



California Regional Water Quality Control Board North Coast Region

Geoffrey M. Hales, Chairman



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February 10, 2010

Norman Shopay
McKinleyville Community Services District
P.O. Box 2037
McKinleyville, CA 95519

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Dear Mr. Shopay:

Subject: Pretreatment Compliance Inspection Summary Report for the
McKinleyville Community Services District

File: McKinleyville Community Services District, Wastewater Treatment Facility,
675 Hiller Road McKinleyville, WDID#1B82084OHUM

A Pretreatment Compliance Audit (PCA) was conducted on April 21, 2009 for the McKinleyville Community Services District on behalf of the North Coast Regional Water Quality Control Board (Regional Water Board). Enclosed is the PCA Summary Report prepared by Tetra Tech. The Summary Report identified the following recommendations:

1. The District has initiated plans to reevaluate the local limits and has acquired the services of Freshwater Environmental to assist with this effort. The Tetra Tech auditor recommends that the District submit to the Water Board for approval the findings and proposed actions from the local limits evaluation before adopting any changes.
2. Section 26.02.3 of the SUO states that the permit application submitted by NDUs becomes the permit upon approval by the District. The Tetra Tech auditor strongly recommends that the District develop a permit template that meets the standards established in 40 CFR 403.8(f)(1).
3. Section 26.01 of the draft SUO references the authority to request periodic discharge reports but does not specifically identify BMR requirements. The Tetra Tech auditor strongly recommends that the District revise the SUO to specify the BMR requirements at 40 CFR 403.12(b).
4. As noted throughout the report, the SUO does not comply with the minimum requirements of 40 CFR Part 403 and must be revised accordingly. The Tetra Tech auditor recommends the District obtain a copy of the recently revised Model SUO from EPA's Web site at <http://www.epa.gov/npdes/pretreatment> to assist with this effort.
5. The District has not classified as SIUs any of the NDUs that were visited during the audit. Minkler's Jewelry operates a zero-discharge metal finishing operation subject

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to categorical standards under 40 CFR Part 433. The regulations at 40 CFR 403.3(v)(2) stipulate that a POTW with an approved pretreatment program may classify CIUs discharging less than 100 gallons per day as an NSCIU. The Tetra Tech auditor strongly recommends that the District establish the necessary legal authority to implement the NSCIU classification by adopting into the SUO the definition in 40 CFR Part 403.3(v)(2).

6. The lack of established monitoring makes it difficult to assess the impact from other nondomestic dischargers. Section 8.3 of this report has recommendations for monitoring at Humboldt Sanitation and Six Rivers Brewery. The Tetra Tech auditor also recommends that the District conduct periodic sampling downstream of Minkler's Jewelry to secure independent verification, as required by 40 CFR 403.8(f)(2)(v), that no metals from the categorical process are being discharged to sewer.
7. Humboldt Sanitation performs periodic monitoring of its storm water runoff for heavy metals. However, no monitoring of the discharge to sewer is performed. The Tetra Tech auditor recommends that the District evaluate the storm water monitoring data to gage the level of metals that might also be reaching the sewer. The auditor further recommends that the District initiate sampling of the discharge to sewer to verify that the waste does not contain elevated levels of heavy metals.
8. Humboldt Sanitation has two open wash bays on-site. The Tetra Tech auditor recommends that the District work with the facility to ensure that the wash bays are covered to minimize the amount of storm water entering the collection system.
9. Exact BOD loadings from Six Rivers Brewery were unknown at the time of the PCA. The Tetra Tech auditor strongly recommends that the District monitor the discharge for BOD and total suspended solids to verify the loading rates.
10. Minkler's Jewelry is a commercial jeweler that performs a small amount of rhodium plating on individual pieces. Such a process is subject to 40 CFR Part 433. The Tetra Tech auditor recommends that the District revisit the facility to speak with the owner and ensure that no discharge is occurring as reported during the site visit. The auditor further recommends that the District issue a zero-discharge permit to the facility as an added level of protection for the WMF.

Regional Water Board staff has reviewed the PCA and we encourage the District to pursue the recommended activities as stated above. If you have any questions regarding this matter, please contact me at (707) 576-2677 or at LBernard@waterboards.ca.gov.

Sincerely,



Lisa Bernard
Sanitary Engineering Associate

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Enclosure: April 2009 Pretreatment Compliance Audit (PCA) Summary Report

Pretreatment Compliance Audit

Summary Report

Discharger: McKinleyville Community Services District
NPDES No. CA0024490
Humboldt County

Location: 675 Hiller Road, McKinleyville, California 95519

Contact: Greg Orsini, Lead Operator
Tom Marking, Director of Public Works (not present for the PCA)
Oren Plocker, Freshwater Environmental

Inspection date: April 21, 2009

Inspected by: Chuck Durham, Tetra Tech, Inc.
Lisa Bernard, North Coast Regional Water Board

Contents

1. Executive Summary	1
2. Introduction.....	1
3. Industrial Waste Survey	2
4. Local Limits	2
5. Legal Authority	3
5.1 Pretreatment Streamlining Regulations.....	3
5.2 Legal Authority Review	4
5.2.1 Definitions	4
5.2.2 Prohibitive Discharge Standards.....	4
5.2.3 Control Mechanisms.....	5
5.2.4 Reporting Requirements	5
5.2.5 Enforcement	5
6. Control Mechanisms.....	5
7. Application of Pretreatment Standards and Requirements	6
8. Compliance Monitoring.....	7
8.1 Compliance Sampling	7
8.2 Compliance Inspections	7
8.3 Nondomestic Discharger Site Inspections Conducted during the PCA	8
9. Pollution Prevention	9
10. Summary of Requirements and Recommendations	9
10.1 Requirements.....	9
10.2 Recommendations	10

Attachments

- Attachment A Sewer Use Ordinance
- Attachment B Legal Review Checklist

1. Executive Summary

The McKinleyville Community Services District (District) is responsible for providing sewer, water, street, electricity, and parks and recreation service to McKinleyville and the surrounding area. The District provides sewer service to approximately 10,000 customers, and its staff manages the Wastewater Management Facility (WMF or facility) at 675 Hiller Road. That facility is regulated under National Pollutant Discharge Elimination System (NPDES) No. CA0024490 and Order No. R1-2008-0039 and has a design capacity of 1.61 million gallons per day. The District does not have an approved pretreatment program, but Section VI(C)(5)(b) of its NPDES permit requires it to carry out a number of source control measures. Those measures include establishing adequate legal authority to monitor and enforce source control standards, establish a permit system for waste haulers, conduct a waste survey every 5 years, and conducting periodic inspections and monitoring to ensure adequate source control.

At the time of the Pretreatment Compliance Audit (PCA or audit), the District had not completed an industrial waste survey in more than 6 years but had just recently initiated efforts to do so. The District's Rules and Regulations (sewer use ordinance or SUO) do not comply with the minimum requirements of Title 40 of the *Code of Federal Regulations* (CFR) Part 403 and must be revised. The District does not have a control mechanism that meets the minimum requirements of 40 CFR 403.8 in place for any of its nondomestic users (NDUs). The District's personnel nor its consultant could validate the basis for existing local limits, and development documents were not available. The local limits must be reevaluated at least every 5 years and must be technically sound. The District has acquired the services Freshwater Environmental to perform the reevaluation. The District has implemented a pollution prevention program to reduce the disposal of unused pharmaceuticals to the sewer.

2. Introduction

The North Coast Regional Water Quality Control Board (Water Board), with assistance from Tetra Tech, Inc., conducted a PCA of the District on April 21, 2009. In the absence of an approved pretreatment program, the primary purpose of this PCA was to evaluate any efforts the District has implemented with respect to source control and to identify any potential categorical industrial users (CIUs) that might be discharging to the publicly owned treatment works (POTW). This report describes the primary concerns generated from the audit. Please note that, for the purposes of the report, recommendations and requirements are addressed as if the District has an approved program.

The audit consisted of three parts: an interview of the District's source control staff, a review of the pretreatment program files, and site visits to area NDUs. The interview included a discussion with the District's lead operator and the District's consultant regarding the program in general, the District's compliance sampling and inspection procedures and their frequency, and enforcement issues. The information available for

specific NDUs was minimal; therefore, the file review was limited to a cursory review of the SUO and the most recent discharge monitoring reports. As part of the audit, the following NDUs were inspected:

- Humboldt Sanitation (noncategorical significant industrial user [SIU])
- Six River's Brewery (noncategorical SIU)
- Minkler's Jewelry (zero-discharging CIU)
- Steve's Septic (non-categorical SIU)

This report summarizes the overall findings of the audit and describes the program elements that are not consistent with federal pretreatment program requirements. In addition, the report provides recommendations to enhance the effectiveness of program implementation and enforcement.

3. Industrial Waste Survey

The regulations at 40 CFR 403.8(f)(2) require POTWs to identify all possible industrial users (IUs) and further identify the character and volume of pollutants contributed by each IU. Furthermore, Section VI(C)(5)(b)(ii) of the District's NPDES permit requires the POTW to conduct an industrial waste survey at a minimum frequency of at least every 5 years. At the time of the PCA, the District had initiated a preliminary industrial waste survey, identifying more than 50 commercial users in need of further evaluation. District personnel indicated that it had been more than 6 years since the last survey had been completed. The District intends to send out a survey *short form* and, on the basis of the results of the survey, will narrow the list to those users discharging nondomestic wastewater. The District will then require those facilities to fill out the survey *long form* providing detailed information about processes, chemicals used, and wastewater characteristics. The District is required to complete the survey and submit the results to the Water Board. That report must include the following: identification of those industries eliminated from further evaluation with an explanation as to why, identification of IUs in need of further evaluation, and the final list of IUs for which the District has determined are in need of permitting under the pretreatment program.

4. Local Limits

The federal pretreatment regulations at 40 CFR 403.5(c) require POTWs to develop and enforce local limits to implement the general and specific prohibitions at 40 CFR 403.5(a) and (b). The pretreatment regulations also require POTWs to continue to develop the local limits as necessary and effectively enforce the limits. In addition, the recently promulgated federal streamlining regulations state that POTWs may develop best management practices (BMPs) to implement the general and specific prohibitions. The BMPs must be considered local limits and pretreatment standards (40 CFR 403.5(c)(4)).

The District has established local limits for 10 metals (arsenic, cadmium, copper, cyanide, lead, mercury, nickel, silver, total chromium, and zinc), as listed in Section 24.08.01 of its SUO. In addition, Section 24.08.02 lists restrictions on temperature, oil and grease, pH, chlorinated hydrocarbons, and phenols. The limiting criteria used to

determine existing limits for each individual pollutant was unknown to District staff and the consultant. It was noted, however, that the District planned to recalculate the local limits in the near future and had just acquired the services of Freshwater Environmental to assist with that effort. District personnel cited the lenient nature of the existing limits for toxic pollutants (lead, copper, and silver specifically) as the driving force being the reevaluation. The Tetra Tech auditor recommends that the District submit the findings and proposed actions from the local limits evaluation to the Water Board for approval before adopting any changes.

5. Legal Authority

The federal pretreatment regulations at 40 CFR 403.8(f) require that every POTW subject to the national pretreatment program has the necessary legal authority to apply and enforce section 307(b) and (c) and section 402(b)(8) of the Clean Water Act.

5.1 Pretreatment Streamlining Regulations

On October 14, 2005, the U.S. Environmental Protection Agency (EPA) promulgated several changes to the general pretreatment regulations (streamlining rule). The following table indicates where to find the changes in the newly revised general pretreatment regulations at 40 CFR Part 403.

Issue	Section of 40 CFR Part 403 Rule
Sampling for pollutant not present	403.8(f)(2)(v), 403.12(e)
General control mechanisms	403.8(f)(1)(iii)
Best management practices	403.5, 403.8(f), 403.12(b), (e), (h)
Slug control plans	403.8(f)(1)(iii)(B)(6), 403.8(f)(2)(vi)
Equivalent concentration limits for flow-based standards	403.6(c)(6)
Equivalent mass limits for concentration-based standards	403.6(c)(5)
Use of grab and composite samples	403.12(g)
Significant noncompliance criteria	403.8(f)(2)(viii)
Removal credits	403.7(h)
Nonsignificant CIU	403.3(v)(2), 403.8(f)(2)(v), (6), 403.12(e)(1), (g), (i), (q)
Middle Tier CIU	403.8(f)(2)(v)(C), 403.12(e)(3), (i)
Miscellaneous changes	403.12(g), (i), (l), (m)

Many of the streamlining provisions are changes that the POTW may adopt at its discretion. A few of the provisions, however, require the POTW to revise its legal authority. The required changes are as follows:

- 40 CFR 403.8(f)(1)(iii)(B)(6): clarification that slug control requirements must be referenced in SIU control mechanisms
- 40 CFR 403.8(f)(2)(viii)(A–C): revisions to the significant noncompliance (SNC) definition
- 40 CFR 403.12(g): modifications to the sampling requirements and a clarification of the requirement to report all monitoring results

The required changes are summarized in *Pretreatment Streamlining Rule Fact Sheet 2.0: Required Changes*, February 2006, on EPA's Web site at http://cfpub.epa.gov/npdes/home.cfm?program_id=3.

5.2 Legal Authority Review

The auditor reviewed the District's existing SUO to evaluate whether it contains all legal authority components required at 40 CFR Part 403. The findings of this review are described in detail in the sections below.

5.2.1 Definitions

The SUO does not include many of the definitions listed in 40 CFR 403.3. Specifically, it is missing adequate definitions for the following:

- Authorized Representative
- BMPs
- Categorical Standard
- IU
- Interference
- National Pretreatment Standard
- New Source
- Pass Through
- Pretreatment Requirement
- SIU
- SNC

The District is required to modify the SUO to include definitions for each of the above terms.

5.2.2 Prohibitive Discharge Standards

Section 24.01 of the SUO lists prohibited dischargers but does not comply with 40 CFR 403.5(b). Specific deficiencies include the following:

- The fire/explosion prohibition does not include the flashpoint criteria listed in 40 CFR 403.5(b)(1).
- Prohibition language does not include the pH/corrosion prohibition listed in 40 CFR 403.5(b)(2).
- The only temperature prohibition restricts actual discharge to 150 degrees Fahrenheit (°F). 40 CFR 403.5(b)(5) restricts discharges that cause the POTW influent to exceed 140 °F.
- The language in Sections 24.08.3 and 24.08.4 refers to national categorical standards and local limits but is lacking in comparison to 40 CFR Part 403.
- The SUO does not contain any reference to BMPs

The District is required to modify the SUO's prohibitive discharge section to comply with 40 CFR 403.5(b).

5.2.3 Control Mechanisms

The regulation at 40 CFR 403.8(f)(1) lists the minimum requirements for an IU permit. Section 26.02.4 of the SUO provides a list of information to be included in an IU permit issued by the District. That section is missing information regarding permit duration, non-transferability, applicable penalties, and slug discharge. The SUO does establish legal authority for permit duration and non-transferability but not within the scope of individual permit language. The District is required to modify Section 26.02.4 to include all components of 40 CFR 403.8(f)(1).

Section 26.02.3 of the SUO states that the permit application submitted by NDUs becomes the permit, upon approval by the District. The District should use the permit application to determine which pollutants of concern should be monitored, sampling frequencies, and reporting requirements. The permit format and layout should not look anything like a permit application. The Tetra Tech auditor strongly recommends that the District develop a permit template that will meet the standards established in 40 CFR 403.8(f)(1).

5.2.4 Reporting Requirements

Section 26.01 of the SUO references the authority to request periodic discharge reports but does not specifically identify baseline monitoring report (BMR) requirements. The Tetra Tech auditor strongly recommends that the District revise the SUO to specify the BMR requirements at 40 CFR 403.12(b).

5.2.5 Enforcement

Section 29 of the SUO establishes all the District's enforcement remedies. However, it fails to include all components of enforcement outlined in 40 CFR 403.8(f)(1)(vi). Of greatest significance, the SUO does not establish authority for an enforcement response plan (ERP). It is imperative that the District develop an ERP to ensure an effective source control program. Therefore, the District is required to modify the SUO to comply with 40 CFR 403.8(f)(1)(vi).

As noted throughout this section, the SUO does not comply with the minimum requirements of 40 CFR Part 403 and must be revised accordingly. The Tetra Tech auditor recommends that the District obtain a copy of the recently revised Model SUO from EPA's Web site at <http://www.epa.gov/npdes/pretreatment> to assist with that effort. In addition, EPA also has published a guidance manual on developing an ERP, and it can be downloaded from the same Web site. Attached to this report is a copy of the completed legal authority checklist to help the District identify deficient components of its SUO.

6. Control Mechanisms

To ensure compliance with applicable pretreatment standards, the federal pretreatment regulations at 40 CFR 403.8(f)(1)(iii) require POTWs to control the discharges from nondomestic dischargers by using control mechanisms (permits or other similar means). The control mechanisms must include, at a minimum, the following:

- Statement of duration (in no case more than 5 years)

- Statement of nontransferability
- Effluent limits, including BMPs, based on applicable pretreatment standards
- Self-monitoring, sampling, reporting, and record-keeping requirements
- Statement of penalties
- Compliance schedules (if applicable)
- Required resampling within 30 days after noticing a violation
- Slug control requirements (if necessary)
- Notification requirements
 - Notice of slug loadings
 - Notification of spills, bypasses, or upsets
 - Notification of significant change in discharge
 - Notification within 24 hours after noticing a violation

Permits for CIUs must also properly use the combined wastestream formula, properly convert mass-based limits to concentration-based limits, properly apply production-based limits (if applicable), and include a prohibition on dilution as a substitute for treatment.

Section VI(C)(5)(b) of the District's NPDES permit describes the source control program implementation requirements. The only reference to permitting of NDUs in that language is found in subpart (ii), and it stipulates that the District is to establish a waste hauler permit system. At the time of the audit, Steve's Septic did not have a discharge permit. It is the largest contributor, by volume, to the POTW. In an effort to comply with Section VI(C)(5)(b)(ii) of the NPDES permit, the District must issue a permit to Steve's Septic.

Minkler's Jewelry is a zero-discharging categorical facility. The retail jeweler does small-volume (one-pint beakers) rhodium plating. Until the District can revise its SUO to adopt the nonsignificant CIU (NSCIU) classification, the the regulations at 40 CFR 403.8(f)(1)(iii) require the District to permit the facility as a zero-discharging CIU and require annual certification of the zero-discharge.

7. Application of Pretreatment Standards and Requirements

The federal pretreatment regulations at 40 CFR 403.8(f)(1) require the District to have the legal authority to require compliance with applicable pretreatment standards and requirements and to ensure compliance with these standards and requirements through the use of control mechanisms such as permits.

