

## EPA Region IX and California Water Resources Control Board

### NPDES Compliance Evaluation Inspection (CEI) Report

<b>Name and Location of Facility Inspected</b> McKinleyville Community Services District Wastewater Management Facility 675 Hiller Road McKinleyville, CA 95519		<b>Entry Date</b> 3/12/2013  <b>Entry Time</b> 10:00 AM	<b>Permit Effective Date</b> 4/19/2011
<b>NPDES Permit Number</b> CA0024490	<b>Order Number</b> WQ 2011-0008-DWQ	<input checked="" type="checkbox"/> <b>Major</b>  <input type="checkbox"/> <b>Minor</b>	<b>County</b> Humboldt  <b>Permit Expiration Date</b> 4/18/2016
<b>Name(s) &amp; Title(s) of On-Site Representative(s)</b> Gregory Orsini (Operations Director)	<b>Contact Information</b> Phone: (707) 839-3251 Fax: (707) 839-8685 E-mail: operations@mckinleyvillecsd.com		<b>Notified of Inspection?</b> <input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b>
<b>Name, Title &amp; Address of Responsible Official</b> Gregory Orsini (Operations Director) PO Box 2037 McKinleyville, CA 95519	<b>Contact Information</b> Phone: (707) 839-3251 Fax: (707) 839-8685 E-mail: operations@mckinleyvillecsd.com		<b>Official Contacted?</b> <input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b>
<b>Inspector(s)</b> <b>Primary:</b> Craig Blett (PG Environmental, LLC) <b>Other(s):</b> Cathy Goodwin (North Coast Water Board)			<b>Presented Credentials?</b> <input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b>
<b>Weather Conditions at the Time of the Inspection:</b> Overcast; light precipitation within the past 24 hours	<b>Facility Receiving Water Name:</b> Mad River		
<b>Overview of Areas Evaluated During Inspection</b> <i>S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated</i>			
Permit: S  Records/Reports: M  Facility Site Review: S  Effluent and Receiving Waters: S	Flow Measurement: S  Self-Monitoring Program: S  Laboratory: U  Operations & Maintenance: M	Biosolids/Solid Waste Handling & Disposal: N  Compliance Schedules: N  Pretreatment (POTWs Only): N  Storm Water: N	
Prepared By: Craig Blett (PG Environmental, LLC) on 3/19/2013 Reviewed By: Max Kuker (PG Environmental, LLC) on 3/29/2013			

**Report Delivery Date: 3/29/2013**

## Facility Narrative

On March 12, 2013 a USEPA contractor inspected the McKinleyville Community Services District Wastewater Management Facility in McKinleyville, CA. Discharges from the Facility are regulated by North Coast Water Board Order No. WQ 2011-0008-DWQ (NPDES Permit No. CA0024490). The primary purpose of the inspection was to determine the accuracy and reliability of the Discharger's self-monitoring and reporting program. The primary on-site Facility representative was Gregory Orsini (Operations Director).

The McKinleyville Community Services District (District or Discharger) owns and operates the Wastewater Management Facility (Facility). The Facility treats residential and commercial wastewater from the District, which includes approximately 14,000 residents. Commercial users include a car wash, brewery, jewelry repair, and dentists. There are approximately 4,800 sewer connections to the collection system.

The Facility provides secondary level treatment of wastewater. Treatment consists of preliminary influent grinding, grit removal, facultative ponds, oxidation ponds, wetlands, chlorination, and dechlorination. The treated effluent is then directed to the Mad River through Discharge Point 001 or to land discharge through Discharge Points 003, 004, and 006. Percolation ponds (Discharge Point 002) are used for discharge when the other discharge points are not in use (during low river flow or saturation of land application fields). The Facility also supplies the Hiller wetlands through Discharge Point 005 during dry periods so that the wetlands can maintain vegetative cover and growth. Biosolids are not processed at the facility.

The Discharger is planning several major upgrades to the treatment processes. Currently, a design analysis of the Facility upgrades is being conducted. The design is expected to be completed in April 2014. According to the primary on-site Facility representative, the District has not yet programmed or funded any upgrade construction work. The primary on-site Facility representative stated that he was going to initiate a discussion of the upgrade schedule with the District Board of Directors at a meeting to be held the night of the inspection (March 12, 2013).

The inspectors visually evaluated the treatment train in order from headworks to discharge and site conditions in the presence of the primary on-site Facility representative and determined that all mechanical treatment units were in good condition and functioning properly.

