City of Arcata

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February 26, 2018

Electronic Submittal

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Justin McSmith
Water Resource Control Engineer
Regional Water Quality Control Board
CIWQS

RE: WDID No. 1B82114OHUM/NPDES NO. CA0022713 ANNUAL PRETREATMENT REPORT FOR 2017

To Whom It May Concern:

Submitted herewith is the City of Arcata POTW Annual Pretreatment Report for 2017 and associated attachments.

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."

If you have any questions regarding this matter, please do not hesitate to contact me at (707) 822-8184.

Sincerely,

Mark Andre

Mark Andre
Director of Environmental Services

Attachments:
2017 City of Arcata Outfall #001 307a Table of Results
40 CFR 503 – 2017 Biosolids Annual Report

Pretreatment Program Overview

The City of Arcata pretreatment program encompasses 40 CFR 403 related activities; a Fats, Oils, and Grease (FOG) program; and public outreach activities.

As the agency responsible for administering 40 CFR 403 requirements the City developed and established specific authority in the Arcata Municipal Code; creating the City's Pretreatment Program. The City adopted an updated Sewer Use Ordinance (SUO) (Title 7, Chapter 2) on August 19, 2015 in order to modernize the program and comply with mandated streamlining rules. The City of Arcata Pretreatment Program has two positions directly associated with the program. The City's Environmental Compliance Officer functions as the Pretreatment Coordinator and Pretreatment Facility Inspector. The City's Environmental Compliance Technician provides secretarial support, performs FOG inspections and outreach. Ancillary support to the program is provided by the water/wastewater operational staff, collection system staff and other water/wastewater division staff as needed. The City dedicates the equivalent of 1 full time staff person since tasks are divided amongst employees.

2017 Industrial Pretreatment Program Report

The City of Arcata is a small community with a handful of industrial users (IUs). Historically, the timber industry had provided the industrial base in the community. As that industry has declined, the City has actively promoted the development of environmentally friendly industry. Today, the City of Arcata is home to many small companies which produce specialty items for niche markets. Generally, very few new industrial companies open each year in Arcata and those that have succeeded over the past 20 years are relatively environmentally friendly and do not pose a reasonable risk of interference or pass-through.

Most recently, the Arcata City Council passed a resolution authorizing the permitting of certain commercial medical cannabis/medical marijuana activities within a "medical marijuana innovation zone". The Commercial Cannabis Activity Permit (CCAP) application process includes review of the proposed industrial process and wastewater characteristics. To-date no CCAP applicants have been identified as Significant Industrial Users and two CCAP applicants have been identified as commercial users required to participate in the City's FOG program.

It is fairly easy for City staff to be aware of all industrial users due to the small size of the City and the existence of only a few concentrated business/industrial centers. Even so, pretreatment staff uses several means for identifying potential significant industrial users (SIUs) including reviewing all business license tax certificate applications submitted to the City, reviewing new construction and facility remodel plans submitted to the Building Department, and "windshield" surveys conducted as staff carry out day-to-day activities throughout town.

In 2017 the City had six SIUs discharging under a wastewater discharge permit; two of which are Categorical Industrial Users (CIU).

POTW Effluent and Sludge Sampling Results

Effluent-001 was sampled for California Toxics Rule Priority Pollutants in October 2017. Cyanide, carbon tetrachloride, dichlorobromomethane and bis (2-ethylhexyl) phthalate are monitored more frequently based on requirements in NPDES Permit No. CA0022713 Monitoring and Reporting Program. The results of priority pollutant monitoring of treatment plant effluent are presented in the 2017 City of Arcata Outfall #001 307a Table of Results (Attachment A).

When anaerobically digested sludge is drawn out of the digester, it flows into a covered drying bed and is allowed to dry for an extended period of time (typically 2-6 months) after which it is composted, on-site, with wetland vegetation and chipped brush. One sludge bed was drawn in 2017, resulting in the generation of 14.11 dry metric tons of sludge. Sludge samples were analyzed for arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium and zinc. Sludge results are presented in the 40 CFR 503 report for 2017 (Attachment B). Pollutant levels were well below limits specified by 40 CFR 503 Table 3.