The District has not classified as SIUs any of the NDUs that were visited during the audit. Minkler's Jewelry operates a zero-discharge metal finishing operation subject to categorical standards under 40 CFR Part 433. The regulations at 40 CFR 403.3(v)(2) stipulate that a POTW with an approved pretreatment program may classify CIUs discharging less than 100 gallons per day as an NSCIU. An NSCIU is required to submit annual certification statement as specified in 40 CFR 403.12(q). The Tetra Tech auditor strongly recommends that the District establish the necessary legal authority to implement the NSCIU classification by adopting into the SUO the definition in 40 CFR Part 403.3(v)(2).

8. Compliance Monitoring

The federal pretreatment regulations at 40 CFR 403.8(f)(2)(v) require that a POTW develop and implement an inspection and monitoring program to determine, independent of information supplied by nondomestic dischargers, compliance or noncompliance with applicable pretreatment standards and requirements. Furthermore, 40 CFR 403.8(f)(2)(vii) requires POTWs to investigate instances of noncompliance and enforce the regulations as necessary.

8.1 Compliance Sampling

The federal pretreatment regulations at 40 CFR 403.8(f)(2)(v) require that all SIUs be sampled at least once a year unless the POTW has authorized a CIU to forego sampling of a pollutant regulated by federal pretreatment requirements. In such a case, the POTW must sample for the waived pollutant(s) at least once during the permit term [40 CFR 403.8(f)(2)(v)(A)].

Restaurants grease traps are sampled monthly to get a profile of the waste. If grease traps are at greater than 20 percent capacity, pumping is required. The restaurant is required to submit a copy of the invoice to the District as verification of the pumping event. District representatives noted that the biggest impact to the collection system and the WMF is historically from the restaurants.

Groundwater remediation wastes hauled to the WMF are sampled for benzene, toluene, and xylene before pumping. All results must be below detection (0.5 milligram per liter) before discharge can occur.

The lack of established monitoring makes it difficult to assess the impact from other nondomestic dischargers. Section 8.3 below includes recommendations for monitoring at Humboldt Sanitation and Six Rivers Brewery. The Tetra Tech auditor also recommends that the District conduct periodic sampling downstream of Minkler's Jewelry to secure independent verification, as required by 40 CFR 403.8(f)(2)(v), that no metals from the categorical process are being discharged to the sewer.

8.2 Compliance Inspections

The federal pretreatment regulations at 40 CFR 403.8(f)(2)(v) require that all SIUs be inspected at least once a year unless a discharger is subject to the reduced reporting requirements under 40 CFR 403.12(e)(3). In such a case, the POTW must inspect the discharger at least once every 2 years [40 CFR 403.8(f)(2)(v)(C)].

The District's compliance inspection frequencies were found to be inadequate. The District's inspection efforts are primarily focused on restaurants, which are inspected monthly. The District is preparing to initiate an oil/water separator evaluation program for area car washes and automobile service facilities. The other NDUs have been inspected by District personnel in the past but not necessarily annually. The District's NPDES permit Section VI(C)(5)(b)(iv) requires ongoing industrial inspections at a frequency to ensure adequate source control. Therefore, the District is required to

establish and implement an inspection protocol that complies with its NPDES permit and the provisions of 40 CFR 403.8(f)(2)(v).

8.3 Nondomestic Discharger Site Inspections Conducted during the PCA

The Tetra Tech auditor, along with the District and Water Board representatives, inspected four of the District's NDUs. The Tetra Tech auditor noted the following during the nondomestic discharger site visits:

Humboldt Sanitation. This facility's primary operation is refuse collection, but it also operates a recycling center, a liquid waste booth rental company, and a fencing equipment rental company at the same location. The facility has two open wash bays on-site. The first wash bay is for the refuse collection trucks and has a four-stage oil/water separation system. Chico Oil pumps out the separator twice per year and disposes of the waste off-site. The second bay is for washing the dust off of portable toilet booths. The booths are *dry* when they arrive on-site, having already been pumped out by the hauler. They are sprayed off when rented just before delivery simply for aesthetic purposes. The facility performs periodic monitoring of its stormwater runoff for heavy metals. There is, however, only random monitoring of the discharge to sewer even though the facility has experienced lead violations in the past. The Tetra Tech auditor recommends that the District evaluate the stormwater monitoring data to gage the level of metals that might also be reaching the sewer. The auditor further recommends that the District initiate sampling of the discharge to sewer to verify that the waste does not continue to contain elevated levels of heavy metals. Additionally, the Tetra Tech auditor recommends that the District work with the facility to cover the wash bays to minimize the amount of stormwater entering the collection system.

Steve's Septic. The facility is a commercial septic hauling operation that also has on-site treatment of collected waste. The operation includes two trucks that collect waste from septic tanks throughout Humboldt County. Once on-site, the waste is dumped into one of two 10,000-gallon tanks. The waste is then pumped into the treatment unit. Polymer (polyacrylamide emulsion) is added for flocculation. After mixing, the waste is then pumped into the filter tank (a filter-lined roll-off box) for dewatering. The water filters through and drains to a 1,200-gallon settling tank. The water then passes through a three-stage settling chamber before entering the sewer. Solids generated from the operation are shipped off-site to a ranch in Gerlach, Nevada, for land application. As noted previously, the District is required to permit all waste hauling facilities that discharge to the WMF. No deficiencies were noted at this facility as part of the PCA. As noted previously, the District must issue a permit to this facility as required by Section VI(C)(5)(b)(ii) of its NPDES permit.

Six River's Brewery. The facility is a restaurant and small microbrewery that brews approximately three to five batches per week. The brewing operation uses one 200-gallon kettle and two 400-gallon kettles. A caustic cleaner and acid rinse is used to clean kettles after each batch. The brew room has a 2-foot floor trap that captures spillage and washdown water. The trap flows to the grease interceptor before entering the sewer. Solids wastes (grains, hops, and barley malt) are picked up daily by a local farmer and used for horse feed. Exact biochemical oxygen demand (BOD) loadings from the discharge are unknown. The Tetra Tech auditor strongly recommends that the District

monitor the discharge for BOD and total suspended solids to verify the loading rates. No other concerns were noted at this facility.

Minkler's Jewelry. The facility is a commercial jeweler that performs a small amount of rhodium plating on individual pieces. The facility owner was not present at the time of the inspection, but other facility personnel noted that the plating occurs only about once a month and that no discharge is made to the sewer from the process. The plating and rinse takes place in small-volume beakers and is simply replenished as needed. The Tetra Tech auditor recommends that the District revisit the facility to speak with the owner and ensure that no discharge occurs from the facility. The auditor further recommends that the District issue a zero-discharge permit to the facility as an added level of protection for the WMF.

9. Pollution Prevention

Because of increased public awareness and concerns nationwide regarding unused pharmaceuticals, the District has initiated a *No Drugs Down the Drain* program. The program includes distribution of education flyers at various community events and designates special locations and times for disposal of unused prescription medicine. The District also plans to purchase advertising space on prescription bags for local pharmacies. The District is to be commended for this progressive effort.

10. Summary of Requirements and Recommendations

Listed below are the primary requirements and recommendations resulting from the audit of the District's pretreatment program. For more specific information pertaining to each comment, see the cited sections of the report.

10.1 Requirements

1. The District has not completed an industrial waste survey in more than 6 years. The regulations at 40 CFR 403.8(f)(2) require POTWs to identify all possible IUs and further identify the character and volume of pollutants contributed by each IU. Furthermore, the District's NPDES permit Section VI(C)(5)(b)(ii) permit requires the it to conduct an industrial waste survey at a minimum frequency of at least every 5 years. The District is required to complete the survey and submit the results to the Water Board. That report must include the following: (1) a list of industries eliminated from further evaluation with an explanation as to why, (2) a list of IUs in need of further evaluation, and (3) the final list of IUs for which the District has determined are in need of permitting under the pretreatment program. (Section 3.0, Industrial Waste Survey)
2. The SUO does not include many of the definitions listed in 40 CFR 403.3. The District is required to modify the SUO to include definitions for each of the specified terms. (Section 5.2.1, Definitions)
3. Section 24.01 of the SUO lists prohibited dischargers, but the language does not comply with 40 CFR 403.5(b). The District is required to modify the SUO's

prohibitive discharge section to comply with 40 CFR 403.5(b). (Section 5.2.2, Prohibitive Discharge Standards)

4. 40 CFR 403.8(f)(1) lists the minimum requirements for an IU permit. Section 26.02.4 of the SUO lists information to be included in an IU permit issued by the District, but it is missing information regarding permit duration, non-transferability, applicable penalties, and slug discharge. The District is required to modify Section 26.02.4 to include all components of 40 CFR 403.8(f)(1). (Section 5.2.3, Control Mechanisms)
5. Section 29 of the SUO describes all enforcement remedies for the District. It fails to include all components of enforcement outlined in 40 CFR 403.8(f)(1)(vi). Of greatest significance, the SUO does not establish authority for an ERP. The District must develop an ERP to ensure an effective source control program. Therefore, the District is required to modify the SUO to comply with 403.8(f)(1)(vi). (Section 5.2.5, Enforcement)
6. Section VI(C)(5)(b)(ii) stipulates that the District is to establish a waste hauler permit system. At the time of the audit, Steve's Septic did not have a discharge permit and is the largest contributor, by volume, to the POTW. In an effort to comply with Section VI(C)(5)(b)(ii) of the NPDES permit, the District must issue a permit to Steve's Septic. (Section 6.0, Control Mechanisms)
7. Minkler's Jewelry is a zero-discharging categorical facility. The District is required by 40 CFR 403.8(f)(1)(iii) to permit the facility as a zero-discharging CIU and require annual certification of the zero-discharge. (Section 6.0, Control Mechanisms)
8. The District's compliance inspection frequencies were found to be inadequate. The District's NPDES permit Section VI(C)(5)(b)(iv) requires ongoing industrial inspections at a frequency to ensure adequate source control. Therefore, the District is required to establish and implement an inspection protocol that complies with the NPDES permit and the provisions of 40 CFR 403.8(f)(2)(v). (Section 8.2, Compliance Inspections)

10.2 Recommendations

1. The District has initiated plans to reevaluate the local limits and has acquired the services of Freshwater Environmental to assist with this effort. The Tetra Tech auditor recommends that the District submit to the Water Board for approval the findings and proposed actions from the local limits evaluation before adopting any changes. (Section 4, Local Limits)
2. Section 26.02.3 of the SUO states that the permit application submitted by NDUs becomes the permit upon approval by the District. The Tetra Tech auditor strongly recommends that the District develop a permit template that meets the standards established in 40 CFR 403.8(f)(1). (Section 5.2.3, Control Mechanisms)

3. Section 26.01 of the draft SUO references the authority to request periodic discharge reports but does not specifically identify BMR requirements. The Tetra tech auditor strongly recommends that the District revise the SUO to specify the BMR requirements at 40 CFR 403.12(b). (Section 5.2.4, Reporting Requirements)
4. As noted throughout the report, the SUO does not comply with the minimum requirements of 40 CFR Part 403 and must be revised accordingly. The Tetra Tech auditor recommends the District obtain a copy of the recently revised Model SUO from EPA's Web site at <http://www.epa.gov/npdes/pretreatment> to assist with this effort. (Section 5.2.5, Enforcement)
5. The District has not classified as SIUs any of the NDUs that were visited during the audit. Minkler's Jewelry operates a zero-discharge metal finishing operation subject to categorical standards under 40 CFR Part 433. The regulations at 40 CFR 403.3(v)(2) stipulate that a POTW with an approved pretreatment program may classify CIUs discharging less than 100 gallons per day as an NSCIU. The Tetra Tech auditor strongly recommends that the District establish the necessary legal authority to implement the NSCIU classification by adopting into the SUO the definition in 40 CFR Part 403.3(v)(2). (Section 7.0, Application of Pretreatment Standards and Requirements)
6. The lack of established monitoring makes it difficult to assess the impact from other nondomestic dischargers. Section 8.3 of this report has recommendations for monitoring at Humboldt Sanitation and Six Rivers Brewery. The Tetra Tech auditor also recommends that the District conduct periodic sampling downstream of Minkler's Jewelry to secure independent verification, as required by 40 CFR 403.8(f)(2)(v), that no metals from the categorical process are being discharged to sewer. (Section 8.1, Compliance Sampling and Section 8.3, Nondomestic Discharger Site Inspections Conducted During the PCA)
7. Humboldt Sanitation performs periodic monitoring of its stormwater runoff for heavy metals. However, no monitoring of the discharge to sewer is performed. The Tetra Tech auditor recommends that the District evaluate the stormwater monitoring data to gage the level of metals that might also be reaching the sewer. The auditor further recommends that the District initiate sampling of the discharge to sewer to verify that the waste does not contain elevated levels of heavy metals. (Section 8.3, Nondomestic Discharger Site Inspections Conducted during the PCA)
8. Humboldt Sanitation has two open wash bays on-site. The Tetra Tech auditor recommends that the District work with the facility to ensure that the wash bays are covered to minimize the amount of stormwater entering the collection system. (Section 8.3, Nondomestic Discharger Site Inspections Conducted during the PCA)
9. Exact BOD loadings from Six Rivers Brewery were unknown at the time of the PCA. The Tetra Tech auditor strongly recommends that the District monitor the

discharge for BOD and total suspended solids to verify the loading rates. (Section 8.3, Nondomestic Discharger Site Inspections Conducted during the PCA)

10. Minkler's Jewelry is a commercial jeweler that performs a small amount of rhodium plating on individual pieces. Such a process is subject to 40 CFR Part 433. The Tetra Tech auditor recommends that the District revisit the facility to speak with the owner and ensure that no discharge is occurring as reported during the site visit. The auditor further recommends that the District issue a zero-discharge permit to the facility as an added level of protection for the WMF. (Section 8.3, Nondomestic Discharger Site Inspections Conducted during the PCA)

CHECKLIST – PRETREATMENT PROGRAM LEGAL AUTHORITY REVIEWS

NAME OF POTW: McKinleyville Community Services District
 DATE OF REVIEW: 5/12/09

Note: Several changes to the National Pretreatment Regulations made as a result of the Streamlining Rule are more stringent than the previous Federal requirements and therefore are considered required modifications for the POTW. Therefore, to the extent that existing POTW legal authorities are inconsistent with these required changes, they must be revised. Where local authorities are already consistent with these required provisions, further changes are not necessary.

NONE = No revision necessary REQ = Require Revision REC = Recommend Revision

	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
			NONE	REQ	REC		
A. Definitions [403.3 & 403.8(f)(2)]							
1. Act, Clean Water Act	403.3(b)	§ 1.4 A	x			1.22	Defines ‘Federal Act’ but includes all amendments that follow.
2. Authorized or Duly Authorized Representative of the User	403.12(l)	§ 1.4 C		x		1.41	Definition of ‘Person’ references corporate representative but is very general.
3. Best Management Practices or BMPs	403.3(e)	§ 1.4 E		x		NA	
4. Categorical Pretreatment Standard or Categorical Standard		§ 1.4 F		x		NA	
5. Indirect Discharge or Discharge	403.3(i)	§ 1.4 M	x			1.27	Defines ‘Industrial Wastewater’
6. Industrial User (or equivalent)	403.3(j)	§ 1.4 LL		x			
7. Interference	403.3(k)	§ 1.4 O		x			
8. National Pretreatment Standard, Pretreatment Standard or Standard	403.3(l)	§ 1.4 BB		x			
9. New Source	403.3(m)	§ 1.4 T		x			
10. Pass Through	403.3(p)	§ 1.4 V		x			
11. Pretreatment Requirement	403.3(t)	§ 1.4 AA		x			

12. Publicly Owned Treatment Works or POTW	403.3(q)	§ 1.4 DD							
13. Significant Industrial User <i>[NOTE: §1.4 GG(3) is an optional streamlining provision for Non-Significant Categorical Industrial User classification.]</i>	403.3(v)	§ 1.4 GG				x		1.32	Allows flows of up to 50,000 gpd. Must modify to mirror 403 definition.
14. Significant Noncompliance	403.8(f)(2)(vii)	§ 9 (A-H)				x			

NONE = No revision necessary	REQ = Require Revision	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
				NONE	REQ	REC		
15. Slug Load or Slug Discharge		403.8(f)(2)(vi)	§ 1.4 HH		x			
16. Other definitions based on terms used in the POTW Ordinance								
B. National Pretreatment Standards - Prohibited Discharges								
1. General Prohibitions								
a. Interference		403.5(a)	§ 2.1A	x			24.01(f) &(g)	
b. Pass Through		403.5(a)	§ 2.1A		x		24.01	Does not specifically reference pass-through.
2. Specific Prohibitions [403.5(b)]								
a. Fire/Explosion Hazard (60° C or 140° F flashpoint)		403.5(b)(1)	§ 2.1B(1)		x		24.01(a)	Does not cite flashpoint criteria.
b. pH/Corrosion		403.5(b)(2)	§ 2.1B(2)		x		NA	
c. Solid or Viscous/Obstruction		403.5(b)(3)	§ 2.1B(3)	x			24.10(b)	
d. Flow Rate/Concentration (BOD, etc.)		403.5(b)(4)	§ 2.1B(4)					
e. Heat; exceeds 40° C (104°F)		403.5(b)(5)	§ 2.1B(5)		x		24.08.2	Limits discharge temperature to 150 degrees Fahrenheit
f. Petroleum/Nonbiodegradable Cutting/Mineral Oils		403.5(b)(6)	§ 2.1B(6)		x			
g. Toxic Gases/Vapor/Fumes		403.5(b)(7)	§ 2.1B(7)	x			24.01(e)	
h. Trucked/Hauled Waste		403.5(b)(8)	§ 2.1B(8)	x			24.06 & 24.07	

NONE = No revision necessary		REQ = Require Revision		REC = Recommend Revision				
		Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
				NONE	REQ	REC		
3. National Categorical Standards		403.8(f)(1)(ii)	§ 2.2			x	24.08.3	Modify to mirror 403
4. Local Limits Development <i>[NOTE: POTWs may develop Best Management Practices (BMPs) to implement the prohibitions listed in 40 CFR 403.5(a)(1). Such BMPs shall be considered local limits and Pretreatment Standards.]</i>		403.5(c) & (d)	§ 2.4			x	24.08..4	Modify to mirror 403 lanugauge.
5. Prohibition Against Dilution as Treatment		403.6(d)	§ 2.6	x			24.03	
6. Best Management Practices Development <i>[NOTE: Optional streamlining provision.]</i>		403.5(c)(4)	§ 2.4C			x	NA	Recommend adopting this provision.
C. Control Discharges to POTW System								
1. Deny/Condition New or Increased Contributions		403.8(f)(1)(i)	§§ 4.8 & 5.2		x		NA	
2. Individual Control Mechanism (e.g., permit) to ensure compliance - Permit Content		403.8(f)(1)(iii)	§ 4.2			x	26.02	
a. Statement of Duration		403.8(f)(1)(B)(1)	§§ 5.1 & 5.2A(1)			x	26.02.5	Identifies duration of <5 years, but does not specify this language be in permit.
b. Statement of Nontransferability		403.8(f)(1)(B)(2)	§5.2A(2)			x	26.02.6	Does not specify this language be in permit.
c. Effluent Limits		403.8(f)(1)(B)(3)	§ 5.2A(3)			x	26.02.4.b	<u>Section 26.02.3 states that the application becomes the permit.</u>

NONE = No revision necessary	REQ = Require Revision	REC = Recommend Revision	REVISEMENTS				POTW Ordinance Section	Comments / Notes
			Part 403 Citation	Model SUO Section	NONE	REQ	REC	
d. Best Management Practices <i>[Note: This is a required streamlining provision for CIUs with BMP requirements as part of its Categorical Standards. But if BMPs are being applied to other CIUs or noncategorical SIUs without categorical BMP requirements, then this provision would be optional and is only required if the POTW has incorporated the use of BMPs (§ 2.4 C).]</i>	403.8(f)(1)(B)(3)	§ 5.2A(3)					x	NA
e. Self-Monitoring Requirements	403.8(f)(1)(B)(4)	§ 5.2A(4)					x	Modify to mirror 403.
f. Reporting & Notification Requirements	403.8(f)(1)(B)(4)	§ 5.2A(4)					x	Modify to mirror 403.
g. Recordkeeping Requirements	403.8(f)(1)(B)(4)	§ 5.2A(4)					x	Modify to mirror 403.
h. Process for Seeking a Waiver for Pollutants Not Present or Expected to be Present <i>[NOTE: Optional streamlining provision. Required only if the POTW has incorporated § 6.4B o the Model SUO.]</i>	403.8(f)(1)(B)(4) & 403.12(e)(2)	§ 5.2A(5)			x			Not applicable based on current industrial user base.
i. Statement of Applicable Civil and Criminal Penalties	403.8(f)(1)(B)(5)	§ 5.2A(7)					x	Minimum of \$6,000. Does not specify this language be in permit.
j. Slug Discharge Requirements (if necessary) <i>[NOTE: Required streamlining change. Where the POTW has determined that slug controls are necessary, the ordinance must provide authority for the POTW to include such requirements in IU permits.]</i>	403.8(f)(1)(B)(6)	§ 5.2A(8)					xx	Refers to Protection against Accidental Discharge. Need to modify to mirror 403.