The Facility's design capacity (design dry weather flow) is 1.6 million gallons per day (mgd). Average dry weather flow for the period of October 2012 through January 2013 was approximately 1.0 mgd. The instantaneous influent flow was 0.847 mgd at 1:36 PM. The Facility was not discharging effluent at the time of inspection because the chlorine contact tank was being cleaned. Therefore, flow was being allowed to accumulate (i.e., backup) as additional storage in the treatment ponds.

The Facility's operations personnel conduct self-monitoring activities. Influent samples are collected at the grit chamber and effluent samples for Discharge Point No. 001 are collected at end of the chlorine contact tank. Sample collection locations and methods appeared to provide representative samples. All samples are analyzed at an on-site laboratory and at contract laboratories.

Electronic self monitoring reports (eSMRs) and the "California Integrated Water Quality System (CIWQS) Violation Report" for the period of October 2012 through January 2013 were reviewed as a component of this inspection. Permit limit exceedances were identified and are presented in the attached "CIWQS Violation Report". The evaluation also included a comparison of data points

reported in the eSMRs submitted to the North Coast Water Board against the laboratory bench sheets and contract laboratory reports documenting the actual analytical results. No discrepancies were identified.

Previous inspection reports were not reviewed prior to this inspection.

### **Major Findings**

#### ***Laboratory***

1. North Coast Water Board Order No. WQ 2011-0008-DWQ, Attachment E – Monitoring and Reporting Program, Provision I.C requires that “Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provisions of Water Code 13176, and must include quality assurance/quality control data with their reports.” The Facility’s on-site laboratory is not ELAP certified and has not developed a Quality Assurance/Quality Control (QA/QC) Program. Additionally, the Discharger had not developed SOPs for analyses conducted in the on-site laboratory (i.e., temperature, pH, chlorine residual, and DO). The primary on-site Facility representative stated that he was unaware of this permit requirement and that it was his intention to develop and implement a QA/QC Program as soon as possible. He further stated that he also intended to develop SOPs along with correcting the additional identified deficiencies (recording pH and chlorine residual analysis times and monitoring refrigerator temperature).

#### **Attachments:**

CEI Photo Log  
CIWQS Violation Report

## PERMIT:

OVERALL RATING: S

INSPECTED ITEM	EVAL
1. Current copy of Facility's NPDES permit available on site.	S
2. Correct name and mailing address of permittee identified on NPDES permit.	S
3. Facility is as described in permit.	S
4. a. Notification given to Regional Water Board of process/production modifications, collection system expansions, etc. that impacted quality/quantity of discharge or changes to the Facility or increased discharge. b. Permit modification received, if required, prior to changes.	N N
5. Recent permit modifications, amendments or compliance orders on file.	N
6. Number of discharge outfalls the same as listed in the permit.	S
7. Name of receiving waters listed correctly in the permit.	S
8. Permit status (i.e., Current, Expired, or Extended)	Current
9. Permit renewal application submitted to the Regional Water Board at least 180 days prior to the expiration date.	N
10. Other:	N
<b>Notes:</b> <i>This section was rated "satisfactory" because all checklist items reviewed were rated satisfactory.</i>	

**RECORDS/REPORTS:**

**OVERALL RATING: M**

INSPECTED ITEM	EVAL
<p>1. NPDES records maintained for the time period required (5 years):</p> <p>The following records and reports were requested and observed:</p> <ul style="list-style-type: none"> <li>- <b>Current permit, monitoring and reporting program, and standard provisions</b></li> <li>- <b>Latest four months of eSMRs (October 2012 through January 2013)</b></li> <li>- <b>2012 Annual Report (dated March 1, 2013)</b></li> <li>- <b>Flow measurement records</b></li> <li>- <b>Maintenance records</b></li> <li>- <b>Operation and maintenance (O&amp;M) manual</b></li> <li>- <b>Operation log records</b></li> <li>- <b>Contract laboratory records and chain-of-custodies (COCs)</b></li> </ul>	<p>Yes</p>
<p>2. a. Did the Facility document any spills or bypasses during the period reviewed?</p> <p>b. Spills and bypasses reported and documented as required by the permit (i.e., as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances).</p> <p>c. Follow-up written documentation given as required by the permit (within 5 days in most cases).</p>	<p>No</p> <p>N</p> <p>N</p>
<p>3. Discharge monitoring report (DMR) and/or self monitoring report (SMR) evaluation:</p> <ul style="list-style-type: none"> <li>a. The responsible person or designee signs and certifies the DMRs and/or SMRs.</li> <li>b. The Facility monitors more frequently than required by the permit.</li> <li>c. All data collected are summarized on the DMRs and/or SMRs.</li> <li>d. Data reported on DMRs and/or SMRs is consistent w/ analytical results.</li> <li>e. Coliform concentrations calculated as required by the permit (e.g., median, geometric mean).</li> <li>f. Numerical values for minimum detection limits are reported on DMRs and/or SMRs when laboratory reports "Not Detected" or "0" (for example, MDL= 3, Report: "&lt;3" on DMR).</li> <li>g. "Less than values" properly carried through loading calculations.</li> <li>h. Flow measurement period used for loading calculations brackets the sampling period.</li> <li>i. Influent and/or effluent loading rates properly calculated; if required.</li> <li>j. Number Exceeding (N.E.) properly reported on all DMRs and annual reports.</li> </ul>	<p>S</p> <p>No</p> <p>S</p> <p>S</p> <p>S</p> <p>S</p> <p>S</p> <p>S</p> <p>S</p> <p>S</p>
<p><b>eSMRs, not DMRs, were reviewed as a component of this inspection.</b></p>	