Upset, Interference, or Pass-through

No upset, interference, or pass-through incidents resulting from discharge from nondomestic users, occurred in 2017.

Current List of Significant Industrial Users

Industry Name	Address	Type of User	Applicable Categorical Standard(s)	Subject only to Local Limits
Cypress Grove Chevre	1330 Q Street Arcata, CA 95521	Categorical	405.66	No
Pacific Powder Coating, Inc.	148 South G Street, Unit 9 Arcata, CA 95521	Categorical	433.17	No
Fieldbrook-Glendale Community Services District	4584 Fieldbrook Road Fieldbrook, CA 95519	Non-Categorical	N/A	Yes
Humboldt State University	1 Harpst Street Arcata, CA 95521	Non-Categorical	N/A	Yes
Mad River Community Hospital	3800 Janes Road Arcata, CA 95521	Non-Categorical	N/A	Yes
Redwood Curtain Brewing Company	550 South G Street, #5 Arcata, CA 95521	Non-Categorical	N/A	Yes

Neither of the Categorical Industrial Users is subject to local requirements which are more stringent than the applicable categorical pretreatment standards. None of the industrial users are subject to reduced reporting requirements. No industrial user is classified as a Non-Significant Categorical Industrial Users.

Industrial User Compliance Status

Categorical Industrial Users

Industrial User	Permit No.	Classification	NAICS#
Cypress Grove Chevre	004-01-0002	40 CFR 405.66	2022

Description of wastewater treatment or control process
The wastewater treatment system includes a 10,000 gallon equalization basin, two aerators, and a final clarifier. The system also includes continuous pH, dissolved oxygen and flow monitoring and an array of alarms to notify the operator of water quality issues.

Number of samples collected by IU in 2016:
The IU continuously monitored for pH, collected ten oil & grease samples and four BOD and TSS samples.

Number of samples collected by the POTW during the year	1
List of standards violated during the year:	Event not completed on time – sample event Event not completed on time – reporting event Effluent limit violation - pH
Was facility in significant noncompliance during the year?	Yes

Enforcement action summary:
A Notice of Violation (NOV) was issued on 7/11/2017 for a late sample event and failure to provide a required self-monitoring report within 45-days of the due date. The Industrial User (IU) returned to compliance with sampling requirements on 4/25/2017 by collecting and analyzing samples for BOD and TSS. The IU implemented procedures to have multiply staff verify that required samples have been collected 30-days before the end of each compliance quarter and trained additional staff on sample collection procedures. The IU returned to compliance with reporting requirements on 6/26/2017 with the submittal of a reporting fee and laboratory reports for all data collected during the reporting period.

A NOV and Compliance Order (CO) were issued on 8/3/2017 for an effluent limit violation. On 4/13/2017, wastewater having a pH less than 5.0 was discharged to the POTW. A total of 1,165-gallons having a pH ranging from 2.8 to 4.7 was discharged to the POTW. The IU reported that on 4/28/2017 low pH wastewater was detected in the pretreatment system. Discharge to the POTW was halted to prevent an effluent limit violation. In both cases, the event required discharge to cease for several hours and manual dosing and re-circulation to bring pH into an acceptable range. The IU was directed to install a pH adjustment system to the pretreatment system or otherwise make adjustments to the pretreatment system to prevent the occurrence of pH effluent violations. The IU completed a compliance project on 1/22/2018 with installation of an automatic valve which diverts wastewater back to the pretreatment system when high/low set-points are exceeded.