NONE = No revision necessary		REQ = Require Revision		REC = Recommend Revision		
		Part 403 Citation	Model SUO Section	REVISIONS		
				NONE	REQ	REC
						POTW Ordinance Section
						Comments / Notes
k. Specific waived pollutant [NOTE: Optional streamlining provision. Required only if the POTW has incorporated § 6.4B of the Model SUO.]	403.8(f)(1)(B) (4)	§ 5.2A(9)	x			Not necessary with current industrial base.
l. Permit Application/Reapplication Requirements [Note: Optional permit provision]		§§ 5.3 & 5.7	x			Modify to mirror 403.
m. Permit Modification [Note: Optional permit provision]		§ 5.4	x			Modify to mirror 403.
n. Permit Revocation/Termination [Note: Optional permit provision]		§§ 5.6 & 10.8	x			Modify to mirror 403.
o. Proper Operation and Maintenance [Note: Optional permit provision]		§ 3.1	x			Modify to mirror 403.
p. Duty of Halt/Reduce [Note: Optional permit provision]		§ 10.7	x			Modify to mirror 403.
q. Requirement to submit Chain-of-Custody forms with monitoring data [Note: Optional permit provision]			x			Modify to mirror 403.
3. General Control Mechanism to ensure compliance [NOTE: Optional streamlining provision. Required only if the POTW has incorporated the use of General Permits (§ 4.6 of the Model SUO).] - Permit Content	403.8(f)(1)(iii) (A)	§ 4.2 & 4.6	x			Don't recommend adoption.
a. Statement of Duration	403.8(f)(1)(B) (1)	§§ 5.1 & 5.2A(1)	x			Don't recommend adoption.
b. Statement of Nontransferability	403.8(f)(1)(B) (2)	§ 5.2A(2)	x			Don't recommend adoption.

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REC = Recommend Revision

	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
			NONE	REQ	REC		
c. Effluent Limits	403.8(f)(1)(B) (3)	§ 5.2A(3)	x			NA	Don't recommend adoption.
d. Best Management Practices <i>[Note: This is a required streamlining provision for CIUs with BMP requirements as part of its Categorical Standards. But if BMPs are being applied to other CIUs or noncategorical SIUs without categorical BMP requirements, then this provision would be optional and is only required if the POTW has incorporated the use of BMPs (§ 2.4C).]</i>	403.8(f)(1)(B) (3)	§ 5.2A(3)	x			NA	Don't recommend adoption.
e. Self-Monitoring Requirements	403.8(f)(1)(B) (4)	§ 5.2A(4)	x			NA	Don't recommend adoption.
f. Reporting & Notification Requirements	403.8(f)(1)(B) (4)	§ 5.2A(4)	x			NA	Don't recommend adoption.
g. Recordkeeping Requirements	403.8(f)(1)(B) (4)	§ 5.2A(4)	x			NA	Don't recommend adoption.
h. Process for Seeking a Waiver for Pollutants Not Present or Expected to be Present <i>[Note: Required only if POTW has incorporated the use of Pollutants Not Present and § 6.4 of the Model SUO.]</i>	403.8(f)(1)(B) (4) & 403.12(e) (2)	§ 5.2A(5)	x			NA	Don't recommend adoption.
i. Statement of Applicable Civil and Criminal Penalties	403.8(f)(1)(B) (5)	§ 5.2A(7)	x			NA	Don't recommend adoption.

NONE = No revision necessary			REQ = Require Revision			REC = Recommend Revision		
	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes	
			NONE	REQ	REC			
j. Slug Discharge Requirements (if necessary) <i>[NOTE: Required streamlining change. The ordinance should indicate that a user is required to develop a slug discharge control plan if determined by the POTW to be necessary.]</i>	403.8(f)(1)(B)(6)	§ 5.2A(8)	x			NA	Don't recommend adoption.	
k. Permit Application/Reapplication Requirements <i>[Note: Optional permit provision]</i>		§§ 5.3 & 5.7	x			NA	Don't recommend adoption.	
l. Permit Modification <i>[Note: Optional permit provision]</i>		§ 5.4	x			NA	Don't recommend adoption.	
m. Permit Revocation/Termination <i>[Note: Optional permit provision]</i>		§§ 5.6 & 10.8	x			NA	Don't recommend adoption.	
n. Proper Operation and Maintenance <i>[Note: Optional permit provision]</i>		§ 3.1	x			NA	Don't recommend adoption.	
o. Duty of Halt/Reduce <i>[Note: Optional permit provision]</i>		§ 10.7	x			NA	Don't recommend adoption.	
p. Requirement to submit Chain-of-Custody forms with monitoring data <i>[Note: Optional permit provision]</i>			x			NA	Don't recommend adoption.	
D. Required Reports								
1. Develop compliance schedule for installation of technology	403.8(f)(1)(iv)	§§ 5.2b(2) & 10.4				26.03	Establishes 90-day schedule for installation of monitoring equipment. States District may ask IU to submit time schedule for actions to be taken to correct problem or prevent additional one.	
					x	29.03		

NONE = No revision necessary

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REC = Recommend Revision

	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
			NONE	REQ	REC		
2. Reporting Requirements [403.12] Types of Reports							
a. Baseline monitoring report	403.12(b)	§ 6.1			x	26.01	This section reference periodic discharge reports, but not BMRs. Recommend modifying SUO to mirror 403.12
(i) Identifying Information	403.12(b)(1)	§ 6.1B(1) & § 4.5A(1)a			x	NA	Ditto.
(ii) Other Environmental Permits Held	403.12(b)(2)	§§ 6.1B(1) & 4.5A(2)			x	NA	Ditto
(iii) Description of operations	403.12(b)(3)	§§ 6.1B(1) & 4.5A(3)a			x	NA	Ditto
(iv) Flow measurements	403.12(b)(4)	§§ 6.1(b)(2) & 4.5A(6)			x	NA	Ditto
(v) Measurement of pollutants	403.12(b)(5)	§ 6.1B(2)			x	NA	Ditto
(vi) Certification	403.12(b)(6)	§ 6.1B(3)			x	NA	Ditto
(vii) Compliance schedule	403.12(b)(7)	§ 6.1B(4)			x	NA	Ditto
b. Compliance schedule progress report	403.12(c)	§ 6.2			x	NA	Recommend modifying SUO to mirror 40.12
c. Report on compliance with categorical Pretreatment Standard deadline	403.12(d)	§ 6.3				NA	Recommend modifying SUO to mirror 403.12

d. Periodic reports on continued compliance		403.12(e)	§ 6.4A				x	NA	Recommend modifying SUO to mirror 403.12
- From categorical users									
- From significant non-categorical users		403.12(h)	§ 6.4A				x	29.03	Recommend modifying SUO to mirror 403.12
e. Notice of potential problems to be reported immediately (including slug loads)		403.12(f)	§ 6.6				x	29.01.1	Language is probably sufficient, but still recommend to mirror 403.12 as part of overall SUO revision process.

NONE = No revision necessary

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REC = Recommend Revision

	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
			NONE	REQ	REC		
f. Notification of changes affecting potential for a slug discharge [NOTE: Required streamlining revision]	403.8(f)(2)(vi)	§ § 6.5 & 6.6		x		NA	Modify to mirror 403.8
g. Notice of violation/sampling requirement [NOTE: Required streamlining revision.]	403.12(g)(2)	§ 6.8		x		NA	Modify to mirror 403.12
h. Requirement to conduct representative sampling	403.12(g)(3)	§ 6.4E		x		26.03	Modify to mirror 403.12
i. Notification of changed discharge	403.12(j)	§ 6.5					
j. Notification of discharge of hazardous waste	403.12(p)	§ 6.9		x		NA	Modify to mirror 403.12
Other Reporting Requirements							
k. Data accuracy certification & authorized signatory	403.6(a)(2)(ii) & 403.12(l)	§§ 6.4D & 6.14		x		NA	
l. Recordkeeping Requirement (3 years or longer)	403.12(o)	§ 6.13		x		26.02.4	Does not stipulate duration. Modify to mirror 403.12.
- Including documentation associated with Best Management Practices [NOTE: Required streamlining provision.]	403.12(o)	§ 6.13		x			
m. Submission of all monitoring data [NOTE: Required streamlining revision]	403.12(g)(6)	§ 6.4F		x		24.10.05	Refers only to facilities with grease traps or interceptors.
n. Annual certification by Non-significant categorical Industrial Users [Note: Optional provision, required only if the POTW has incorporated §1.4GG(3) of the Model SUO.]	403.3(v)(2)	§§ 4.7C & 6.14B			x	NA	Recommend adopting this provision.

NONE = No revision necessary

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REC = Recommend Revision

	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
			NONE	REQ	REC		
o. Certification of pollutant not present <i>[NOTE: Optional provision, required only if the POTW has incorporated § 6.4 B of the Model SUO]</i>	403.12(e)(2)(v)	§ 6.14C			x	NA	Recommend modification to incorporate this language.
E. Test Procedures [40 CFR Part 136 & 403.12(g)]							
1. Analytical procedures (40 CFR Part 136) <i>[NOTE: Required streamlining provisions]</i>	403.12(g)	§ 6.10		x		NA	SUO refers to Standard Methods throughout. Must revise to specify compliance with 40 CFR Part 136
2. Sample collection procedures <i>[NOTE: Required streamlining provisions]</i>	403.12(g)(3) & (4)	§ 6.11		x		NA	ditto
F. Inspection and Monitoring Procedures [403.8(f)]							
1. Right to enter all parts of the facility at reasonable times	403.8(f)(1)(v)	§ 7.1	x			26.04	
2. Right to inspect generally for compliance	403.8(f)(1)(v)	§ 7.1	x			26.04	
3. Right to take independent samples	403.8(f)(1)(v), 403.8(f)(2)(v) & 403.8(f)(2)(vii)	§ 7.1	x			26.04	
4. Right to require installation of monitoring Equipment	403.8(f)(1)(iv)	§ 7.1	x			26.03	
5. Right to inspect and copy records	403.12(o)(2)	§ 7.1	x			26.03	
G. Remedies for Non-compliance (Enforcement) [403.8(f)(1)(vi)]							
1. Non-emergency response							
a. Injunctive relief	403.8(f)(1)(vi)	§ 11.1	x			30.02	
b. Civil/Criminal penalties	403.8(f)(1)(vi)	§§ 11.2 & 11.3		x		30.05	Current language references civil

NONE = No revision necessary

REQ = Require Revision

REC = Recommend Revision

	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
			NONE	REQ	REC		
2. Emergency response							
a. Immediately halt actual/threatened discharged	403.8(f)(1)(vi)(B)	§ 10.7			x	29.02	Modify to mirror 403.8
3. Legal authority to enforce Enforcement Response Plan	403.8(f)(1)(vi)	§ 11.4		x		NA	District does not have an ERP. Must develop one.
H. Public Participation							
1. Publish list of Industrial Users in Significant Noncompliance [NOTE: Required streamlining revision]	403.8(f)(2)(viii)	§ 9		x		NA	Modify to mirror 403.8
2. Access to data [403.8(f)(1)(vii) & 403.14]							
a. Government	403.14(a) & (c)	§ 8	x			26.07	
b. Public	403.14(b)	§ 8	x			26.07	
I. Optional Provisions							
1. Net/Gross adjustments [streamlining provision]	403.15	§ 2.2 D			x		
2. Equivalent mass limits for concentration Limits [streamlining provision]	403.6(c)	§ 2.2 E			x		
3. Equivalent concentration limits for mass limits [streamlining provision]	403.6(c)	§ 2.2 F			x		
4. Upset Notification	403.16	§ 13.1			x		
5. Waive monitoring for pollutant not present or expected to the present [streamlining provision]	403.12(e)(2)	§ 6.4B			x		
6. Reduce periodic compliance reporting [streamlining provision]	403.12(e)(3)	§ 6.4C			x		
7. Other special agreement or waivers (excluding wavier of National Categorical Pretreatment Standards and Requirements)			x				

NONE = No revision necessary

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REC = Recommend Revision

	Part 403 Citation	Model SUO Section	REVISIONS			POTW Ordinance Section	Comments / Notes
			NONE	REQ	REC		
8. Hauled Waste Reporting/Requirements		§ 3.4			x	24.10.05	Recommend consideration of model SUO language.
9. Grease Interceptor Reporting/Requirements		§ 3.2 C			x	24.10.05	ditto
10. Authority to issue Notice of Violations (NOVs)		§ 10.1		x			Need to develop ERP
11. Authority to issue Administrative Orders (AOs)				x		NA	ditto
12. Authority to issue Administrative Penalties		§ 10.6		x			ditto
13. Authority to enforce again falsification or tempering			x			30.06	
14. Any other supplemental enforcement actions as noted in the POTW's enforcement response plan					x	NA	No ERP in place.
15. Permit Appeals Procedures							
16. Penalty or Enforcement Appeals Procedures			x			29.04	
17. Bypass Notification	403.17	§ 13.3	x			29.04	
					x		Modify to mirror 403.17

Document(s) submitted for review:

MCSD's Rules and Regulations (2-18-08)

Name of Reviewers

Chuck Durham

ICIS WENDB DATA ENTRY WORKSHEET

PRETREATMENT COMPLIANCE INSPECTIONS/AUDITS

► TYPE OF COMPLIANCE MONITORING: **PCA**

► NAME OF PRETREATMENT PROGRAM: **McKinleyville Community Services District**

► CONTROLLING AUTHORITY NPDES ID: **CA0024490**

START DATE OF INSPECTION.....04/21/2009

► END DATE OF INSPECTION.....4/21/2009

LEAD INSPECTOR (Name, Company, Phone, E-mail [if available]):

Chuck Durham, Tetra Tech, Inc., 615-888-2928, chuck.durham@tetrattech.com

ACCOMPANYING INSPECTOR(s) (Name, Company, Phone, E-mail [if available]):

Lisa Bernard, North Coast Regional Water Board, Lbernard@waterboards.ca.gov

SIGNIFICANT INDUSTRIAL USERS (SIUs)	PCI CHECKLIST REFERENCE	PCA CHECKLIST REFERENCE	DATA
► SIUs* :	II.B.2.a	I.C.4.a	0***
► SIUs Without Control Mechanism:	II.C.1.c	I.D.1 and II.A	0
► SIUs Not Inspected:	II.E.2.c	I.F.2.c	0
► SIUs Not Sampled:	II.E.2.b	I.F.2.b	0
► SIUs in SNC with Pretreatment Standards** :	II.F.3.a	I.F.3.a	0
► SIUs in SNC with Reporting Requirements:	II.F.3.a	I.F.3.a	0
SIUs in SNC with Pretreatment Schedule:		I.F.3.a	0
SIUs in SNC Published in Newspaper:		I.G.4; II.D.7	0
Criminal Suits Filed Against SIUs:	II.F.1		0
CATEGORICAL INDUSTRIAL USERS (CIUs)			
► CIUs:		I.C.4.a	0****
OTHER INFORMATION			
Pass-Through/Interference Indicator (none, Yes, or No)		I.G.6	No
DEFICIENCIES			
Control Mechanism Deficiencies (No or Yes)		I.D.1;II.A.4	Yes
Inadequacy of Sampling and Inspections (No or Yes)		II.C and Site Visit Sheets	Yes
Adequacy of Pretreatment Resources (Yes or No)		I.I	No

FOOTNOTES:

► denotes required information

* The number of SIUs entered into PCS is based on the CA's definition of "Significant Industrial User."

** AS DEFINED IN EPA's 1986 Pretreatment Compliance Monitoring and Enforcement Guidance.

*** The CA's definition of SIU lists the flow at 50,000 gpd. This permittee does not have an approved pretreatment program.