RECORDS/REPORTS:

OVERALL RATING: M

INSPECTED ITEM	EVAL
<p>4. Reports completed in the time frame and frequency as required by the permit (not all reports required for all facilities):</p> <ul style="list-style-type: none"> <li>a. DMRs and/or SMRs</li> <li>b. Biosolids Monitoring Reports</li> <li>c. Biosolids Management Reports</li> <li>d. CSO/ I&amp;I Reports</li> <li>e. Compliance Schedule Reports</li> <li>f. Pretreatment Reports</li> <li>g. Other:</li> </ul> <p><b>4a. The cover letter attached to the November 2012 eSMR record on CIWQS was intended for the October 2012 eSMR. A November 2012 cover letter was not observed with the November 2012 eSMR record on CWIQS. This observation was made after the inspection, and therefore the inspector did not request the November 2012 cover letter during the inspection.</b></p> <p><b>4d. The collection system and associated records were not reviewed during the inspection.</b></p>	<p>M N N N N N N</p>
<p>5. Sampling and analytical records (for water and biosolids) include:</p> <ul style="list-style-type: none"> <li>a. Dates, times, and location of sampling</li> <li>b. Names of individuals performing sampling</li> <li>c. Analytical methods</li> <li>d. Results of analyses</li> <li>e. Dates of analyses</li> <li>f. Time of analyses, as necessary to verify holding times</li> <li>g. Analysts' names or initials</li> <li>h. Instantaneous flow at grab sample stations, if required</li> </ul> <p><b>5f. The time of analyses was not recorded for the on-site laboratory analysis of pH and chlorine residual for the period of review (October 2012 through January 2013). The laboratory technician stated that pH and chlorine residual analyses are conducted immediately following sample collection.</b></p>	<p>S S S S S M S S</p>
<p>6. Plant records include:</p> <ul style="list-style-type: none"> <li>a. Daily plant operational records or log book</li> <li>b. Equipment maintenance records and schedules</li> <li>c. CSO/lift station check records or log book</li> <li>d. Records of auxiliary power checks</li> <li>e. Spill Prevention Control and Countermeasure (SPCC) plan</li> <li>f. Pollution Prevention Plan (P3)</li> <li>g. Storm Water Pollution Prevention Plan (SWPPP)</li> <li>h. Influent and/or effluent flow measurement records maintained for the past three years</li> <li>i. Other:</li> </ul> <p><b>6d. The Facility is capable of operation without power because wastewater flows by gravity from the headworks to the point of discharge. Flow is pumped to the Facility from a lift station which has an on-site backup generator.</b></p>	<p>S S N N N N N S N</p>

**RECORDS/REPORTS:**

**OVERALL RATING: M**

INSPECTED ITEM	EVAL
7. All records and reports required by the permit appear to be organized and available for inspection.	S
8. Other:	N
<b>Notes:</b> <i>This section was rated "marginal" due to checklist items 4a. and 5f.</i>	