Industrial User	Permit No.	Classification	NAICS#
Pacific Powder Coating, Inc.	999-00-0126	40 CFR 433.17	33812

Description of wastewater treatment or control process:
Rinsate is collected in a 1,000 gallon holding tank. The facility batch discharges the holding tank when the tank approximately half full. The contents of the tank are discharged to the sanitary sewer through a floor drain via a siphon hose. There is no pretreatment for this discharge. Batch discharges must be scheduled with the City of Arcata Pretreatment Program and are contingent upon receipt of laboratory results demonstrating compliance with numeric effluent limits.

Number of samples collected by IU in 2016:
None required. The IU did not discharge in 2017.

Number of samples collected by the POTW during the year	1
List of standards violated during the year:	None
Was facility in significant noncompliance during the year?	No

Enforcement action summary:
A Notice of Violation was issued on 11/15/2017 for violation of permit conditions for failing to secure the discharge floor drain with a lock. A verbal warning was issued during the annual facility inspection and the industrial user immediately remedied the violation by locking the floor drain.

Non-Categorical Significant Industrial Users

Industrial User	Permit No.	Classification	NAICS#
Fieldbrook-Glendale Community Services District (FGCSD)	001-06-0139	Subject to general pretreatment standards	N/A

Description of wastewater treatment or control process
As a condition of the discharge permit issued to the IU, the District is required to adopt a sewer use ordinance with conditions for a pretreatment program. SIUs contributing all or portions of their wastewater to the District collection system are required to be managed under the established District Pretreatment Program.

Pursuant to Arcata Municipal Code, extrajurisdictional users, such as FGCSD, may enter into an agreement with the City to discharge into the POTW wastewater from outside the City's jurisdiction, with conditions requiring the extrajurisdictional user to have pretreatment controls for industrial users the service area. The current sewer use agreement with FGCSD contains the major provisions required by municipal code. The SIU permit for FGCSD is under review to determine portions of the current permit that should be applied to the agreement. When complete, this change will more appropriately classify FGCSD as an extrajurisdictional user, rather than a SIU, and consolidate requirements into a single document. The City anticipates that the sewer agreement update, with pretreatment requirements, will be finalized in 2018.

Number of samples collected by IU in 2017:
The IU is not required to sample discharge to the POTW. The IU is required to identify and issue a control mechanism to significant industrial users discharging to its collection system. To date no significant industrial users have been identified by the District.

Number of samples collected by the POTW during the year	No samples collected while permit is under review.
List of standards violated during the year:	n/a
Was facility in significant noncompliance during the year?	No

Enforcement action summary:
The IU is consistently achieving compliance.

Industrial User	Permit No.	Classification	NAICS#
Humboldt State University (HSU)	012-01-0130	Subject to general pretreatment standards	611310

Description of wastewater treatment or control process

As a condition of the discharge permit issued to the IU, Humboldt State University is required to implement sewer management rules with a pretreatment program component. SIUs contributing all or portions of their wastewater to HSU's collection system are required to be managed under the established HSU pretreatment program.

During the 2016 Pretreatment Compliance Inspection (PCI) conducted on 3/21/2016 by TetraTech the SIU permit for Humboldt State University was discussed in depth. Due to the nature of the discharges and configuration of industrial user, the pretreatment inspectors suggested that permits should be issued to each discharger within HSU's system rather than having a single control mechanism for the entire campus. At this time the SIU permit issued to HSU is under review to determine whether individual control mechanisms or an extrajurisdictional agreement would be the most appropriate means of controlling discharges from the industrial user.

Number of samples collected by IU in 2017	1
Number of samples collected by the POTW during the year	No samples collected while permit is under review.
List of standards violated during the year:	n/a
Was facility in significant noncompliance during the year?	No

The IU is consistently achieving compliance.

Industrial User	Permit No.	Classification	NAICS#
Mad River Community Hospital	010-02-0115	Subject to general pretreatment standards	622110

Description of wastewater treatment or control process

Discharges are controlled through the effluent limitations and pretreatment standards described in wastewater discharge permit no. 010-02-0115.

Number of samples collected by IU during the year

The IU collected four quarterly pH and oil & grease samples.