****The auditor found a retail jeweler that performs rhodium plating. This is a small-volume, zero-discharge operation.

DATA ENTRY WORKSHEET COMPLETED BY: **Chuck Durham**

DATE: **11/07/2009**

TITLE: **Principal Engineer**

TELEPHONE NO.: **615-888-2928**

RNC DATA ENTRY WORKSHEET

RNC DATA ENTRY WORKSHEET				
<i>INSTRUCTIONS: Enter the data provided by the specific checklist questions that are referenced.</i>				
CA name McKinleysville Community Services District				
NPDES number CA0024490				
Date of inspection April 21, 2009	Date entered into PCS			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Level</th> <th style="text-align: center;">Checklist Reference</th> </tr> </thead> </table>	Level	Checklist Reference
Level	Checklist Reference			
NA	Failure to enforce against pass through and/or interference	I II.F.6.b&9		
NA	Failure to submit required reports within 30 days	I Att. A.A.3		
NA	Failure to meet compliance schedule milestone date within 90 days	I Att. A.A.4		
X¹	Failure to issue/reissue control mechanisms to 90% of SIUs within 6 months	II II.C.1.b&2		
X²	Failure to inspect or sample 80% of SIUs within the last 12 months	II II.E.2		
X³	Failure to enforce pretreatment standards and reporting requirements	II II.F.2		
NA	Other (specify)	II		
SNC				
NA	CA in SNC for violation of any Level I criterion			
X⁴	CA in SNC for violation of two or more Level II criterion			
<p>For more information on RNC, please refer to EPA's 1990 <u>Guidance for Reporting and Evaluating POTW Noncompliance with Pretreatment Implementation Requirements</u></p> <p>1. MCSD does not have an approved program and has not identified any of its dischargers as SIUs. The NPDES permit does, however, require that the District establish a waste hauler permit and issue permits to applicable facilities. Steve's Septic is the largest nondomestic discharge by volume and had not been issued a permit at the time of the PCA.</p> <p>2. Technically, no SIUs, SUO defines 'major contributing industries'. Sampling and inspection efforts are primarily focused on food service establishments.</p> <p>3. District has not permitted or sampled the one categorical facility within its jurisdiction (Minkler's Jewelry).</p> <p>4. SNC is not applicable since MCSD does not have an approved program. Merely reporting on this form for comparison purposes.</p>				

RNC WORKSHEET COMPLETED BY:	Chuck Durham	DATE: 11/7/09
TITLE:	Principal Engineer	TELEPHONE: 615-888-2928

SANITARY SEWER MONITORING PROGRAM REPORT

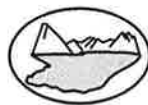
**MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
1656 SUTTER ROAD MCKINLEYVILLE, CALIFORNIA
NPDES PERMIT NUMBER CA0024490**

Prepared for:
**McKinleyville Community Services District
1656 Sutter Road
McKinleyville, California 95519**

June 8, 2009

Prepared by:
Orrin Plocher and Stan Thiesen

of



Freshwater Environmental Services

1372 Anderson Ave.
McKinleyville, California 95519
Phone (707) 839-0091

TABLE OF CONTENTS

LIST OF TABLES.....	2
LIST OF APPENDICES	2
1.0 INTRODUCTION	3
2.0 Sanitary Sewer Monitoring Program	4
3.0 INDUSTRIAL SURVEY	5
3.1 Goals	5
3.2 Method	5
3.3 Observations	6
4.0 MCSD ORDINANCE REVIEW.....	7
4.1 Compliance with Task 4	7
4.2 Pretreatment	8
4.3 Steve's Septic Service and Six Rivers Brewery.....	9
5.0 RECOMMENDATIONS.....	11
5.1 Waste Discharge Permits.....	11
5.1 Steve's Septic and Six Rivers Brewery	11
6.0 REFERENCES	12

LIST OF TABLES

TABLE 1	Non-Residential Customers Selected for Site Reviews
TABLE 2	Non-Residential Customers with Pretreatment of Wastewater
TABLE 3	Non-Residential Customers with Potential Code Infractions

LIST OF APPENDICES

APPENDIX A	MCSD Sanitary Sewer Monitoring Program
APPENDIX B	Sanitary Sewer Monitoring Maps
APPENDIX C	Information for Facilities with Oil/Water Separators
APPENDIX D	Discharge Monitoring Programs for Steve's Septic and Six Rivers Brewery.
APPENDIX E	Best Management Practices for Sink and Drain

1.0 INTRODUCTION

Freshwater Environmental Services (FES) has prepared this report to document activities related to the sanitary sewer monitoring program for the McKinleyville Community Services District (MCSD) located in McKinleyville, California. These activities were performed to fulfill specific requirements contained within order number R1-2008-0039 (the order) issued by the California Regional Water Quality Control Board North Coast Region (RWQCB) related to the National Pollution Discharge Elimination System (NPDES) permit number CA0024490. The NPDES permit includes a Compliance Schedule for Final Effluent Limitations with specific tasks.

Task 2 A of the Compliance Schedule for Final Effluent Limitations requires the development and implementation of a sanitary sewer monitoring program to monitor the effectiveness of the public education effort, to identify possible sources of pollutants of concern, and to detect illicit and unpermitted discharges of pollutants of concern to the sanitary sewer. The activities described in this report conducted to fulfill Task 2 A include development of a written sanitary sewer monitoring program and performance of a survey of industrial/commercial customers.

Task 2 B requires the development and implementation of a program to monitor the discharge of septage wastewater from Steve's Septic Services. This report includes a monitoring plan for Steve's Septic Services and Six Rivers Brewery.

Task 3 requires the development of Waste Discharge Permits and Individual Discharge Plans for businesses that may discharge pollutants of concern to the sanitary sewer system. This report discusses the timing of issuance of waste discharge permits.

Task 4 requires the MCSD to adopt local ordinances for local waste discharge permits that include monitoring, inspection, and enforcement authority for District personnel. This report includes a review of the current MCSD ordinances to determine compliance with Task 4.

This report is organized as follows. Section 2.0 of this report includes a description of the sanitary sewer monitoring program. Section 3.0 of the report describes the field observations and results of the survey of industrial/commercial customers. Section 4.0 contains a review of the current MCSD ordinance. Section 5.0 includes recommendations. Section 6.0 indicates the references used in this report.

2.0 Sanitary Sewer Monitoring Program

In an effort to detect illicit and unpermitted discharges to the MCSD sewer system, MCSD staff have developed and implemented a sanitary sewer monitoring program included as Appendix A. The monitoring program requires that the MCSD staff perform monthly monitoring of the sanitary sewer for pollutants of concern. Sampling is to be conducted at representative locations in each of the four schedules semi-annually. Sewer schedules are isolated sub-drainage areas within the sanitary sewer system that can be sampled and represent sanitary sewer inputs from a defined and limited geographic areas. Maps are included in Appendix B which identifies the four sewer schedules.

Sanitary sewer samples will be analyzed for potential pollutants of concern (POCs) which typically including copper and lead and can be expanded to include other POCs.

Based on the results from the initial monthly sampling of the four schedules, trunk sampling, additional follow-up sampling within each of the schedules may be conducted to identify the sources of the discharge containing the POC. Appendix B contains maps of each of the schedules including notations of commercial connections with potential industrial discharges and facilities conducting pretreatment of wastewater.

If sampling indicates a specific customer as a potential source of the POC, site specific targeted sampling may be conducted at that customer's facility. If a facility is identified as the source of wastewater in violations or prohibitions or limitations prescribed in the MCSD ordinance, MCSD staff will contact the customer in writing, and per Rule 29.03 will require that the customer submit for approval proposed modifications to their facility or process to eliminate the condition including the submission of a time schedule for completion of the modification. MCSD may also issue cease and desist orders to customers per rule 29.02 if necessary.

Results and records generated from sanitary sewer monitoring and correspondence will be maintained in a designated file and location. FES recommends the development of a database that will be used to store, query and report on laboratory data from sewer system monitoring. The database should be developed to facilitate easy entry of laboratory data and will allow generation of standard reports. A copy of the McKinleyville Community Services District Sanitary Sewer Monitoring Program is included in Appendix A.

3.0 INDUSTRIAL SURVEY

3.1 Goals

The primary goals of the industrial survey include:

- Public education and outreach. Visiting with owners and managers about the sensitive nature of the receiving water and the limitations of the waste treatment process raised the level of public awareness;
- Accounting of non-domestic sewer drains at each facility;
- Identification of possible sources of pollutants of concern;
- Identification of illicit discharges to the sanitary sewer system;
- Determine which of the non-residential sanitary sewer customers should be eliminated from consideration for wastewater discharge permits; and
- Aid in the development of sewer monitoring maps identifying commercial/industrial customers within the sanitary sewer system sub-drainages.

3.2 Method

In a previous investigation regarding pollutants of concern in the McKinleyville Community Services District (FES, 2008), FES compiled a list of commercial customers from several sources including:

- MCSD commercial customer list;
- Humboldt County Hazardous Materials Facility list; and
- Database report generated by Environmental Data Resources (EDR) listing of facilities in the area that are on Local, State, and Federal environmental activity databases.

Based on a previously compiled list, 56 non-residential customers were selected from a total of 205 commercial customers for the industrial survey. The target list of 54 non-residential customers is included as Table 1.

Prior to the industrial survey, non-residential customers identified in Table 1 were notified in a letter from the MCSD explaining the purpose of the site reviews and introduced FES as a contractor hired to conduct the industrial survey for the MCSD. Following the MCSD notification letter, FES staff contacted each facility by phone to identify the contact person responsible for wastewater and to schedule the site reviews. Data gathered during the industrial inspections was stored in a Microsoft Access database. A CD with the database file is attached to the inside cover of this report.

Each site review began with FES explaining the purposes of the site review including:

- Public education and outreach regarding the sensitive nature of the receiving water and the limitations of the waste treatment process; and
- Accounting of non-domestic sewer drains at each facility;

Managers were encouraged to pass on information regarding the sewer system and drains to employees at upcoming staff meetings. Information provided to employees is anticipated to raise the level of awareness at commercial facilities. By educating employees a positive impact on residential sewer practices is also anticipated. FES also

completed a questionnaire regarding drain use and hazardous materials at each facility. If field observations indicated a need for additional best management practices for drain protection, FES discussed and recommended new BMPs to the manager.

FES also facilitated a meeting with Humboldt County Public Works staff responsible for stormwater compliance and hazardous materials inspections. The goal of the meeting was to make County staff aware of the sensitive nature of the receiving water and the limitations of the waste treatment process and to encourage a consistent message regarding waste handling practices and the proper use of sanitary sewer drains used in McKinleyville.

3.3 Observations

Based on site reviews it was determined that 17 of the 56 sites do not have drains other than for restrooms (toilets and sinks). Twenty-three of the remaining 39 sites were found to have various sinks including hair washing sinks, mop sinks, and medical (dental and veterinary) sinks or other drains.

Six of the 39 sites perform pretreatment of their wastewater. Five of the sites use oil/water separators and one site processes septage (Steve's Septic Services) through a flocculation process prior to discharging to the MCSD sanitary sewer system listed in Table 2.

Observations at six of the sites indicated potential infractions to MCSD wastewater ordinances and are included in Table 3.

4.0 MCSD ORDINANCE REVIEW

FES reviewed the MCSD Rules and Regulations dated February 18, 2008. The purpose of the review was to:

- Determine if the current ordinance complies with Task 4 of the Compliance Schedule for Final Effluent Limitations within the NPDES permit, which requires the MCSD to adopt local ordinances for local waste discharge permits that include monitoring, inspection, and enforcement authority for District personnel;
- Determine the regulatory framework for monitoring customers with pretreatment facilities; and
- Determine the regulatory framework for establishing a program to monitor the discharges from Steve's Septic and Six Rivers Brewery.

4.1 Compliance with Task 4

Based on the ordinance review, the current MCSD ordinances include provisions for monitoring, inspection and enforcement authority.

- **Rule 26.03. Monitoring Facilities.** All industries discharging into a public sewer shall perform such monitoring of their discharges as the District and/or other duly authorized employee of the District may reasonable require, including the installation, use, and maintenance of monitoring equipment and records shall be made available upon request by the District and to other Agencies having jurisdiction over discharges to the receiving waters.
- **Rule 26.04. Inspection and Sampling.** The District may inspect the facilities of any user to ascertain whether the purpose of this Ordinance is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the District or its representative ready access at all reasonable times to all parts of the premises for the purposes of inspection and sampling or in the performance of any of their duties.
- **Rule 29.02. Issuance of Cease and Desist Orders.** When the District finds that a discharge of wastewaters has taken place in violation of prohibitions or limitations of this ordinance, or the provisions of a Wastewater Discharge Permit, the District may issue an order to cease and desist, and direct that those persons not complying with such prohibitions, limits requirements, or provisions to: (a) Comply forthwith: (b) Comply in accordance with a time schedule set forth by the Authority of the District: (c) Take appropriate remedial or preventative action in the event of a threatened violation: (d) Terminate all wastewater flow.

Based on the review of current MCSD ordinances, Task 4 is of the compliance schedule for final effluent limitations contained in the NPDES permit is satisfied.

4.2 Pretreatment

Based on the MCSD ordinance review, several sections are noted below that provide the regulatory framework for oversight of pretreatment facilities.

- **Rule 24.09. Disposal of Unacceptable Waste.** Waste not permitted to be discharged into the community sewer must be transported to a State approved disposal site. The required "waste haulers report" must be completed and a copy furnished within 30 days to the District by the Discharger.

Oil/water separators are pretreatment devices to eliminate unwanted waste from entering the sewer system. When oil/water separators are cleaned, owners must provide documentation of proper disposal of the wastes. Sump waste should be characterized to determine proper disposal. In most cases, waste from oil/water separators will be classified as a hazardous waste.

- **Rule 24.10. Interceptor Requirements.** Grease, oil, and sand interceptors shall be provided when, in the opinion of the Manager, they are necessary for the proper handling of liquid wastes, containing grease in excessive amounts, or any flammable waste, sand and other harmful ingredients; except that such interceptors shall not be required for buildings used for residential purposes. All interceptors shall be of the type and capacity approved by the Manager and shall be located as to be readily and easily accessible for cleaning and inspection. All such grease, oil and sand interceptors shall be maintained by the Owner, at their expense, in continuous efficient operation at all times.

Facilities with oil/water separators are subject to inspection by the MCSD and must be cleaned regularly to assure continuous efficient operation at all times.

- **Rule 24.10.05 Monitoring and Reporting.** All establishments having a grease trap or interceptor shall maintain and clean the unit as recommended by the manufacturer. Each grease trap or interceptor shall be regularly maintained by the proprietor or property owner and records kept at the site for inspection by the District. Maintenance will vary depending upon the size of the unit and grease loading. The property owner or proprietor shall send a copy of the maintenance records to the District Annually from the time of installation or some other agreed upon date by the District. At no time shall the unit be allowed to become clogged with grease so as to create damage to the District collection or treatment facilities. The Proprietor must develop a cleaning schedule sufficient to keep the units functioning properly. Records of grease disposal to a collection agent must be available to District personnel upon request.

Facilities with oil/water separators are subject to inspection of records regarding maintenance and cleaning of the oil/water separators.

- **Rule 24.12 Maintenance of Pretreatment Facilities.** Where required by the District, preliminary treatment facilities for any waters or wastes shall be maintained continuously in satisfactory and effective operation by the owner at their expense to the satisfaction of District.

Facilities with oil/water separators (pretreatment) are required to clean oil/water separators.

FES recommends the monthly inspection of facilities with pretreatment. Appendix C includes an information sheet for facilities with pretreatment. FES recommends that the information sheet be provided as notice to all facilities with pretreatment of their requirements and that monthly inspections will begin in June of 2009. Following the anticipated update to the rules and regulations, facilities with pretreatment will be covered by a waste discharge permit.

4.3 Steve's Septic Service and Six Rivers Brewery

Several sections are noted below that provide the regulatory framework for establishing a program to monitor the discharges from Steve's Septic and Six Rivers Brewery.

- **Rule 24.11. Preliminary Treatment of Wastes.** The admission into the public sewers of any waters or waste having (a) 5-day Biological Oxygen Demand greater than 300 milligrams per liter, or (b) containing more than 350 milligrams per liter of suspended solids or (c) contain any quantity of substances having the characteristics described in Rule 24.08, (pH lower than 6.0 or higher than 9.0, temperature higher than 150 F) shall be subject to the review and approval of the Manager. Where necessary in the opinion of the Manager, the owner shall provide, at their own expense, such preliminary treatment as may be necessary to comply with the limits above.

The above section establishes limits for waste water that are of concern for Steve's Septic and Six Rivers Brewery.

- **Rule 26.03. Monitoring Facilities.** Users who propose to discharge, or who in the judgment of the District could discharge now or in the future, wastewater with constituents and characteristics different from that produced by a domestic premise will be required to install a monitoring facility. Monitoring facilities that are required to be installed shall be constructed, operated and maintained at the user's expense.

Steve's Septic and Six Rivers Brewery are required to have monitoring facilities.

- **Rule 26.03. Monitoring Facilities.** All industrial discharges into a public sewer shall perform such monitoring of their discharges as the District and/or other duly authorized employee of the District may reasonably require, including the installation, use, and maintenance of monitoring equipment and records shall be made available upon request by the District and to other Agencies having jurisdiction over discharges to the receiving waters.

Steve's Septic and Six Rivers Brewery are required to perform reasonable monitoring as required by the District including sampling and analytical costs.

- **Rule 26.04. Inspection and Sampling.** The District may inspect the facilities of any user to ascertain whether the purpose of this Ordinance is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the District or its representative ready access at all reasonable times to all parts of the premises for the purposes of inspection and sampling or in the performance of any of their duties.

At their discretion, the MCSD may inspect and sample wastewater from any facility to determine compliance with the rules and regulations.

- **Rule 29.02. Issuance of Cease and Desist Orders.** When the District finds that a discharge of wastewaters has taken place in violation of prohibitions or limitations of this ordinance, or the provisions of a Wastewater Discharge Permit, the District may issue an order to cease and desist, and direct that those persons not complying with such prohibitions, limits requirements, or provisions to: (a) Comply forthwith: (b) Comply in accordance with a time schedule set forth by the Authority of the District: (c) Take appropriate remedial or preventative action in the event of a threatened violation: (d) Terminate all wastewater flow.

At their discretion, the MCSD may issue a cease and desist order to facilities in violation of discharge limits.

Discharge monitoring programs for Steve's Septic and Six Rivers Brewery are included in Appendix D.

5.0 RECOMMENDATIONS

5.1 Waste Discharge Permits

Based on site reviews it was determined that 17 of the 56 sites do not have drains other than for restrooms (toilets and sinks). It is recommended that these sites be eliminated from further consideration for wastewater discharge permits. Twenty-three of the remaining 39 sites were found to have various sinks including hair washing sinks, mop sinks, and medical (dental and veterinary) sinks or other drains. It is recommended that these facilities with various sinks listed above be eliminated from further consideration for wastewater discharge permits. It is recommended that commercial customers with drains other than for restrooms (domestic wastewater) be provided with a one page list of BMPs for sinks and drains to be posted as required in Rule 29.01.2. An example of BMPs that could be used is included in Appendix E.

Six of the remaining sites perform pretreatment of their wastewater. Five of the sites use oil/water separators and one site processes septage (Steve's Septic Services) through a flocculation process prior to discharging to the MCSD sanitary sewer system listed in Table 2. It is recommended that the six facilities performing pretreatment of wastewater be further considered for wastewater discharge permits following the anticipated modification of the MCSD Rules and Ordinances (Table 2). FES recommends that all facilities with oil/water separators be provided the information sheet included in Appendix C. FES also recommends monthly inspections of oil/water separators to assure required maintenance and records retention.