**FACILITY SITE REVIEW:**

**OVERALL RATING: S**

INSPECTED ITEM	EVAL
<p>1. All treatment units and supporting equipment are in service and mechanically functioning properly.</p> <p><b>The Facility's treatment train consists of the following:</b></p> <ul style="list-style-type: none"> <li>- One solids grinder</li> <li>- One grit removal chamber</li> <li>- Two facultative ponds (Ponds 1A and 1B in use)</li> <li>- Two oxidation ponds (Ponds 2 and 3 in use)</li> <li>- Two treatment wetlands (Wetlands 4 and 5 in use)</li> <li>- One chlorine contact tank</li> <li>- Dechlorination by sulfur dioxide gas</li> </ul> <p><b>Biosolids are not processed at the Facility. Solids have been allowed to accumulate in the four treatment ponds since the Facility was constructed in the mid-1980s. Sludge depth has been measured and according to the primary on-site Facility representative, the depth varies between 1.5 to 2 feet in Ponds 1A and 1B. He further stated that sludge depth has not been measured in Ponds 2 and 3.</b></p>	<p>S</p>
<p>2. Hydraulic and organic loadings are consistent with the fact sheet and plant design criteria.</p> <p>a. Are there signs of overloading to the Facility and collection system, including I&amp;I and septage loading?</p>	<p>S N</p>
<p>3. Peak flows remain within the established plant capacity.</p> <p>a. If flows have exceeded capacity, has the Regional Water Board been notified?</p>	<p>S N</p>
<p>4. Lift stations are properly monitored, maintained, have a back-up power source and are not subject to chronic spills and/or overflows.</p> <p><b>Lift stations in the collection system were not reviewed as a component of this inspection.</b></p>	<p>N</p>
<p>5. Odors are adequately controlled, resulting in limited complaints.</p>	<p>S</p>
<p>6. Residual chlorine monitoring is well documented and sampling/monitoring is representative of the discharge.</p> <p>a. If a UV system is used, the dosage intensity, tubes, and alarms are adequate, maintained and documented.</p>	<p>S N</p>
<p>7. Housekeeping procedures are adequate to prevent release of pollutants to the environment:</p> <ul style="list-style-type: none"> <li>a. Adequate dikes and secondary containment</li> <li>b. Spill containment and clean-up</li> <li>c. Signs of spillage to soil, groundwater, or surface water</li> <li>d. Storm water and leachate management from storage piles</li> <li>e. Leaking pipes, pumps, etc.</li> <li>f. Drum and chemical storage areas</li> <li>g. Minimization of pollutants entering storm water outfalls</li> <li>h. Other open dumps or debris piles</li> <li>i. Other:</li> </ul>	<p>S S S S S S S S N</p>

**FACILITY SITE REVIEW:**

**OVERALL RATING: S**

INSPECTED ITEM	EVAL
8. Signs of tank deterioration and/or settlement.	N
9. Safety concerns are present that may interfere with proper operation, maintenance, and/or monitoring.	S
10. Material Safety Data Sheets (MSDS) are available for stored chemicals.	S
11. Equipment available for spill clean-up and containment.	S
12. Other:	N
<p><b>Notes:</b> <i>This section was rated "satisfactory" because all checklist items reviewed were rated satisfactory.</i></p>	

**EFFLUENT AND RECEIVING WATERS:**

**OVERALL RATING: S**

INSPECTED ITEM	EVAL
<p>1. Recent DMR and/or SMR history (last <b>four</b> months) (outfall number(s) <b>001</b>):</p> <ul style="list-style-type: none"> <li>a. Violations of discharge limits</li> <li>b. Spills/bypasses</li> <li>c. Fish kills or other receiving water impacts</li> <li>d. WET testing results are in accordance with the permit</li> <li>e. If effluent limit violations have been identified, what actions has the Facility taken to eliminate or reduce their recurrence?</li> </ul> <p><b>1a. Determination of effluent limit exceedances was made based upon a review of data contained within CIWQS. An effluent limit exceedance for total coliform was noted during the period of review (October 2012 through January 2013). Refer to the attached "CIWQS Violation Report" for details of this violation.</b></p> <p><b>1d. The Discharger did not meet the toxicity monitoring median survival rate for Ceriodaphnia dubia (C. dubia) for the months of November and December 2012. The Discharger's contract laboratory determined that the C. dubia was too sensitive to the buffering agent used to maintain pH at the Facility. The Discharger is conducting ongoing discussions with North Coast Water Board staff regarding the effluent toxicity issue.</b></p> <p><b>1e. The primary on-site Facility representative stated that the total coliform exceedance was uncharacteristic and was likely due to a sample collection error or laboratory error. All other coliform analyses during the period of review were observed to be in compliance with the permit limit.</b></p>	<p>U S S U S</p>
<p>2. DMR and/or SMR spot check <b>October 2012 through January 2013</b> conducted for the Months of:</p> <ul style="list-style-type: none"> <li>a. Internal lab sheets and contract lab results properly transferred to DMRs</li> <li>b. Monthly average, weekly, maximum, etc., values correctly calculated per the permit</li> <li>c. Influent and effluent loadings reported</li> <li>d. DMR and/or SMR is accurate and complete for each outfall</li> </ul> <p><b>2d. The Facility is required by the permit to monitor pH and temperature daily. The Facility did not monitor pH and temperature for several days during October 2012.</b></p>	<p>S S S M</p>
<p><del><b>The primary on-site Facility representative stated that pH and temperature were not monitored when the Facility was discharging to the percolation ponds (Discharge Point 002). He further stated that he would implement pH and temperature monitoring regardless of the discharge locations in accordance with the permit requirements.</b></del></p>	
<p>3. Appearance of effluent during inspection:</p> <ul style="list-style-type: none"> <li>a. The effluent(s) was viewed during the inspection</li> <li>b. Excessive foam, scum, or sheens present</li> <li>c. Cloudy and/or color</li> <li>d. Excessive solids</li> <li>e. Other:</li> </ul> <p><b>The effluent was not able to be viewed because the Facility was not discharging at the time of inspection due to the chlorine contact tank being cleaned.</b></p>	<p>No N N N N</p>