Number of samples collected by the POTW during the year	1
List of standards violated during the year:	Event not completed on time – report Event not completed on time – sample event
Was facility in significant noncompliance during the year?	No

Enforcement action summary:

A NOV and late report penalty of $139.20 was issued om 11/21/2017 for failure to submit a self-monitoring report on-time and late sample event. The industrial user returned to compliance by submitting a self-monitoring report and paying the applicable late report penalty. NOV and late report penalty of $92.80 was issued on 2/202018 for failure to submit a self-monitoring report on-time. The industrial user must submit a corrective action report within 10-days of receiving the NOV and a late report penalty within 30-days to return to compliance.

Industrial User	Permit No.	Classification	NAICS#
Redwood Curtain Brewing Company	005-00-0011	Subject to general pretreatment standards	312120
Description of wastewater treatment or control process Wastes from all cleaning and production processes are discharged onto a containment slab for batch discharge at the end of the process and/or work day. Each batch is sampled for pH prior to discharge, and pH is adjusted if necessary. Process wastewater flows through a solids separator prior to discharge to the POTW.			
Number of samples collected by the IU during the year The IU collected pH samples prior to each discharge, and 4 BOD samples.			
Number of samples collected by the POTW during the year			1
List of standards violated during the year			n/a
Was facility in significant noncompliance during the year?			No
Enforcement action summary: The IU is consistently achieving compliance.			

Compliance and Enforcement Activities

Compliance Activities

The following table is a summary of the industrial user site inspections and sampling events conducted by the City of Arcata.

Industry Name	Address	Date Inspected	Date Sampled by Control Authority
Cypress Grove Chevre	1330 Q Street Arcata, CA 95521	10/11/2017	10/24/2017
Fieldbrook-Glendale Community Services District	4584 Fieldbrook Road Fieldbrook, CA 95519	12/20/2017	Permit under review; no sampling in 2017
Humboldt State University	1 Harpst Street Arcata, CA 95521	Permit under review; no inspection in 2017	Permit under review; no sampling in 2017
Mad River Community Hospital	3800 Janes Road Arcata, CA 95521	12/20/2017	12/20/2017
Pacific Powder Coating	148 South G Street, Unit 9 Arcata, CA 95521	10/24/2017	10/24/2017
Redwood Curtain Brewing Company	550 South G Street, #5 Arcata, CA 95521	11/29/2017	11/29/2017

Non-Domestic, Non-Significant Industrial Users

A single, non-Significant Industrial User was issued a zero discharge permit in February 2016. The Industrial User is expected to apply for a wastewater discharge permit, and may be subject to 40 CFR, Chapter I, Part 418, Subpart G – Mixed and Blend Fertilizer Production subcategory upon commencement of discharge. Currently, the IU is storing generated wastewater in totes and hauling the waste to a disposal facility.

Summary of Changes to the Pretreatment Program

There were no changes to the Pretreatment Program in 2017.

Summary of Annual Pretreatment Budget

In 2017 approximately:

- $908 was spent on sample analysis
- $6000 was spent on assorted materials, parts, software, and equipment
- 1/3 of the Environmental Compliance Officer's efforts and ¼ of the Environmental Compliance Technician's efforts were dedicated towards the City's FOG and Pretreatment Program.

Public Participation Activities

Public Notice for Significant Non-Compliance for 2017 is scheduled for publication on 2/28/2018.

2017 FOG Program Report

The City of Arcata is home to Humboldt State University and is a comparatively affluent community in the Humboldt Bay urban area. Due to these factors a good number of restaurants conduct business in Arcata. A handful of food manufacturers operate in the City though the majority operate out of two large commissaries. Controlling and reducing the discharge of FOG from FSEs to the collection system is the main priority of the pretreatment program because most of the serious POTW issues relate to Sanitary Sewer Overflows (SSOs). The Pretreatment program performs FOG inspections and outreach to FSEs, coordinates with collection system workers regarding problem areas in the City's POTW, maintains associated records, and performs other administrative and enforcement functions.