Observations at six of the sites indicated potential infractions to MCSD wastewater ordinances and are listed in Table 3. It is also recommended that the sites with potential infractions to the MCSD ordinance (Table 3) be reviewed by MCSD staff and undergo the compliance assistance process including the issuance of cease and desist orders where appropriate.

Based on observations made at Minkler's Jewelry and Repair, including generation of wastewater from minor metal plating activities, it has been agreed with Minklers Jewelry and Repair that they will not discharge plating wastes into the sewer system until the ordinance is updated, at which time it is anticipated that a discharge permit will be developed to regulate their type of discharges to the sewer system.

5.1 Steve's Septic and Six Rivers Brewery

FES recommends regular monitoring of wastewater discharge from Steve's Septic and Six Rivers Brewery as described in the monitoring programs included in Appendix D. Following the anticipated update to the rules and regulations, Steve's Septic and Six River Brewery will be covered by a specific waste discharge permit.

6.0 REFERENCES

FES, 2008, *Pollutants of Concern Report, McKinleyville Community Services District, 1656 Sutter Road McKinleyville, California, NPDES Permit CA0024490*, October 27.

TABLES

TABLE 1

**List of Non-Residential Customers Selected for Site
Reviews**

List of Non-Residential Customers Selected for Site Reviews

Customer	Service Address
MCKINLEYVILLE AIRPORT LOUISIANA-PACIFIC	3705 BOEING AVENUE
HCDPW	3561 Boeing Avenue
FED AVIATION ADMN AWP26B,	3561 BOEING AVENUE
Minkler's Jewelry	1981 Central Ave
Humboldt Union High School	1300 Murray Rd
U. S. COAST GUARD,	1001 LYCOMING AVE
TROBITZ, DAVE animal hospital	2151 CENTRAL
Hertz Rent A Car	Arcata-Eureka Airport
Parker's Beauty Bar	1149 Central Avenue
Ace Hardware	2165 Central Avenue
McKinleyville Union Transportation District	2275 Central Avenue
MCK UNION SCHOOL DIST,	2285 CENTRAL
Morris School	2395 McKinleyville Avenu
Karen Beck, Fredrick Johnson, DDS	1955 Central Avenue
Brian's Automotive	2220 McKinleyville Avenu
GRISSOM, RICHARD Central Station Services	2785 CENTRAL
MIKE'S AUTO DETAILING,	2314 CENTRAL
Heavenly Touch	1225 Central Avenue # 2
Dreamers Hair & Nail Salon	1933 Central Avenue, Suite
STEVE'S SEPTIC SVC LLC,	1810 MURRAY ROAD
REDWOOD ANIMAL HOSPITAL,	1585 SCHOOL ROAD
Davis & Johansson, DDS	1661 Pickett
BIG OIL & TIRE CO.,	1021 MURRAY ROAD
BIG OIL & TIRE CO.,	2698 CENTRAL
MELLON DDS, GREGORY T	1737 CENTRAL
Hair Connection & Tanning	2017 Central Avenue
LES SCHWAB TIRES,	2210 CENTRAL

Customer	Service Address
MICKEY'S QUALITY CARS,	1901 CENTRAL
THOMAS HOME CENTER,	1685 SUTTER
Opies Fine Cars, Inc.	1900 Central Avenue
Andy Cabinets	2411 Central Avenue
EVENSON, MICHAEL The Auto Spa	1642 HOLLY
K-MART CORP, #7390	1480 CENTRAL
RITE AID CORPORATIONS,	1500-D ANNA SPARKS
ACE HIGH AUTOMOTIVE,	2755 CENTRAL
Ron Peter's Cabinets	2620 Central Avenue
HUMBOLDT SANITATION,	2585 CENTRAL
SUNDBERG, GARTH multi incl quick lube	1590 NURSERY WAY
A & L Feeds	2308 Central Avenue
BERRY, HOLLY Muddy Paws	2288 CENTRAL
SPECIALTY FOREIGN AUTO,	2330 CENTRAL
BMW OF HUMBOLDT BAY,	1795 CENTRAL
REGLI, JON G & A Automotive	1738 MARKET
CSK AUTO, KRAGEN auto parts	1605 CENTRAL
MILLER FARMS,	1828 CENTRAL
BRADEN AUTOBODY,	1560 BATES ROAD
Avis Rent-A-Car	3561 Boeing Avenue
Humboldt County Animal Shelter	980 Lycoming Avenue
ABACA CLEANERS INC., dry cleaners "Best Cleane	1541 CITY CENTER
FORD, RONDA auto body shop A&M Body Shop.	1777 SUTTER
Power Sports Central	2555 CENTRAL
Studio B	1936 Central Avenue
Six Rivers Brewery	
Hans Garage	2519 Central Avenue
MELLO JOSEPH TRUCKING (residence)	2545 Central Avenue
B & B Green House	1179 Central Avenue

TABLE 2
Non-Residential Customers with Pretreatment of
Wastewater

Facilities with Pretreatment

Customer	U. S. COAST GUARD,
Service Address	1001 LYCOMING AVE
Location ID	3980
Initial Inspection Completed	4/1/2009 1:00:00 PM
Home Phone	(804)523-6940
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	SQG
HAZNET	
Haz materials	H
Priority	High
Comment	Airport
Drains	Sinks/toilets, kitchen, overhead door strip drains
Comments	Outside wash rack for aircraft, diverts to stormwater when not used for washing. When washing discharge to OWS and then sanitary sewer. Very well maintained facility, excellent haz mat facilities and awareness.
Waste Water Contact	Mr. Wolfe
Waste Water Contact Phone	707-839-6163
Reccomendations	
Other drains	Outside wash basin with diverter to stormwater
Violations	
Pre-treatment	OWS
Sink BMPs	<input type="checkbox"/>
Floor drain BMPs	<input type="checkbox"/>

Facilities with Pretreatment

Customer	McKinleyville Union Transportation District
Service Address	2275 Central Avenue
Location ID	9001
Initial Inspection Completed	3/29/2009 10:00:00 AM
Home Phone	
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	
Haz materials	H
Priority	Medium
Comment	
Drains	Sinks/toilets, bus wash area outside, OWS with diverter to stormwater system
Comments	
Waste Water Contact	Scott Oilar
Waste Water Contact Phone	707-839-2584 Dist office 839-1549
Recommmendations	
Other drains	Outside bus wash
Violations	
Pre-treatment	OWS
Sink BMPs	<input type="checkbox"/>
Floor drain BMPs	<input type="checkbox"/>

Facilities with Pretreatment

Customer	STEVE'S SEPTIC SVC LLC,
Service Address	1810 MURRAY ROAD
Location ID	6426
Initial Inspection Completed	2/27/2009 8:30:00 AM
Home Phone	(707)839-2270
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	
Haz materials	H
Priority	Unknown
Comment	Question
Drains	5 residential sink/toilet connections. One connection after septage pretreatment. BOD tested on Fridays.
Comments	Recommended 1) educational letter to clients (for the good of your system). 2) Review clients against hazmat list. 3) Written SOP for load rejection.
Waste Water Contact	Wes Green, Kent Tuter
Waste Water Contact Phone	496-0175, 498-2113
Recommmendations	Pre-treatment and discharge of accumulated septage.
Other drains	Septage drain
Violations	
Pre-treatment	Floc
Sink BMPs	<input type="checkbox"/>
Floor drain BMPs	<input type="checkbox"/>

Facilities with Pretreatment

Customer	LES SCHWAB TIRES,
Service Address	2210 CENTRAL
Location ID	6367
Initial Inspection Completed	2/17/2009 10:30:00 AM
Home Phone	(707)839-8986
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	HAZNET
Haz materials	H
Priority	Medium
Comment	
Drains	3 toilet/sinks, 1 shop sink, Grated floor drain in shop (tire wash), Outside truck tire wash (no cover to storm water). 1-O/W/S maintained yearly.
Comments	Hazardous materials used and generated onsite.
Waste Water Contact	Pat Sheehy
Waste Water Contact Phone	(707)839-8986
Reccomendations	Shop sink, floor drains, O/W/S. Sink BMPs, Floor drain BMPs, O/W/S maintenance schedule. Cover or plug outside wash area that is exposed to storm water and not being used.
Other drains	Shop sink, floor drains, outside wash area
Violations	24.02 Prohibited stormwater
Pre-treatment	OWS
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input checked="" type="checkbox"/>

Facilities with Pretreatment

Customer	MICKEY'S QUALITY CARS,
Service Address	1901 CENTRAL
Location ID	1425
Initial Inspection Completed	2/17/2009 10:00:00 AM
Home Phone	(707)839-4324
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	
Haz materials	H
Priority	Medium
Comment	
Drains	3 toilet/sinks, sink in break room, sink in detail shop, long floor drain in main shop, Outside wash area with drain (no cover). 1-O/W/S.
Comments	Oil drums placed over open floor drain in shop. Hazardous materials in area of floor drain. Paint gun near detail shop sink.
Waste Water Contact	Mike Jones
Waste Water Contact Phone	(707)839-4324
Reccomendations	Shop floor drain, shop sink, outside wash basin/drain, O/W/S. Sink BMPs, Floor drain BMPs, O/W/S maintenance schedule.
Other drains	Shop sink, floor drains, outside wash area
Violations	24.02 Prohibited stormwater
Pre-treatment	OWS
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input checked="" type="checkbox"/>

Facilities with Pretreatment

Customer	EVENSON, MICHAEL The Auto Spa
Service Address	1642 HOLLY
Location ID	1427
Initial Inspection Completed	2/13/2009 11:00:00 AM
Home Phone	(707)839-4425
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	
Haz materials	H
Priority	Unknown
Comment	Question
Drains	4-wash bay drains with oil/water separators, 1-toilet, 1-shop floor drain.
Comments	Oil water separators only cleaned out every 5 years. Traps are near capacity, may be petroleum bypass. Shop floor drain unprotected from soap concentrates. Limited site control, clients bring in engines and use degreasers.
Waste Water Contact	Mike Evenson
Waste Water Contact Phone	(707)839-4425
Recommmendations	Recommended petroleum booms in oil/water separators and containment for chemicals in area of shop floor drain. Sampling-Permit? Oil/Water maintenance schedule. Sink BMPs, Floor drain BMPs, O/W/S maintenance schedule.
Other drains	Wash bay drains, floor drains
Violations	24.08.2 Not continuous efficient operation of OWS
Pre-treatment	OSW
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BPMs	<input checked="" type="checkbox"/>

Facilities with Pretreatment

Customer	HUMBOLDT SANITATION,
Service Address	2585 CENTRAL
Location ID	3282
Initial Inspection Completed	2/12/2009 2:00:00 AM
Home Phone	(707)839-3285
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	HAZNET
Haz materials	H
Priority	Medium
Comment	
Drains	Toilet/sink, two outside wash bays, 1-o/w separator connected to veh wash bay, porta toilets cleaned in wash bay to sewer.
Comments	Hazardous materials associates with vehicle maintenance. Outside vehicle washing and toilet washing.
Waste Water Contact	Brian
Waste Water Contact Phone	
Recommmendations	Drains "other than". 1- oil/water separator on outside veh wash bay, 1-outside wash area for empty porta-potties. Veh wash area without cover allowing storm water runoff. Permit with sampling, Oil/Water maintenance schedule. Resolve porta toilet?
Other drains	Outside washdays
Violations	24.02 Prohibited stormwater
Pre-treatment	OWS
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input type="checkbox"/>

Facilities with Pretreatment

Customer	BMW OF HUMBOLDT BAY,
Service Address	1795 CENTRAL
Location ID	5050
Initial Inspection Completed	2/11/2009
Home Phone	(707)839-4269
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	SQG
HAZNET	
Haz materials	H
Priority	High
Comment	
Drains	3 toilet/sink combinations, one floor drain in shop.
Comments	Shop floor is washed daily into floor drain in shop. Shop is very clean. Hazardous materials appear to be well managed. Radiator fluid, used oils, sorbents, and waste fuels are containerized and transported for disposal offsite.
Waste Water Contact	Kevin Danbrauskas
Waste Water Contact Phone	(707)839-4269
Reccomendations	Wastewater other than toilet/sink. Shop floor drain with hazardous materials present. They do have a three chamber O/W separator. Sink BMPs, Floor drain BMPs. O/WS BMPs or seal drain.
Other drains	Floor drain
Violations	
Pre-treatment	OWS
Sink BMPs	<input type="checkbox"/>
Floor drain BMPs	<input checked="" type="checkbox"/>

TABLE 3

**Non-Residential Customers with Potential Code
Infractions**

Potential Code Infraction

Customer	LES SCHWAB TIRES,
Service Address	2210 CENTRAL
Location ID	6367
Initial Inspection Completed	2/17/2009 10:30:00 AM
Home Phone	(707)839-8986
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	HAZNET
Haz materials	H
Priority	Medium
Comment	
Drains	3 toilet/sinks, 1 shop sink, Grated floor drain in shop (tire wash), Outside truck tire wash (no cover to storm water). 1-O/W/S maintained yearly.
Comments	Hazardous materials used and generated onsite.
Waste Water Contact	Pat Sheehy
Waste Water Contact Phone	(707)839-8986
Recommmendations	Shop sink, floor drains, O/W/S. Sink BMPs, Floor drain BMPs, O/W/S maintenance schedule. Cover or plug outside wash area that is exposed to storm water and not being used.
Other drains	Shop sink, floor drains, outside wash area
Violations	24.02 Prohibited stormwater
Pre-treatment	OWS
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input checked="" type="checkbox"/>

Potential Code Infraction

Customer	MICKEY'S QUALITY CARS,
Service Address	1901 CENTRAL
Location ID	1425
Initial Inspection Completed	2/17/2009 10:00:00 AM
Home Phone	(707)839-4324
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	
Haz materials	H
Priority	Medium
Comment	
Drains	3 toilet/sinks, sink in break room, sink in detail shop, long floor drain in main shop, Outside wash area with drain (no cover). 1-O/W/S.
Comments	Oil drums placed over open floor drain in shop. Hazardous materials in area of floor drain. Paint gun near detail shop sink.
Waste Water Contact	Mike Jones
Waste Water Contact Phone	(707)839-4324
Reccomendations	Shop floor drain, shop sink, outside wash basin/drain, O/W/S. Sink BMPs, Floor drain BMPs, O/W/S maintenance schedule.
Other drains	Shop sink, floor drains, outside wash area
Violations	24.02 Prohibited stormwater
Pre-treatment	OWS
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input checked="" type="checkbox"/>

Potential Code Infraction

Customer	EVENSON, MICHAEL The Auto Spa
Service Address	1642 HOLLY
Location ID	1427
Initial Inspection Completed	2/13/2009 11:00:00 AM
Home Phone	(707)839-4425
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	
Haz materials	H
Priority	Unknown
Comment	Question
Drains	4-wash bay drains with oil/water separators, 1-toilet, 1-shop floor drain.
Comments	Oil water separators only cleaned out every 5 years. Traps are near capacity, may be petroleum bypass. Shop floor drain unprotected from soap concentrates. Limited site control, clients bring in engines and use degreasers.
Waste Water Contact	Mike Evenson
Waste Water Contact Phone	(707)839-4425
Recommmendations	Recommended petroleum booms in oil/water separators and containment for chemicals in area of shop floor drain. Sampling-Permit? Oil/Water maintenance schedule. Sink BMPs, Floor drain BMPs, O/W/S maintenance schedule.
Other drains	Wash bay drains, floor drains
Violations	24.08.2 Not continuous efficient operation of OWS
Pre-treatment	OSW
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BPMs	<input checked="" type="checkbox"/>

Potential Code Infraction

Customer	HUMBOLDT SANITATION,
Service Address	2585 CENTRAL
Location ID	3282
Initial Inspection Completed	2/12/2009 2:00:00 AM
Home Phone	(707)839-3285
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	HAZNET
Haz materials	H
Priority	Medium
Comment	
Drains	Toilet/sink, two outside wash bays, 1-o/w separator connected to veh wash bay, porta toilets cleaned in wash bay to sewer.
Comments	Hazardous materials associates with vehicle maintenance. Outside vehicle washing and toilet washing.
Waste Water Contact	Brian
Waste Water Contact Phone	
Reccomendations	Drains "other than". 1- oil/water separator on outside veh wash bay, 1-outside wash area for empty porta-potties. Veh wash area without cover allowing storm water runoff. Permlt with sampling, Oil/Water maintenance schedule. Resolve porta toilet?
Other drains	Outside washdays
Violations	24.02 Prohibited stormwater
Pre-treatment	OWS
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input type="checkbox"/>

Potential Code Infraction

Customer	Humboldt County Animal Shelter
Service Address	980 Lycoming Avenue
Location ID	9007
Initial Inspection Completed	1/28/2009
Home Phone	
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	
HAZNET	
Haz materials	H
Priority	High
Comment	
Drains	Sinks/toilets, sink/garbage disposal animal food prep area, tub for animal bathing (infrequent use), sinks in exam rooms, floor drains in exam rooms (not used), kennel wash down drains.
Comments	All skin conditions to vet in McK. MSDSs in good order. Soap in kennels is StrongidT (CAS 22204246), Floating fecal solvent (hydrocarbon mix 8008-20-6). Only occasional animal washing. Feces removed from kennels, soap applied/washed into drains.
Waste Water Contact	
Waste Water Contact Phone	
Recommendations	Wastewater other than toilet/sink. Detail review of MSDS. Sink BMPs. Floor drain BMPs. Sampling-Permit?
Other drains	Floor drains, kennel drains, sinks/tubs
Violations	24.02 Prohibited stormwater
Pre-treatment	
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input checked="" type="checkbox"/>

Potential Code Infraction

Customer	ABACA CLEANERS INC., dry cleaners "Best Cleaners"
Service Address	1541 CITY CENTER
Location ID	1938
Initial Inspection Completed	1/28/2009
Home Phone	(707)442-7917
Co Haz Mat	CRTK HW HW, CRTK
RCRA SQG	SQG
HAZNET	HAZNET
Haz materials	H
Priority	High
Comment	
Drains	Sink/toilet, "normal wash machine", non-contact cooling water for dry cleaning machine.
Comments	Accumulates water with solvents in a bucket that he takes to his Eureka store for processing. Does not operate McK dry cleaning machine often.
Waste Water Contact	Phillip Kurtz
Waste Water Contact Phone	707-599-9107
Recommmendations	Wastewater other than toilet/sink. Sink BMPs. Sampling-Permit?
Other drains	Process water
Violations	24.03 Prohibited unpolluted water
Pre-treatment	
Sink BMPs	<input checked="" type="checkbox"/>
Floor drain BMPs	<input type="checkbox"/>