**EFFLUENT AND RECEIVING WATERS:**

**OVERALL RATING: S**

INSPECTED ITEM	EVAL
4. Appearance of receiving water(s) during inspection: a. The receiving water(s) was viewed during the inspection b. Distinctly visible foam or sheens on receiving water c. Biosolids accumulation or deposits of solids below discharge point(s) d. Distinctly visible plume from discharge(s) to receiving water e. Discharge creates objectionable odor at or near receiving water(s) f. Other: <b><i>The receiving water (refer to Photo 2) was viewed and determined to be free of visually objectionable characteristics. Note that the Facility was not discharging at the time these observations were made.</i></b>	Yes S S N N N
5. Other:	N
<b>Notes:</b> <b><i>This section was rated "satisfactory" because all the identified exceedances appeared to be properly reported to the North Coast Water Board and are presented in the "CIWQS Violation Report" and the inspector did not believe that checklist item 2d. was significant enough to downgrade the overall rating to marginal.</i></b>	

## FLOW MEASUREMENT:

OVERALL RATING: S

INSPECTED ITEM	EVAL
1. Flow Measurement devices and methods: <b>Influent Measurement:</b> Primary Device: <u>Magmeter</u> Secondary Device: <u>N/A</u> <b>Effluent Measurement:</b> Primary Device: <u>Magmeter</u> Secondary Device: <u>N/A</u> Other method of estimating flow: <u>N/A</u>	       
2. Flow measurement devices designed to meet permit requirements ("continuous measured," "continuous record," etc.).	S
3. Flow measurement location is representative of the actual discharge (considering return and bypass lines, etc.).	S
4. Flumes: a. Approach channel straight for at least 10 times the maximum head height in flume b. Flow enters flume evenly distributed across the channel and free of turbulence, boils, or other disturbances c. The flume is clean and free of debris or deposits d. All flume dimensions appear accurate, level, and plumb e. Flume head is being measured properly f. Flume is appropriately sized to measure the existing range of flows g. No obstructions downstream causing inaccurate flow measurement due to excessive "submergence" in flume h. Proper flow tables being used	         
5. Weirs: a. Approach channel straight for at least 10 times the maximum head height b. Flow in the approach channel is evenly distributed and free of turbulence, boils, or other disturbances	  
c. No solids accumulation in the bottom of the approach channel d. Weir crest is located at least two times the maximum head height off the floor of the flow channel e. The weir plate is level, plumb and without distortions f. Weir is beveled on downstream side if plate is >1/8 inch thick g. No leakage around the weir plate h. Measuring point located at least 3 times the maximum head height behind (upstream of) the weir i. There is free-fall and access for air below the nappe of the weir (i.e., water doesn't cling to the weir plate) j. Weir sized properly to measure the existing range of flows k. Proper flow tables being used for weir type and size	          

**FLOW MEASUREMENT:**

**OVERALL RATING: S**

INSPECTED ITEM	EVAL
6. Secondary flow device properly installed and maintained, and operating without interference from foam, turbulence, webs, etc.	N
7. Date of last flow meter calibrations: <b>Influent:</b> Performed by: <u>N/A</u> <b>Effluent:</b> Performed by: <u>N/A</u> <b><i>The Mag meters do not require regular calibration.</i></b>	N  N
8. Calibration checks by plant personnel routinely performed. <b><i>Flow rates are occasionally reviewed to determine if they are within expected ranges.</i></b>	S
9. Calibration records (external and internal checks) maintained.	N
10. Other:	N
<b>Notes:</b> <b><i>This section was rated "satisfactory" because all checklist items reviewed were rated satisfactory.</i></b>	