The basis of the FOG program is municipal code authority given to the Director of Environmental Services to specify the use of and acceptable type of grease interception equipment. In practice, facilities are required to install or update their equipment when there is new construction, or if the facility is remodeling or changing ownership. It is frequently the case that the Environmental Compliance Officer establishes the minimum equipment acceptable as an authorized representative for the Director of some cases equipment larger than that required by plumbing code is required based on special factors such as historical cleaning frequency or storage of large quantities of liquid oil. The most critical determination for minimum required equipment is whether a Gravity Grease Interceptor (GGI) or a Hydromechanical Grease Interceptor (HGI) is required. In general, if a FSE has one or more of the following three conditions, a gravity grease interceptor is required:

1. a fryer will be in use at the FSE (excludes counter-top models)
2. there will be an automatic dishwasher in use at the FSE
3. the FSE has a quantity of oil in inventory that exceed the volumetric capacity of a HGI

At this time the City does not specifically accept Automatic Grease Removal Devices (GRD) or other "self-cleaning" equipment. Users may substitute a GRD for an equivalent rated HGI if requested but may not substitute a GRD for a GGI unless a specific variance is given to the minimum required equipment determination.

Compliance and Enforcement Activities

The City issued 21 enforcement actions against 15 FSEs in 2017 for failed grease removal devices (25% rule) and/or failure to keep cleaning records and/or service a grease removal device. A verbal Notice of Violation (NOV) was issued when a facility was found to be out of compliance with the 25% rule or was not able to produce all cleaning records during an inspection. In most cases, the verbal NOV given during the inspection was sufficient enforcement for the facility to return to compliance.

One NOV and Compliance Order was issued to a FSE for stormwater violations, which required plumbing repairs and sewage line video inspection for return to compliance. The facility returned to compliance within the time period specified in the enforcement action. Enforcement actions were issued to two FSEs, both school cafeterias, in 2015 for failing grease removal devices. Extensions were granted to allow the schools to coordinate project approval with the State Engineer. Both FSEs returned to compliance in 2017 with the installation of approved grease removal equipment.

In 2017, the City increased the number of FOG inspections in the Northtown neighborhood because of a Category 1 SSO in the neighborhood caused by FOG. Each FSE in Northtown was inspected around the time that its interceptor was due for maintenance/service. Increase inspection frequency resulted in grease removal devices being cleaned consistently and one enforcement recommendation.

FOG Inspections by POTW

The City of Arcata performed 173 FOG inspections/site visits at 87 FSEs in 2017. All FSEs with grease removal equipment were inspected. FOG inspections consist of a review of grease interceptor cleaning/servicing documentation and a physical inspection of the grease removal device including measurement of food solids and FOG layers.

In 2017, the FOG program emphasized the importance of establishing and maintaining an interceptor cleaning frequency that adequately protects the POTW from discharges of oil and grease and keeping cleaning records to verify that an established cleaning schedule is being maintained. The City considers the 25% rule (i.e. interceptor cleaned when 25% full of FOG and food solids) to be adequate to protect the POTW from FOG discharges. Inspectors performed frequent repeat visits to FSEs that did not have a known cleaning schedule. Inspection results culminated in an established cleaning schedule for the FSE.

Pollution Prevention/Outreach

Outreach activities are designed to provide information to the general public or commercial sectors on pretreatment issues and/or to gather information which is used in pretreatment program planning and development. Past outreach activities have included press releases on proper household disposal of waste products, informational pamphlets on prescription drug disposal options at local pharmacies, participation in regional recycling outreach, and surveys of voluntary dental amalgam practices by local dentists. In 2017, the City continued its practice of posting household FOG disposal information on the City website and issuing press releases around the holiday season when many households have an abundance of waste grease.

Attachment A
2017 City of Arcata Outfall #001 307a Table of Results

Attachment B

40 CFR 503 Biosolids 2017 Annual Report