APPENDICES

APPENDIX A

MCSD Sanitary Sewer Monitoring Program

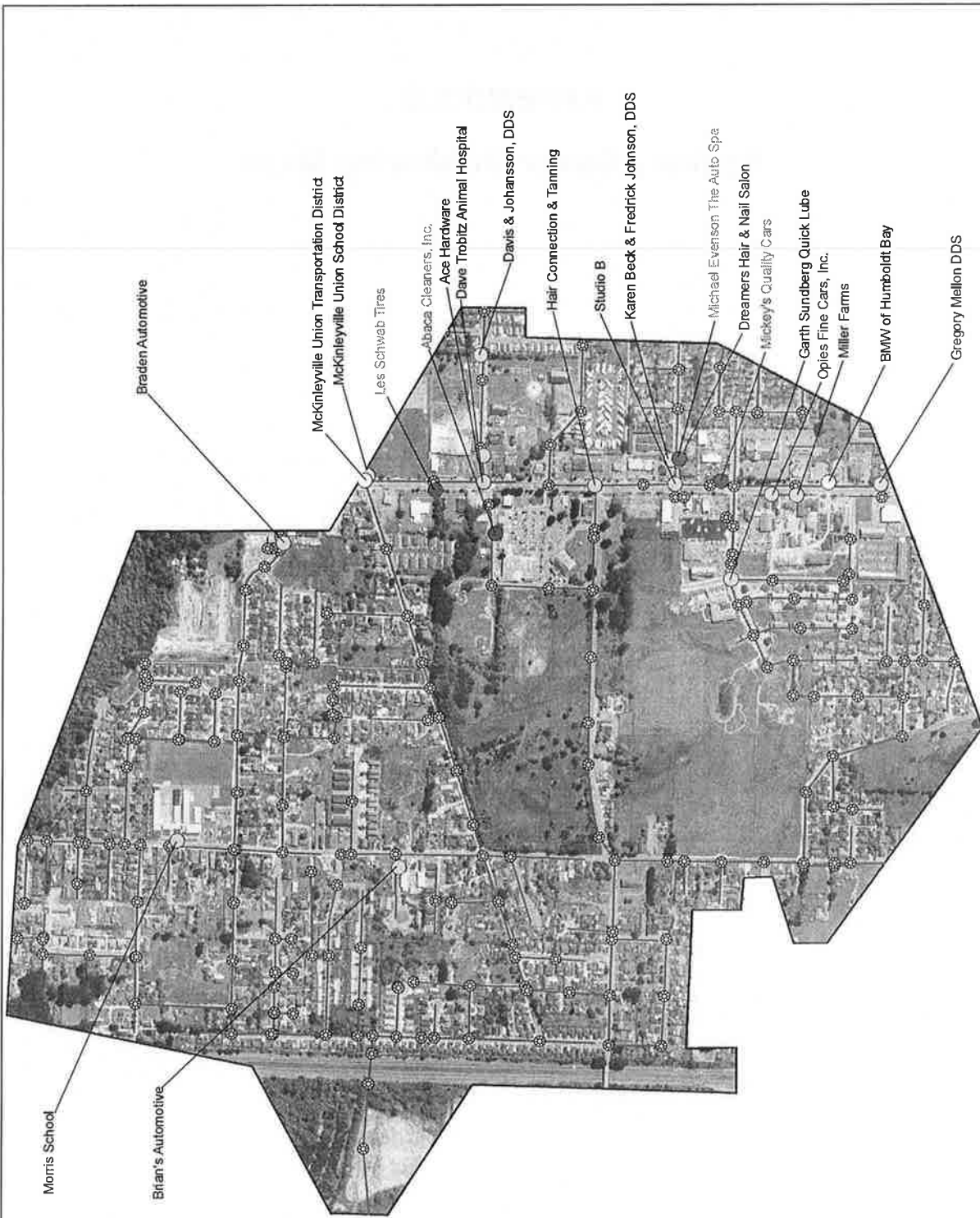
McKinleyville Sanitary Sewer Monitoring Program

In an effort to detect illicit and unpermitted discharges to the MCSD sewer system, MCSD staff have developed and implemented a sanitary sewer monitoring program.

- MCSD staff will perform monthly monitoring of the sanitary sewer for pollutants of concern. Sampling is to be conducted at representative locations in each of the four schedules semi-annually. Sewer schedules are isolated sub-drainage areas within the sanitary sewer system that can be sampled and represent sanitary sewer inputs from a defined geographic area.
- Sanitary sewer samples will be analyzed for potential pollutants of concern (POCs) commonly including copper and lead and can be expanded to include other POCs.
- Based on the results from the initial sampling of the four schedules, trunk sampling, additional follow-up sampling within each of the schedules may be conducted to identify the sources of the discharge containing the POC.
- MCSD staff will utilize sewer monitoring maps and other appropriate tools to identify potential sources of POCs.
- If sampling indicates a specific customer as a potential source of the POC, site specific targeted sampling may be conducted at that customer's facility.
- If a facility is identified as the source of wastewater in violations or prohibitions or limitations prescribed in the MCSD ordinance, MCSD staff will contact the customer in writing, and per Rule 29.03 will require that the customer submit for approval, proposed modifications to their facility or process to eliminate the condition including the submission of a time schedule for completion of the modification.
- MCSD may also issue a cease and desist order to the customer per rule 29.02 if necessary.
- Results, records, and correspondences related to the sanitary sewer monitoring program will be maintained in a designated file and location.

APPENDIX B

Sanitary Sewer Monitoring Maps

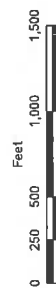


LEGEND

- Business Location
- Business Location with pretreatment
- Business Location with potential violation
- ⊗ Manhole from MCSD GIS data
- Sewer Line from MCSD GIS data
- Schedule II Boundary
- Ⓡ Lift Station from MCSD GIS data

Base Image Data Source:
USDA-FSA Aerial Photography Field Office
Color Digital Ortho Photo Quad Majority
image dates 2005

ALL LOCATIONS APPROXIMATE



McKinleyville Community
Services District

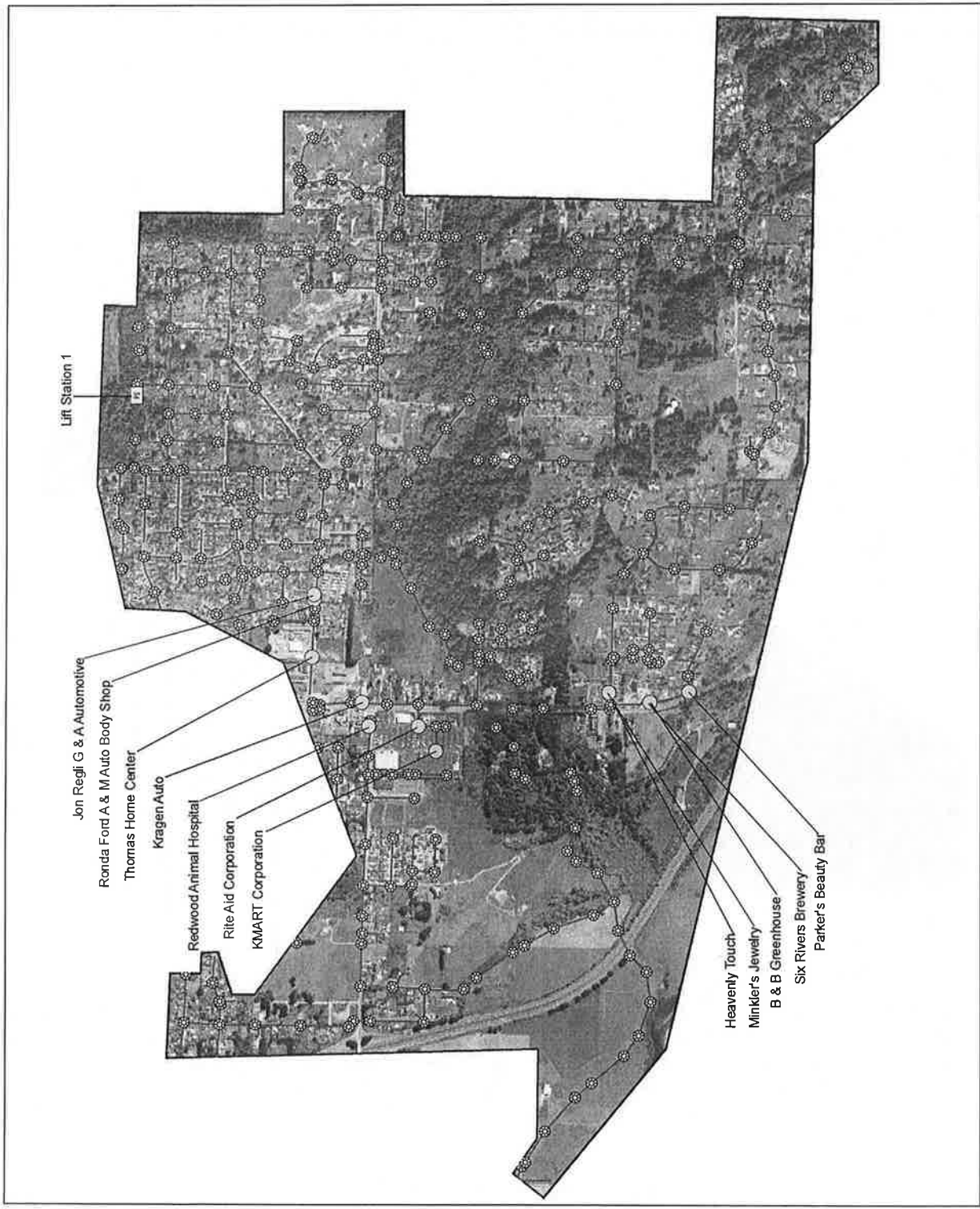
Schedule II Area

Date: 6-8-09

By: S.J.T



Freshwater
Environmental
Services



LEGEND

- Business Location
- Business Location with pretreatment
- Business Location with potential violation
- ⊙ Manhole from MCSD GIS data
- Sewer Line from MCSD GIS data
- Schedule III Boundary
- ⊠ Lift Station from MCSD GIS data

Base Image Data Source:
 USDA-FSA Aerial Photography Field Office
 Color Digital Ortho Photo Quad Mapcity
 image dates 2005

ALL LOCATIONS APPROXIMATE



McKinleyville Community Services District

Schedule III Area

Date: 6-8-09

By: S.JT



Freshwater
 Environmental
 Services

LEGEND

- Business Location
- Business Location with pretreatment
- Business Location with potential violation
- ⊗ Manhole from MCSD GIS data
- Sewer Line from MCSD GIS data
- Schedule IV Boundary
- ⊞ Lift Station from MCSD GIS data

Base Image Data Source:
USDA-FSA Aerial Photography Field Office
Color Digital Ortho Photo Quad Majority
image dates 2005

ALL LOCATIONS APPROXIMATE

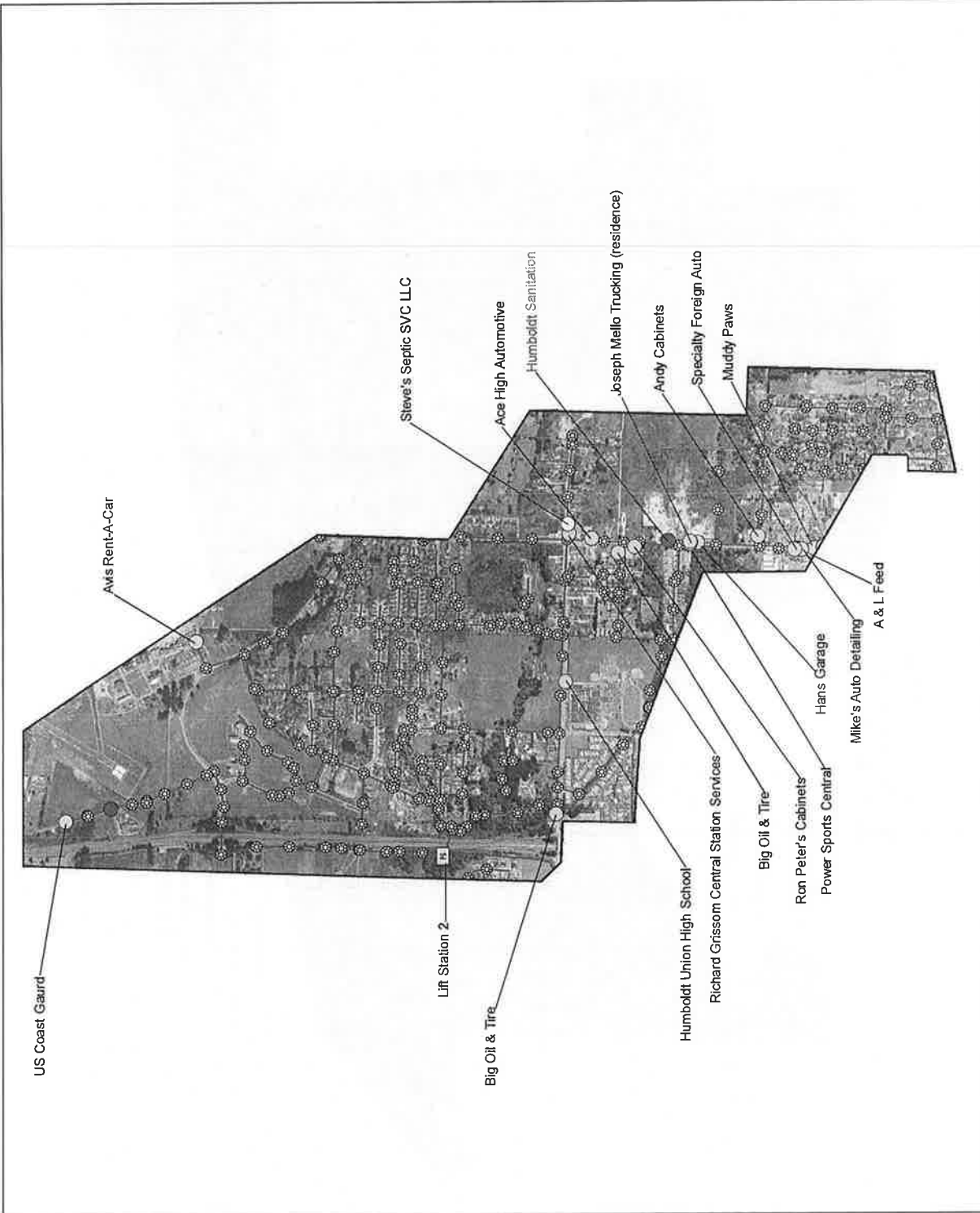


McKinleyville Community
Services District

Schedule IV Area

Date: 6-8-09

By: S.JT



APPENDIX C

Information for Facilities with Oil Water Separators

INFORMATION FOR FACILITIES WITH OIL/WATER SEPARATORS

- **Rule 24.09. Disposal of Unacceptable Waste.** Waste not permitted to be discharged into the community sewer must be transported to a State approved disposal site. The required "waste haulers report" must be completed and a copy furnished within 30 days to the District by the Discharger.

Oil/water separators are pretreatment devices to eliminate unwanted waste from entering the sewer system. When oil/water separators are cleaned, owners must provide documentation of proper disposal of the wastes. Sump waste should be characterized to determine proper disposal. In most cases, waste from oil/water separators will be classified as a hazardous waste.

- **Rule 24.10. Interceptor Requirements.** Grease, oil, and sand interceptors shall be provided when, in the opinion of the Manager, they are necessary for the proper handling of liquid wastes, containing grease in excessive amounts, or any flammable waste, sand and other harmful ingredients; except that such interceptors shall not be required for buildings used for residential purposes. All interceptors shall be of the type and capacity approved by the Manager and shall be located as to be readily and easily accessible for cleaning and inspection.

All such grease, oil and sand interceptors shall be maintained by the Owner, at their expense, in continuous efficient operation at all times.

Facilities with oil water separators are subject to inspection by the MCSD and must be cleaned regularly to assure continuous operation at all times.

- **Rule 24.10.05 Monitoring and Reporting.** All establishments having a grease trap or interceptor shall maintain and clean the unit as recommended by the manufacturer. Each grease trap or interceptor shall be regularly maintained by the proprietor or property owner and records kept at the site for inspection by the District. Maintenance will vary depending upon the size of the unit and grease loading. The property owner or proprietor shall send a copy of the maintenance records to the District Annually from the time of installation or some other agreed upon date by the District. At no time shall the unit be allowed to become clogged with grease so as to create damage to the District collection or treatment facilities. The Proprietor must develop a cleaning schedule sufficient to keep the units functioning properly. Records of grease disposal to a collection agent must be available to District personnel upon request.

Facilities with oil/water separators are subject to inspection of records regarding maintenance and cleaning of the oil water separators. Records must be submitted to the District annually.

- **Rule 24.12 Maintenance of Pretreatment Facilities.** Where required by the District, preliminary treatment facilities for any waters or wastes shall be maintained continuously in satisfactory and effective operation by the owner at their expense at to the satisfaction of District.

Facilities with oil/water separators (pretreatment) are required to clean oil/water separators.

Summary of Requirements

- Facilities that have pretreatment devices (oil/water separators) will be inspected monthly by MCSD staff. Inspections may take place at a lesser frequency if it is determined that due to low volumes of waste water a lesser frequency is adequate. Inspections of oil/water separators will begin in June 2009.
- Records must be available at the facilities indicating inspections and maintenance of oil/water separators.
- Based on observations during inspections, MCSD staff may require that an oil/water separator be maintained.
- Waste materials removed from oil/water separators must be properly characterized and disposed. Records of disposal are required to be on site and available for review by MCSD staff, provided annually by January 31 of each calendar year to the MCSD, and provided upon request by MCSD staff.

APPENDIX D

Discharge Monitoring Program for Steve's Septic and Six Rivers Brewery

STEVE'S SEPTIC DISCHARGE MONITORING PROGRAM

Rules establishing the right to inspect and sample are provided below with comments.

- **Rule 26.03. Monitoring Facilities.** Users who propose to discharge, or who in the judgment of the District could discharge now or in the future, wastewater with constituents and characteristics different from the produced by a domestic premise will be required to install a monitoring facility....Monitoring facilities that are required to be installed shall be constructed, operated and maintained at the user's expense.

Steve's Septic is required to have monitoring facilities.

- **Rule 26.03. Monitoring Facilities.** All industrial discharges into a public sewer shall perform such monitoring of their discharges as the District and/or other duly authorized employee of the District may reasonable require, including the installation, use, and maintenance of monitoring equipment and records shall be made available upon request by the District and to other Agencies having jurisdiction over discharges to the receiving waters.

Steve's Septic is required to perform reasonable monitoring as required by the District including sampling and analytical costs.