**SELF-MONITORING PROGRAM:**

**OVERALL RATING: S**

INSPECTED ITEM	EVAL
1. Sampling locations, type, methods, and frequencies conform to the NPDES permit for all required samples (including influent, effluent, biosolids, receiving stream, etc.). <b>Details concerning the Discharger's self-monitoring activities can be found in the "Facility Narrative" section of this report.</b>	S
2. Sampling locations and methods provide representative samples. a. Grab samples are collected during peak flow conditions rather than low-stress conditions b. Composite sampling procedures comply with the permit (time vs. flow weighted) c. Other: <b>2b. The Discharger uses an effluent composite sampler that is not capable of collecting flow weighted samples. The sampler is set to collect a sample at regular time intervals regardless of the effluent flow rate.</b>	S M S
3. Automatic samplers and other sampling equipment are properly cleaned.	S
4. Samples are preserved using methods listed in 40 CFR, Part 136 (e.g., chilled, acidified). <b>The temperature of the sample refrigerator in the Facility's on-site laboratory was not being monitored.</b>	M
5. Sample containers are as listed in 40 CFR, Part 136.	S
6. Chain-of-custody is maintained and documented.	S
7. Samples are collected using approved protocols: a. Coliform samples are collected directly into sterilized containers b. BOD samples are collected prior to disinfection or reseeded c. Oil and grease samples are collected directly into glass containers d. Other:	S S N N
8. Other:	N

**Notes:**

**This section was rated "satisfactory" because the inspector did not believe that checklist items 2b. and 4. were significant enough to down grade the overall rating to marginal.**

LABORATORY:

OVERALL RATING: U

INSPECTED ITEM	EVAL
<p>1. On-site laboratory is ELAP-certified?</p> <p>a. List parameters analyzed at the on-site laboratory that are used for DMR reporting: <b><u>Temperature, pH, chlorine residual, and DO</u></b></p> <p>b. List additional parameters analyzed for internal monitoring and process control: <b><u>N/A</u></b></p> <p><b><i>The on-site laboratory is not ELAP-certified. Refer to the "Major Findings - Laboratory" section of this report for details.</i></b></p>	<p>No</p>
<p>2. EPA-approved analytical methods are used by the on-site laboratory?</p>	<p>S</p>
<p>3. Adequate equipment and procedures used for on-site analyses:</p> <p>a. BOD and CBOD</p> <p>b. TSS</p> <p>c. pH</p> <p>d. Dissolved Oxygen</p> <p>e. Residual Chlorine</p> <p>f. Temperature</p> <p>g. Other:</p> <p><b><i>3f. The Facility does not possess a certified thermometer.</i></b></p>	<p>N</p> <p>N</p> <p>S</p> <p>S</p> <p>S</p> <p>M</p> <p>N</p>
<p>4. On-site laboratory records include:</p> <p>a. Laboratory SOPs</p> <p>b. Calibration and maintenance of equipment</p> <p>c. Equipment operating instructions and manuals</p> <p><b><i>4a. The laboratory does not have written SOPs for the analyses conducted on site. Refer to the "Major Findings - Laboratory" section of this report for details.</i></b></p>	<p>U</p> <p>S</p> <p>S</p>
<p>5. Adequate spare parts and supplies for on-site analyses.</p>	<p>S</p>
<p>6. Results of latest external DMR QA study are available and are acceptable. Date of last report: <b><u>N/A</u></b></p> <p><b><i>The Facility does not participate in the DMR QA program nor does it implement a QA/QC Program. Refer to the "Major Findings - Laboratory" section of this report for details.</i></b></p>	<p>U</p>
<p>7. Satisfactory refrigeration in use.</p>	<p>S</p>
<p>8. Certified contract laboratory(s) being used:</p>	<p>S</p>

**LABORATORY:**

**OVERALL RATING: U**

INSPECTED ITEM		EVAL
Laboratory Name: <b>North Coast Laboratories</b> Visited? <b>No</b> Address: <b>5680 West End Road</b> <b>Arcata, CA 95521-9202</b> Phone: <b>(707) 822-4649</b> Parameters: <b>BOD, TSS, inorganics, metals, and bacti</b>	Laboratory Name: <b>Sierra Foothills Laboratory</b> Visited? <b>No</b> Address: <b>255 Scottsville Boulevard</b> <b>Jackson, CA 95642</b> Phone: <b>(209) 233-2800</b> Parameters: <b>Toxicity</b>	
9. EPA-approved analytical procedures are identified on contract lab report.		S
10. Holding times being met by on-site and/or contract laboratory. a. pH measured in situ or within 15 minutes of sample collection. b. Residual chlorine measured in situ or within 15 minutes of sample collection. <b>10a. and 10b. These checklist items were accounted for in the "Records/Reports" section of this report.</b>		M M
11. Other:		N
<b>Notes:</b> <b>This section was rated "unsatisfactory" due to checklist items 1., 4a., and 6.</b>		

