interferences have been removed, each aliquot shall be preserved with sodium hydroxide to a pH 12.0 or greater to ensure sample integrity before compositing.