- **Rule 26.04. Inspection and Sampling.** The District may inspect the facilities of any user to ascertain whether the purpose of this Ordinance is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the District or its representative ready access to all reasonable times to all parts of the premises for the purposes of inspection and sampling or in the performance of any of their duties.

At the discretion of the District the district may inspect and sample wastewater from any facility to determine compliance with the rules and regulations.

- **Rule 29.02. Issuance of Cease and Desist Orders.** When the District finds that a discharge of wastewaters has taken place in violation of prohibitions or limitations of this ordinance, or the provisions of a Wastewater Discharge Permit, the District may issue an order to cease and desist, an direct that those persons not complying with such prohibitions, limits requirements, or provisions to: (a) Comply forthwith: (b) Comply in accordance with a time schedule set forth by the Authority of the District: (c) Take appropriate remedial or preventative action in the event of a threatened violation: (d) Terminate all waste water flow.

At the discretion of the District the district may issue a cease and desist order to a facility in violation of discharge limits.

Steve's Septic Monitoring Program

DISCHARGE MONITORING PROGRAM

- MCSD staff will collect weekly samples from Steve's Septic at random for analysis of BOD.
- Monthly results will be provided to Steve's Septic.
- If a monthly average exceeds the limits established by the ordinance (BOD 300 milligrams/liter) the MCSD will issue a Cease and Desist Order following Rule 29.02 and will require compliance in a specified timeframe or can require termination of wastewater flow.

SIX RIVERS BREWERY DISCHARGE MONITORING PROGRAM

Rules establishing the right to inspect and sample are provided below with comments.

- **Rule 26.03. Monitoring Facilities.** Users who propose to discharge, or who in the judgment of the District could discharge now or in the future, wastewater with constituents and characteristics different from the produced by a domestic premise will be required to install a monitoring facility....Monitoring facilities that are required to be installed shall be constructed, operated and maintained at the user's expense.

Six Rivers Brewery is required to have monitoring facilities.

- **Rule 26.03. Monitoring Facilities.** All industrial discharges into a public sewer shall perform such monitoring of their discharges as the District and/or other duly authorized employee of the District may reasonable require, including the installation, use, and maintenance of monitoring equipment and records shall be made available upon request by the District and to other Agencies having jurisdiction over discharges to the receiving waters.

Six Rivers Brewery is required to perform reasonable monitoring as required by the District including sampling and analytical costs.

- **Rule 26.04. Inspection and Sampling.** The District may inspect the facilities of any user to ascertain whether the purpose of this Ordinance is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the District or its representative ready access to all reasonable times to all parts of the premises for the purposes of inspection and sampling or in the performance of any of their duties.

At the discretion of the District the district may inspect and sample wastewater from any facility to determine compliance with the rules and regulations.

- **Rule 29.02. Issuance of Cease and Desist Orders.** When the District finds that a discharge of wastewaters has taken place in violation of prohibitions or limitations of this ordinance, or the provisions of a Wastewater Discharge Permit, the District may issue an order to cease and desist, an direct that those persons not complying with such prohibitions, limits requirements, or provisions to: (a) Comply forthwith: (b) Comply in accordance with a time schedule set forth by the Authority of the District: (c) Take appropriate remedial or preventative action in the event of a threatened violation: (d) Terminate all waste water flow.

At the discretion of the District the district may issue a cease and desist order to a facility in violation of discharge limits.

Six Rivers Brewery Monitoring Program

DISCHARGE MONITORING PROGRAM

- MCSD staff will collect weekly samples from Six Rivers Brewery at random for analysis of BOD, pH and temperature.
- Monthly results will be provided to Six Rivers Brewery.
- If a monthly average exceeds the limits established by the ordinance (BOD 300 milligrams/liter, pH less than 6.0 or greater than 9.0, temperature greater than 150° F) the MCSD will issue a Cease and Desist Order following Rule 29.02 and will require compliance in a specified timeframe or can require termination of wastewater flow.

APPENDIX E

Best Management Practices for Sink and Drain

Best Management Practices for Sinks and Drains

Wastewater best management practices (BMPs) are guidelines to minimize the impact of activities that potentially contribute contaminants to the sanitary sewer.

Shop Cleaning

- Use dry cleaning methods such as sweeping instead of water cleanup, whenever possible.
- Use dry sweeping compounds and reuse them as long as they remain absorbent.
- Do not hose down work areas. This practice generates large quantities of contaminated wash water.
- Consider sealing your shop floor with epoxy or other suitable sealant.

Hand Washing

- Hand washing in shops can result in the discharge of petroleum products and other hazardous compounds into the sanitary sewer system. Use waterless soaps and wipe hands on paper towels prior to rinsing hands in the sink.

Drain Protection

- Post signs near drains indicating that chemicals are not allowed in any drain.
- Seal floor drains where chemicals are used or stored. Provide floor drain stopper if the drain cannot be sealed.
- Cap and plug floor drains that are not serving a useful purpose.
- Use drip pans for similar devices to collect vehicle fluids before they reach floor drains.
- Do not put fluids like oil, solvents, paints or chemicals into floor drains or sinks.
- Install berms or another form of containment in the shop around areas where chemicals are stored to prevent their entry into the floor drains.
- Install screens in sinks and drains to prevent solids from entering the drain system.
- Develop and implement a maintenance schedule for inspecting and cleaning floor and sink drain systems.

Chemical Storage

- Store chemicals on low shelves or under countertops, on textured rubber mats whenever possible.
- Store chemicals behind protective barriers at least 1/5 the height of the tallest container.
- Never store chemicals above a sink.
- Keep containers sealed when not in use. Keep flammable chemicals in an approved fire-proof cabinet.

- Do not leave chemical cabinet doors unlatched.
- Never store incompatible chemicals together. Avoid accidental mixing.
- Chemical storage areas near floor drains should be surrounded by secondary containment, such as berms or dikes, to prevent accidental spills from reaching the floor drain.

Chemical Disposal

- Collect and segregate hazardous waste for proper disposal.
- Use signage and training to inform employees that hazardous materials or hazardous waste is never to be discharged directly to the sewer. Signs above sinks have been effective.
- If you are not certain if a material is permitted to be poured down a drain, ask your environmental and safety coordinator or contact the McKinelyville Community Services General Manager.
- Dispose of mop water appropriately. If you expect a hazardous component based on operational knowledge, the waste should be characterized and properly disposed. If you have questions contact your environmental and safety coordinator or contact the McKinelyville Community Services General Manager.

Secondary Containment

- Provide secondary containment for all petroleum products, hazardous chemicals and hazardous wastes including small volumes on work surfaces (counter tops, floors, and tables).
- Keep secondary containment clean and dry.
- Never use a sink as secondary containment.

Spill Control

- Clean up spills whenever they occur.
- Keep a well stocked, accessible spill kit in the areas where petroleum products or hazardous materials are stored and used.
- Ensure training of employees in spill control procedures and spill cleanup materials.

EXAMPLE SIGNS FOR POSTING NEAR DRAINS

**DISCHARGE OF ANY PETROLEUM PRODUCTS,
HAZARDOUS CHEMICALS OR HAZARDOUS
MATERIALS IS PROHIBITED FROM ENTERING
THE SEWER SYSTEM THROUGH ANY SINK,
TOILET, OR OTHER DRAIN.**

**If you have any questions please contact the
MCSD General Manager (707) 839-3251.**

**NO VEHICLE FLUIDS OR SOLVENTS DOWN
ANY DRAIN.**

**If you have any questions please contact the
MCSD General Manager (707) 839-3251.**

**NO PETROLEUM PRODUCTS OR CHEMICALS
DOWN ANY DRAIN.**

**If you have any questions please contact the
MCSD General Manager (707) 839-3251.**

NO CHEMICALS DOWN ANY DRAIN.

**If you have any questions please contact the
MCSD General Manager (707) 839-3251.**

**LOCAL LIMITS
DEVELOPMENT WORKPLAN
for
MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**

**Wastewater Management Facility
675 Hiller Road
McKinleyville, California
NPDES No. CA0024490**

HUMBOLDT COUNTY, CALIFORNIA

DRAFT
Prepared for:
McKinleyville Community Services District
675 Hiller Road
McKinleyville, California 95519

January 21, 2011

Prepared by:
Orrin Plocher and Stan Thiesen

of



Freshwater Environmental Services

78 Sunny Brae Center
Arcata, California 95521
Phone (707) 839-0091

TABLE OF CONTENTS

LIST OF TABLES.....	2
LIST OF FIGURES	2
1.0 INTRODUCTION	3
2.0 WASTEWATER MANAGEMENT FACILITY DESCRIPTION.....	4
2.1 Facility, Location and Ownership.....	4
2.2 Facility Description	4
2.3 Collection System Description.....	4
3.0 EXISTING LOCAL LIMITS AND DEVELOPMENT APPROACH	5
4.0 POLLUTANTS OF CONCERN	6
5.0 PROPOSED MONITORING PLAN.....	7
5.1 Treatment Plant Sampling.....	7
5.2 Collection System Sampling.....	8
5.3 Sample Handling	8
5.4 Analytical Methods	8
5.5 Quality Assurance/Quality Control.....	8
6.0 REFERENCES	9

LIST OF TABLES

TABLE 1	Existing Local Limits
TABLE 2	Summary of Pollutants Detected Since 2008
TABLE 3	Selected Pollutants Detected Since 2008 with Water Quality Objectives
TABLE 4	Potential Pollutants of Concern and Driving Factors for Inclusion
TABLE 5	Proposed Analytical Methods for Pollutants of Concern

LIST OF FIGURES

FIGURE 1	Regional Topographic Map
FIGURE 2	MCSD Wastewater Treatment Plant Site Plan
FIGURE 2	Proposed Sampling Locations in the Collection System

DRAFT

1.0 INTRODUCTION

Federal water quality regulations require local governments to prevent the introduction of certain pollutants into their Publicly Owned Treatment Works (POTW), in order to prevent interference with wastewater treatment processes and pass through of pollutants, and provide for the use and disposal of municipal biosolids (sludge). This is accomplished through development and implementation of specific effluent limits (local limits) for industrial users. These limits are developed to reflect the specific needs and capabilities at individual POTWs and protect the waterbody to which the POTW discharges.

Freshwater Environmental Services (FES) has developed this Local Limits Development Workplan to outline the steps required for local limits development/update for the McKinleyville Community Services District (MCSD) for approval by the California Regional Water Quality Control Board North Coast Region. The workplan was developed following the EPA's 2004 *Local Limits Development Guidance* (EPA, 2004). This Workplan contains the following elements:

- The Wastewater Management Facility (WWMF) and collection system is described in Section 2.0;
- The existing local limits and proposed development approach is presented in Section 3.0;
- The pollutants of concern are presented in Section 4.0;
- The proposed monitoring plan is described in Section 5.0; and
- The references cited in this report are listed in Section 6.0.

2.0 WASTEWATER MANAGEMENT FACILITY DESCRIPTION

2.1 Facility, Location and Ownership

The MCSD owns and operates a wastewater management facility (WWMF) located at 675 Hiller Road in McKinleyville, Humboldt County, California (Figure 1 and Figure 2). Discharges from the WWMF are regulated by a National Pollution Discharge Elimination System (NPDES) permit number CA0024490.

2.2 Facility Description

Information within the NPDES permit indicates that the MCSD owns and operates a secondary treatment facility. The WWMF consists of four aerated ponds followed by a two-stage polishing wetland marsh. During the discharge season, which extends from October 1 through May 14, wastewater is discharged from Discharge Point 001 to the Mad River, a water of the United States within the Blue Lake hydrologic area 109.10 and to percolation ponds adjacent to the Mad River Estuary when the flow in the Mad River is less than 200 cubic feet per second (cfs). During summer, a portion of the WWMF effluent is polished in the Hiller storm water treatment marsh where it provides moisture to sustain wetland vegetation through the dry season. Runoff producing rainfall events cause the Hiller storm water treatment marsh to overflow into an unnamed tributary to the Mad River estuary. Prior to the onset of the wet season and storm water overflows from the marsh, the wastewater application to the treatment marsh is ceased and the treatment marsh is allowed to dry through evaporation and evapotranspiration. Figure 1 provides a topographic map of the region around the facility. Figure 2 is a site plan with arrows indicating the flow of wastewater through the facility. The calculated hydraulic residence time from headworks to effluent is approximately 35 days.

2.3 Collection System Description

The MCSD collection system has some unique characteristics that affect the proposed local limits approach. The collection system is dominated by residential users. There are Food Service Establishments (FSEs) that generate Fats, Oils and Greases (FOG) that are inspected monthly by the MCSD Pretreatment Staff. Beyond FSEs, industrial users are limited in numbers and potential impact. Non-FOG industrial users with the highest potential impact to system include: one septage/FOG hauler/processor, one micro-brewery, one carwash, one dry cleaner, one jeweler (zero discharge) and 7 vehicle maintenance facilities with oil-water separators.

3.0 EXISTING LOCAL LIMITS AND DEVELOPMENT APPROACH

The MCSDs existing local limits are shown in Table 1. The MCSD is in the process of evaluating the existing local limits to determine if they are still protective of the POTW or need to be modified. The MCSD proposes to use the Maximum Allowable Headworks Loading (MAHL) calculation methodology described in EPA's 2004 *Local Limits Development Guidance* to evaluate the existing limits, and to also establish its revised local limits. The MAHL methodology includes four basic steps:

- Determine the Pollutants of Concern (POC);
- Collect and analyze data;
- Calculate MAHLs for each POC; and
- Designate and implement the local limits.

After completing the MAHL methodology, local limits may be adjusted to address collection system concerns and practical considerations. This Workplan describes the proposed process.

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4.0 POLLUTANTS OF CONCERN

A Pollutant of Concern (POC) is any pollutant that may be discharged to the POTW in sufficient amounts to pass through treatment processes, interfere with treatment processes, jeopardize worker health and safety, or cause operational problems. A POC may also include pollutants in the applicable NPDES permit or biosolids quality regulations. In order to determine the POCs to be evaluated, the MCSD considered the following:

- MCSD NPDES permit requirements;
- Biosolids quality regulations;
- Treatment process inhibition (nitrification and anaerobic);
- Water Quality Criteria
- Known Industrial Users;
- Sampling and violation history at the WWMF;
- Current local limits, and
- EPA guidance documents.

A summary of compounds detected in effluent samples since 2008 are presented in Table 2. Based on the frequency of detection, concentrations of analytes, comparison to conservative inhibition concentrations, and water quality objectives, some of analytes in Table 3 are not being considered as potential POCs as indicated. The MCSDs potential POCs, along with applicable listing criteria, are included in Table 4.

5.0 PROPOSED MONITORING PLAN

The Local Limits Guidance recommends that sampling be conducted for five consecutive days and analyzed for the POCs. All sampling will be conducted under normal operating conditions during dry weather. Sampling will follow the flow of the treatment process based on the hydraulic residence time (i.e., effluent sampling will be taken after influent sampling and lagged by the hydraulic residence time of 35 days). Specific sampling proposed for local limits development were determined following an extensive review of existing data and potential non-domestic sources. The MCSD will also gather data regarding total POTW flow, domestic wastewater flow, and industrial wastewater flow. The MCSD will use this data to calculate the load of each POC coming into the POTW. Wastewater samples will be either 24-hour flow proportional composite samples, time composited samples or grab samples. A composite grab sample consisting of 4-12 subsamples will be used for the following analytes;

- pH
- Cyanide
- Total phenols
- Volatile Organic Compounds

Proposed local limits sampling locations are shown in Figure 3 and are discussed below:

Treatment Plant Sampling:

Headworks Influent – The Plant influent will be sampled for 5 consecutive days to determine the presence of pollutants of concern and to provide data to conduct treatment process removal efficiency analyses. Removal efficiencies will be used to convert biological process inhibition data into corresponding allowable headworks loadings.

Final Effluent – The Plant final effluent will be sampled for 5 consecutive days to provide data to conduct treatment plant removal efficiency analyses and to calculate headworks loading limits. Previous effluent data will be used in this study.

Collection System Sampling:

Domestic collection system – One representative domestic collection system trunk line will be sampled for one day to determine “uncontrollable” pollutant sources (residential). This information is necessary to accurately allocate the maximum allowable headworks loading for pollutants.

Commercial collection system – One representative collection system trunk line serving primarily commercial uses will be sampled for one day to determine “controllable” pollutant sources (commercial). This information is necessary to accurately allocate the maximum allowable headworks loading for pollutants. Previous discharge data from the septic/FOG hauler/processor will be used in this study.

5.1 Treatment Plant Sampling

Influent and effluent samples will be collected over five day periods separated by 35 days (calculated hydraulic residence time) and analyzed for the POC. Influent sampling will be collected at a location prior to mixing with other wastewater streams. Analytical

results from the samples will be used to aid in planning for future disposal and in the local limits calculations.

5.2 Collection System Sampling

Samples from two locations within the collection system will be collected for a single day and analyzed for the POC. The sampling within the collection system will be performed within the five day period of influent sampling at the treatment plant.

5.3 Sample Handling

Wastewater samples will be collected in laboratory provided containers labeled and immediately placed in an ice-cooled chest for delivery to an analytical laboratory certified by the California Department of Health Services for the required analyses. All sample handling will include chain-of-custody documentation.

5.4 Analytical Methods

All wastewater samples will be analyzed utilizing the methods indicated in Table 5.

5.5 Quality Assurance/Quality Control

Following receipt of the laboratory analytical report all laboratory QC batches will be checked to ensure that the correct number of samples were analyzed, the holding times were not exceeded, surrogates recoveries were within stated control limits, and that Laboratory Method Blank, Matrix Spikes (MS), Matrix Spike Duplicates (MSD), Laboratory Control Samples (LCS) and Laboratory Control Sample Duplicates (LCSD) were all tested and within the acceptable limits.

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6.0 REFERENCES

United States Environmental Protection Agency, 2004, *Local Limits Development Guide*:
July.