**OPERATIONS AND MAINTENANCE:**

**OVERALL RATING: M**

INSPECTED ITEM	EVAL
<p>1. Preliminary treatment units (bar screens, comminuters, grit channels, etc.) properly maintained with wastes properly disposed. <b>Grit removed from the grit chamber is dumped into one of the two facultative ponds (Ponds 1A and 1B).</b></p>	M
<p>2. Adequate oxygen maintained in aerated treatment systems.</p>	S
<p>3. No operational problems caused by hydraulic "short-circuiting" in treatment units.</p>	S
<p>4. Biosolids wasting/return rates adequate to maintain system equilibrium. <b>Biosolids are not removed from the treatment train and have been allowed to accumulate in the four treatment ponds since the Facility was constructed in the mid-1980s. The primary on-site Facility representative stated that the build-up of sludge has not exceeded the design capacity for sludge accumulation of the two facultative ponds (Ponds 1A and 1B).</b></p>	M
<p>5. Operation and Maintenance (O&amp;M) Manuals and supporting information organized and maintained for use:</p> <ul style="list-style-type: none"> <li>a. Plant O&amp;M Manual</li> <li>b. Equipment manuals</li> <li>c. Plant engineering drawings</li> <li>d. Collection system drawings available or in development</li> <li>e. Maintenance records/costs</li> </ul> <p><b>5a. The O&amp;M manual has not been updated since the Facility was constructed in the mid-1980s. For example, the O&amp;M manual states that the sludge depth should be measured annually and removed periodically. According to the primary on-site Facility representative, this procedure is not followed. Additionally, Treatment Wetland 5 was added in approximately 2005. The manual has not been updated to account for this added treatment unit.</b></p>	<p>M S N N N</p>
<p>6. Routine and preventative maintenance items are scheduled and performed on time.</p>	S
<p>7. The amount of maintenance activities and parts in back-log is acceptable. <b>The backlog of preventative and routine maintenance activities appeared reasonable.</b></p>	S
<p>8. Operational problems contributing to plant upset, excessive odors, effluent violations, etc.</p>	S

**OPERATIONS AND MAINTENANCE:**

**OVERALL RATING: M**

INSPECTED ITEM	EVAL
<p>9. Level of operator certification as required by the permit and staffing level as specified in O&amp;M Manual.</p> <p><i>The Facility is rated as a Class I facility. The Facility is typically staffed four hours per day (8 AM to 12 PM) Monday through Friday and two hours on the weekends.</i></p> <p><i>The operations team consists of the following:</i></p> <ul style="list-style-type: none"> <li>- Four Grade II</li> <li>- Three Grade I</li> </ul> <p><i>The operators share responsibilities at the water treatment plant.</i></p>	S
<p>10. Auxiliary power available as required by the permit and operates the necessary treatment units.</p> <p><i>Power for the Facility is typically supplied by Pacific Gas and Electric (PG&amp;E). In the event that power cannot be supplied by PG&amp;E, treatment is able to continue due to the gravity design of the Facility and backup power at the lift station that feeds the Facility.</i></p>	S
<p>11. Alarm systems for power and equipment failure.</p>	S
<p>12. Treatment control procedures are established for emergencies.</p>	S
<p>13. Hydraulic surges are handled without excessive solids wash-out or bypasses.</p>	S
<p>14. Spare pumps and parts readily available.</p>	N
<p>15. Facility appears to be well operated and maintained.</p>	S
<p>16. Other:</p>	N
<p><b>Notes:</b> <i>This section was rated "marginal" due to checklist items 1., 4., and 5a.</i></p>	

**McKinleyville Community Services District Wastewater Management Facility**  
**(NPDES No. CA0024490) Photo Log**  
Inspected by: Craig Blett (PG Environmental, LLC) and Cathy Goodwin (North Coast Water Board)



Photo 1: Facility Entrance Sign.



Photo 2: View of receiving water (Mad River) looking downstream. The Facility was not discharging at the time of the photograph.