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TABLES

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TABLE 1
EXISTING LOCAL LIMITS

Pollutant	Local Limit in (mg/L) ppm	Local Limit (µg/L) ppb
Arsenic	0.1	100
Cadmium	0.2	200
Copper	2.0	2,000
Cyanide	1.0	1,000
Lead	1.0	1,000
Mercury	0.01	10
Nickel	1.0	1,000
Silver	1.0	1,000
Total Chromium	0.5	500
Zinc	3.0	3,000
Oil and Grease (animal or vegetable)	300	300,000
Oil and Grease (mineral or petroleum)	100	100,000
Total Identifiable Chlorinated Hydrocarbons (which cannot be removed by treatment)	0.02	20
Phenolic compounds	1.0	1,000

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TABLE 2
SUMMARY OF POLLUTANTS DETECTED IN EFFLUENT SAMPLES SINCE 2008

Analyte	RESULTS µg/L			Number of Detections	Comments Regarding Sources
	Maximum	Minimum	Average		
3 & 4-Methylphenol	0.6	0.6	0.6	1	Component of creosol.
4,4-DDT	0.53	0.262	0.40	2	Banned pesticide in USA.
Acetone	11.1	2.8	6.95	3	Aerosol paints, architectural coatings, automotive and machinery paints and primers, furniture polish and cleaners, household hard surface cleaners, laundry pre-soaks, pet flea and tick removers, cockroach treatments, laundry starches, lubricating greases and oils, nail enamel and polish and polish remover, particleboard, paints (including interior clear finishes, undercoats and primers), varnish, paint and varnish removers and thinners, liniments for veterinary preparations, pharmaceutical preparations, pre-moistened towelettes, shoe polish, sun tan lotions and oils, and in wood office furniture.
Antimony	0.3	0.1	0.2	2	Fire retardant compound, ceramic & glass additives, paint pigments, rubber vulcanization agents.
Arsenic	0.6	0.5	0.55	2	Agricultural pesticides.
Bis(2-ethylhexyl)phthalate (DEHP)	5	2	3.10	10	Chemical that is added to hard plastics to make them soft.
Bromodichloromethane	0.4	0.1	0.18	6	Disinfection byproduct in the trihalomethane (THM) family.
Butyl benzyl phthalate	1	0.2	0.60	2	Plasticizer for PVC.
Cadmium	0.24	0.05	0.15	2	Pigments, coatings and plating, and as stabilizers for plastics
Carbon tetrachloride	0.3	0.3	0.3	2	Solvent, cleaner persisted as a pesticide to kill insects in stored grain, but in 1970, it was banned in consumer products
Chloroform	3.4	0.8	1.61	9	Disinfection byproduct in the trihalomethane (THM) family.
Chromium	1.5	1.4	1.45	2	Plating.
Copper	24.1	16.1	19.85	4	Plumbing and auto shop brake work
Di-n-butyl phthalate	9	1	4	3	Chemical that is added to hard plastics to make them soft. The plastics that di-n-butyl phthalate is used most in are called polyvinyl chloride.
Lead	0.4	0.2	0.3	4	Electronics, batteries.
Mercury	10.9	5.9	8.4	2	Household bleach, acid and caustic chemicals (e.g., battery acid, household lye, muriatic acid (hydrochloric acid), sodium hydroxide and sulfuric acid), instrumentation containing Mercury (e.g., medical instruments, thermometers, barometers and manometers), dental amalgam (fillings), latex paint (manufactured prior to 1990), batteries, electric lighting (fluorescent lamps), incandescent wire filaments, mercury vapor lamps, ultraviolet lamps), pesticides (restricted and/or banned under FIFRA since 1995), pharmaceuticals (e.g., nasal sprays, cosmetics, contact lens products), household detergents and cleaners, laboratory chemicals, inks and paper coatings, lubrication oils, wiring devices and switches, and imported textiles (Mercury is used as a preservative and is released through laundering).
Methyl tert-Butyl Ether (MTBE)	0.3	0.3	0.3	1	Gasoline additive.
Nickel	2.6	2.4	2.5	2	Electroplating.
Selenium	0.8	0.4	0.6	2	Naturally occurring
Toluene	10.2	0.9	4.10	7	Gasoline component, paint solvent.
Zinc	21.2	13.8	17.5	2	Plating and plumbing

TABLE 3
SELECTED POLLUTANTS DETECTED SINCE 2008
WITH WATER QUALITY OBJECTIVES

Potential Pollutant of Concern	Comments	Treatment process inhibition (Nitrification)	Treatment process inhibition (Anaerobic)	Biosolids quality regulations	NPDES permit effluent water quality limit	Potential industrial user discharge	WQO Comments	Recommended POC for Evaluation
Volatile Organic Compounds (VOCs)								
Acetone	2.8-11.1 ppb, 3 detections since 2008	No	No	No	No	Yes	6,300 ppb, USEPA Integrated Reference Dose as a drinking water	No
Bromodichloromethane	0.1-0.4 ppb, 6 detections since 2008	No	No	No	No	No	0.27 ppb Cal/EPA Cancer Potency Factor as a drinking water level.	Yes
Carbon tetrachloride	0.3-0.3 ppb, 2 detections since 2008, most conservative inhibition concentration 2,000 ppb	No	Yes	No	No	Yes	0.10 ppb California Public Health Goal (PHG), (Cal/EPA, OEHHA)	Yes
Chloroform	0.8-3.4 ppb, 9 detections since 2008, most conservative inhibition concentration 1,000 ppb	Yes	Yes	No	No	Yes	0.26 ppb National Academy of Sciences Health Advisory	Yes
Methyl tert-Butyl Ether (MTBE)	0.3 ppb, 1 detection since 2008	No	No	No	No	Yes	5 ppb Secondary MCL	No
Toluene	0.9-10.2 ppb, 7 detections since 2008	No	No	No	No	Yes	40 ppb Secondary MCL	Yes
Semi volatile Organic Compounds (SVOCs)								
3 & 4-Methylphenol	0.6 ppb, 1 detection since 2008, most conservative inhibition concentration is 4,000 ppb total phenols	Yes (phenols)	No	No	No	No	1 ppb California Ocean Plan Marine Aquatic Life Protection 6-month median.	No
Butyl benzyl phthalate	0.2-1.0 ppb, 2 detections since 2008	No	No	No	No	No	3 ppb Freshwater Chronic toxicity	No
Di-n-butyl phthalate	1-9 ppb, 4 detections since 2009	No	No	No	No	No	3 ppb Freshwater Chronic toxicity	Yes
Metals								
Antimony	0.1-0.3 ppb, 2 detections since 2008	No	No	No	No	Yes	2.8 ppb, USEPA Integrated Reference Dose as a drinking water	No

TABLE 4
POLLUTANTS OF CONCERN AND DRIVING FACTORS FOR INCLUSION

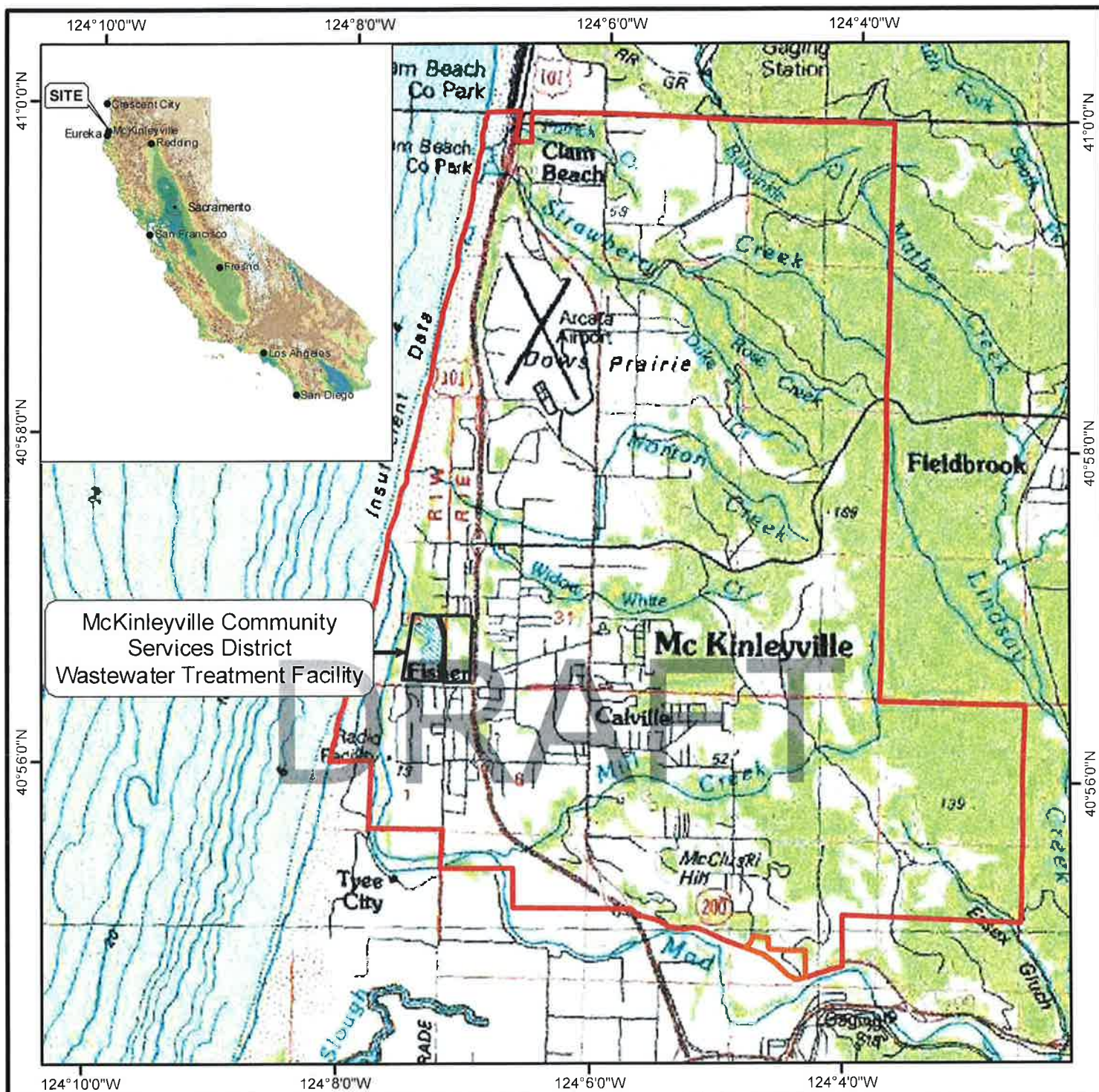
Potential Pollutant of Concern	Treatment process inhibition (Nitrification)	Treatment process inhibition (Anaerobic)	Biosolids quality regulations	Revised NPDES permit effluent water quality limit	Water Quality Objectives	Potential industrial user discharge
Conventional						
Biochemical Oxygen Demand (BOD)				X	X	X
Chlorine Residual				X	X	
Nitrate as Nitrogen				X	X	X
Oil and Grease				X	X	X
pH				X	X	X
Settleable Matter				X	X	X
Total Suspended Solid (TSS)				X	X	X
Priority Pollutants Metals & Cyanide						
Arsenic	X	X	X		X	X
Cadmium	X	X	X		X	X
Total Chromium	X	X			X	X
Copper	X	X	X		X	X
Cyanide	X	X			X	
Lead	X	X	X		X	X
Molybdenum			X		X	X
Mercury			X		X	X
Nickel	X	X	X		X	X
Selenium			X		X	X
Silver		X			X	X
Zinc	X	X	X		X	X
Organics						
bis(2-ethylhexyl phthalate)				X	X	X
Phenolic Compounds	X				X	X
Bromodichloromethane					X	X
Carbon Tetrachloride		X		X	X	X
Chloroform	X	X			X	X
Toluene					X	X
Semi-Volatile Organic Compounds						
Di-n-butyl phthalate					X	
Pesticides and Dioxin						
α-BHC				X	X	X
4,4-DDT				X	X	

TABLE 5
PROPOSED ANALYTICAL METHODS FOR POLLUTANTS OF CONCERN

Potential Pollutant of Concern	Analytical Method	Container	Preservative	Holding Time to Extraction	Sample Type
Conventional					
Biochemical Oxygen Demand (BOD)	SM 5210	1L Poly	4 degrees	48 hours	24-hour flow proportional composite
Chlorine Residual	SM 4500	250ml Poly	None	24 hours	24-hour flow proportional composite
Nitrate as Nitrogen	EPA 353.2	250ml Poly	4 degrees	48 hours	24-hour flow proportional composite
Oil and Grease	EPA 1664A	1L Amber Glass x 2	H2SO4	28 days	4-12 Grab samples composited
pH	SM 4500 H+	250ml Poly	4 degrees	24 hours	4-12 Grab samples composited
Settleable Matter	SM 2540 F	1L Poly	4 degrees	48 hours	24-hour flow proportional composite
Total Suspended Solid (TSS)	SM 2540 D	1L Poly	4 degrees	7 days	24-hour flow proportional composite
Priority Pollutants Metals & Cyanide					
Arsenic	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Cadmium	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Total Chromium	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Copper	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Cyanide	SM 4500CN E	500ml Poly	NaOH	14 days	4-12 Grab samples composited
Lead	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Molybdenum	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Mercury	EPA 1631E	250ml Glass DB	HN03	28 days	24-hour flow proportional composite
Nickel	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Selenium	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Silver	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Zinc	EPA 200.8	500ml QCP	HN03	6 months	24-hour flow proportional composite
Organics					
bis(2-ethylhexyl phthalate)	EPA Method 625	1L Amber Glass x 2	4 degrees	14 days	24-hour flow proportional composite
Total Phenolic Compounds	EPA Method 625	500 ml amber	4 degrees	14 days	4-12 Grab samples composited
Di-n-butyl phthalate	EPA Method 625	1L Amber Glass x 2	4 degrees	14 days	4-12 Grab samples composited
Bromodichloromethane	EPA Method 624	40 ml VOAs x 3	HCL, 4 degrees	14 days	4-12 Grab samples composited
Carbon Tetrachloride	EPA Method 624	40 ml VOAs x 3	HCL, 4 degrees	14 days	4-12 Grab samples composited
Chloroform	EPA Method 624	41 ml VOAs x 3	HCL, 4 degrees	14 days	4-12 Grab samples composited
Toluene	EPA Method 624	40 ml VOAs x 3	HCL, 4 degrees	14 days	4-12 Grab samples composited
Pesticides and Dioxin					
α-BHC	EPA Method 608	1L Amber Glass x 2	4 degrees	7 days	24-hour flow proportional composite
4,4-DDT	EPA Method 608	1L Amber Glass x 2	4 degrees	7 days	24-hour flow proportional composite
2,3,7,8-TCDD equivalents	EPA Method 1613	1L Amber Glass x 2	4 degrees	14 days	24-hour flow proportional composite

FIGURES

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LEGEND

- McKinleyville CSD
- McKinleyville CSD Sphere
- MCSD Wastewater Treatment Facility

Base Image Data Source:
USGS Digital Raster Graph

ALL LOCATIONS APPROXIMATE

McKinleyville Community
Services District

Figure 1
Regional Topographic Map
with District Boundaries
McKinleyville, California

Date: 8-2-10

By: SJT





Freshwater Environmental Services



0 100 200 400 600 800
Feet

LEGEND

-  Flow Direction
-  MCSD Ponds

Base Image Data Source:
USGS Digital Raster Graph

ALL LOCATIONS APPROXIMATE

McKinleyville Community
Services District

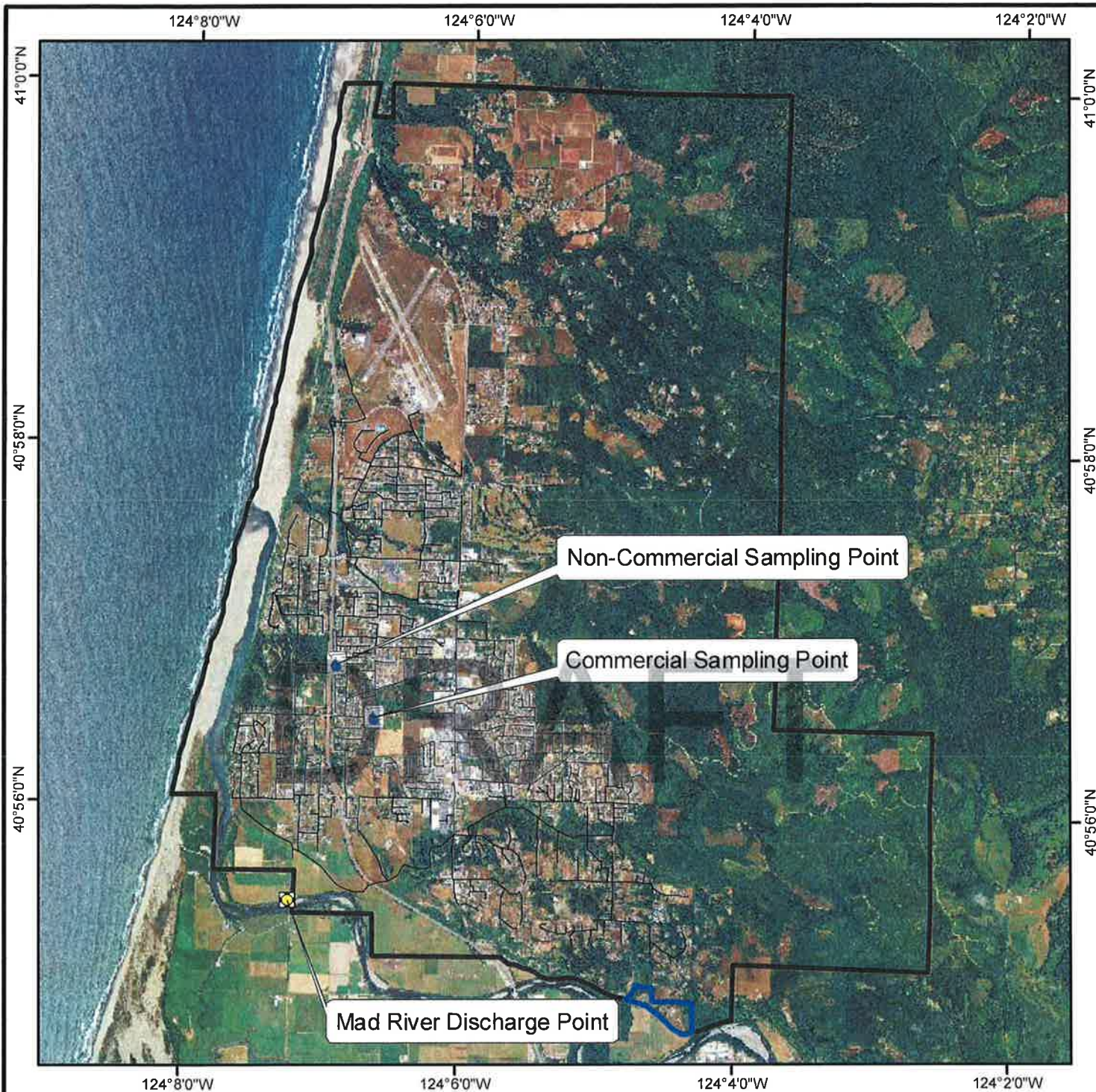
Figure 2 MCSD Wastewater Treatment Plant Site Plan

Date: 8-2-10

By: SJT



Freshwater Environmental Services



LEGEND

- McKinleyville CSD
- McKinleyville CSD Sphere

Base Image Data Source:
USGS Digital Raster Graph

ALL LOCATIONS APPROXIMATE

**McKinleyville Community
Services District**

Figure 3
Proposed Sampling Locations
in the Collection System

Date: 8-2-10

By: SJT



Freshwater Environmental Services