**McKinleyville Community Services District Wastewater Management Facility  
(NPDES No. CA0024490) CIWQS Violation Report**  
Inspected by: Craig Blett (PG Environmental, LLC) and Cathy Goodwin (North Coast Water Board)

**Party At-A-Glance Report**

General Information						
Party ID	Party Name	Party Classification	Mailing Address	Work Phone	Email/Website	
28265	McKinleyville CSD	Special District	Po Box 2037 McKinleyville, CA 95519	None	None	

Related Places							
Place ID	Place Name	County	Region	Place Type	Relationship to Party	Relationship Start Date	Relationship End Date
240093	McKinleyville WWTP	Humboldt	1	Wastewater Treatment Facility	Owner	07/22/1982	None

Total Related Places: 1

Related Parties						
Party ID	Party Name	Party Type	Role/Relationship	Relationship Start Date	Relationship End Date	Classification
537779	Gregory Orsini	Person	Legally Responsible Official	12/04/2012	None	None
523230	Norman Shonav	Person	Legally Responsible Official	06/25/2010	01/09/2013	None
521019	Norman Shonav	Person	Legally Responsible Official	02/09/2010	09/01/2010	None
467536	Gina Orsini	Person	Data Submitter	05/06/2008	None	None
145529	TOM MARKING	Person	Enforcement Contact	04/11/2005	None	None
145200	TOM MARKING	Person	Enforcement Contact	01/18/2005	None	None
140685	TOM MARKING	Person	Enforcement Contact	02/01/2002	None	None
140342	BRUCE RUEL	Person	Enforcement Contact	10/31/2001	None	None

Total Related Parties: 8

Regulatory Measures (non-enforcement)												
Reg. Measure ID	Regulatory Measure Type	Region	WDID	Status	Program	Order No.	RM Effective Date	RM Termination Date	Relationship	Relationship Start Date	Relationship End Date	Amended?
376958	NPDES Permit	1	1B82084OHUM	Active	NPDES	2011-0008 DWO	04/19/2011	None	Discharger	06/28/2001	None	N
319160	NPDES Permit	1	1B82084OHUM	Historical	NPDES	R1-2008-0039	08/01/2008	04/19/2011	Discharger	06/28/2001	None	N
200629	Letter	1	None	Historical	NPDES	001	04/27/2001	04/27/2001	Discharger	04/27/2001	None	N
148437	NPDES Permit	1	1B82084OHUM	Historical	NPDES	R1-2001-0060	06/28/2001	08/01/2008	Discharger	06/28/2001	None	N
139068	NPDES Permit	1	1B82084OHUM	Historical	NPDES	94-118	09/22/1994	04/25/1996	Discharger	09/22/1994	None	N
138696	NPDES Permit	1	1B82084OHUM	Historical	NPDES	96-007	04/25/1996	06/27/2001	Discharger	04/25/1996	None	N
138278	NPDES Permit	1	1B82084OHUM	Historical	NPDES	93-11701	12/09/1993	09/22/1994	Discharger	12/09/1993	None	N
137786	NPDES Permit	1	1B82084OHUM	Historical	NPDES	92-095	08/27/1992	12/09/1993	Discharger	08/27/1992	None	N
137593	NPDES Permit	1	1B82084OHUM	Historical	NPDES	87-092	06/24/1987	08/27/1992	Discharger	06/24/1987	None	N
136900	NPDES Permit	1	1B82084OHUM	Historical	NPDES	82-084	07/22/1982	06/24/1987	Discharger	07/22/1982	None	N

Total Regulatory Measures: 10

Violations within the past year										
Violation ID	Occurrence Date	Violation Type	Violation Description*	Violation Status	Priority	Source	Facility Name	Violated Reg. Meas. ID	Violated Reg. Meas. Order No.	Linked to Enf.
943003	12/11/2012	ATOX	Acute Toxicity 3-Sample Median limit is 80 % effluent and reported value was 85	Violation	N	eSMR	McKinleyville WWTP	376958	2011-0008 DWO	N
941200	11/20/2012	ATOX	Acute Toxicity (Species 2) Monthly Median limit is 80 % effluent and reported va	Violation	N	eSMR	McKinleyville WWTP	376958	2011-0008 DWO	N
941289	11/26/2012	OEV	Total Coliform 3-Month Median limit is 230 MPN/100 ml. and reported value was 160	Violation	N	eSMR	McKinleyville WWTP	376958	2011-0008 DWO	N

Report defaults to display violations within the last year. [Click here](#) to see last five years of violations. Refer to the [Interactive Violation Report](#) for more data.