

ITEM: 25

SUBJECT: City of Colfax, Wastewater Treatment Plant, Placer County

BOARD ACTION: (a) *Consideration of an Administrative Civil Liability Order (ACLO)*
(b) *Consideration of a Cease and Desist Order (CDO)*

FACILITY BACKGROUND: The City of Colfax (City) owns and operates a wastewater collection system and treatment plant (WWTP) and that serves a population of approximately 1,800. Treated effluent is discharged to an unnamed tributary of Smuthers Ravine, which is a tributary of the North Fork American River. Much of the City's sewage collection system was built in the early 1900's of clay pipe. This aging, outdated system generates significant volumes of inflow/infiltration (I/I), resulting in excessive rain-induced flows to the WWTP at rates over 10 times higher than dry weather flows.

There is a long history of enforcement actions against the City. The facility was originally constructed to apply treated wastewater to land, and the storage pond was intended to provide complete containment during the winter. However, there were substantial winter overflows from the storage pond due to high I/I, and soon after the storage pond was first filled in 1979, wastewater began seeping from the base of the dam on a year-round basis. The Board's 1985 NPDES permit is the first to regulate the seepage from the storage pond but continued to allow the effluent to be discharged to land during the summer. A CDO adopted in 2001 requires, among other items, that the City disinfect the seepage water and make facility improvements to prevent winter overflows. In response, the City installed an interim tertiary wastewater treatment plant, discontinued land discharge, and proposed to construct a permanent tertiary plant.

In 2007, the Board adopted an updated NPDES permit and a companion CDO. The NPDES permit required that the permanent tertiary plant be in operation by 1 January 2009. The CDO required that (a) the City take significant steps to address its I/I, and (b) propose and construct upgrades to prevent seepage from the wastewater storage reservoir by October 2009. The CDO included an interim nitrate effluent limit and a timeline for compliance with the final nitrate effluent limit.

The permanent tertiary treatment plant began operation on time, and includes nitrification, denitrification, and UV disinfection treatment processes. The facility also includes two lined ponds and the 64 million-gallon unlined storage reservoir. When winter flows exceed the plant's treatment capacity, excess water is directed to the storage reservoir. When treatment capacity becomes available, water is pumped from the ponds and storage

reservoir and blended with raw influent for treatment prior to discharge to the tributary to Smuthers Ravine. Seepage is collected at the base of the dam and returned to the storage reservoir.

In January 2010, the Board adopted a new CDO for Colfax. This CDO includes an interim copper limit and timeline for compliance, and requires that (a) the City continue with its I/I rehabilitation project and (b) complete its storage reservoir compliance project (i.e., installation of a pond liner) by October 2012.

ACLO BACKGROUND: *(a) Consideration of an Administrative Civil Liability Order (ACLO)*

California Water Code (CWC) section 13385 was amended in 2000 to require that the Water Boards assess mandatory minimum penalties (MMPs) for serious and non-serious violations of NPDES permits.

A mandatory minimum penalty of \$3,000 must be assessed for each serious violation, defined, in part, as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements by either 40% or 20%, depending on the constituent. A mandatory minimum penalty of \$3,000 must also be assessed for each non-serious or chronic violation whenever an effluent limitation is exceeded four or more times in any period of six consecutive months, not counting the first three violations. In addition, the CWC establishes certain exceptions to the requirement to assess MMPs, including:

- Chronic or serious violations that occur within the first 90 days in which a new wastewater treatment plant begins discharging. For Colfax, this exemption occurred from 1 January through 1 April 2009. Any effluent limit violation during that time is not subject to MMPs.
- Where the Discharger is in compliance with a time schedule order or a cease and desist order. For Colfax, the Board issued CDO R5-2010-0001 on 28 January 2010. This CDO contains an interim copper effluent limit and a time schedule to come into compliance. As allowed by the CWC exemption, when copper concentrations exceed the permit effluent limit but remain below the CDO interim effluent limit, then MMPs are not assessed. This exemption remains in effect through the period that the CDO allows Colfax to come into compliance, which is 1 January 2014.

The California Water Code recognizes that the imposition of mandatory minimum penalties may be financially burdensome to small communities with financial hardship and allows the Water Boards to credit mandatory minimum penalties toward a

compliance project designed to correct the problem that lead to the violation(s). The City of Colfax meets the definition of a small community with a financial hardship, and has previously been allowed to apply \$585,000 in MMPs toward compliance projects.

On 23 March 2011, Prosecution staff issued a tentative ACLO for public comments. The ACLO proposed to assess \$114,000 in MMPs for violations that occurred from 1 January 2008 through 31 July 2010, and would have allowed the penalties to be applied to three compliance projects. Two parties commented that the Board should require the City to pay the penalty instead of allowing it to be applied to compliance projects, and the Advisory Team subsequently determined that the matter should proceed to a Board hearing.

On 6 September 2011, the Prosecution Team issued Hearing Procedures and an updated tentative ACLO scheduled to be heard at the December 2011 Board meeting. The ACLO was revised to include MMPs accrued through 30 June 2011, and the proposed penalty amount was increased to \$150,000. The ACLO would allow \$138,000 to be applied to three compliance projects. However, four of the violations can not be credited toward the compliance projects, so the City is required to pay \$12,000.

ACLO ISSUES:

Comments on the updated tentative ACLO were received from Allen Edwards, Friends of the North Fork (Friends), and Save the American River Association (SARA). Prosecution staff has prepared a detailed Response to Comments which is part of this agenda package.

Mr. Edwards alleges that there are an additional 284 violations, from January 2009 through June 2011, which are subject to MMPs. Prosecution staff has reviewed every alleged violation and find that the vast majority are either not violations or are not violations subject to MMPs. In addition, the number of non-MMP violations has decreased substantially since the City hired a contract operator.

Prosecution staff did find that there were four effluent limitation violations identified by Mr. Edwards that are subject to MMPs. These four violations were properly self-reported by the City; however, Board staff neglected to include them in the tentative ACLO. Per Mr. Edward's request, the Prosecution Team also reviewed the 2008 self-monitoring reports and determined that there was an additional one violation of the manganese annual average effluent limitation. These five violations have been added to the ACLO.

Friends and SARA commented that the City has committed many

violations over the years, that the Board has been too forgiving, and that the penalties should not be applied to compliance projects. It is the Prosecution Team's opinion that Colfax has made significant progress toward resolving issues at its wastewater treatment facility over that last several years. Allowing Colfax's MMPs to be applied to its compliance projects is specifically authorized by the Legislature and has been a practical approach taken by the Central Valley Water Board for small communities. Prosecution staff notes that within the Central Valley Region, there are 24 entities that meet the definition of "small community with financial hardship" and that each community has been allowed to apply its MMPs toward compliance projects. There is no rationale not to allow the same for this small community with financial hardship.

No comments were received regarding the specifics of the three compliance projects.

ACLO
RECOMMENDATION:

The Prosecution Team recommends that the Board adopt the proposed Administrative Civil Liability Order assessing \$165,000 in mandatory minimum penalties and allowing \$153,000 to be applied to compliance projects.

CDO BACKGROUND AND
CONTENTS OF CDO:

(b) *Consideration of a Cease and Desist Order*

The tentative CDO was issued on 6 September 2011 for public comments, and is intended to address all outstanding issues at the City's wastewater treatment plant. These include: a) the need to continue rehabilitating the sewage collection system, (b) the need to provide temporary operational flexibility to allow the City to drain the storage reservoir so that it may be lined and therefore prevent wastewater seepage, and (c) based on the 25 million gallon bypass event this spring, the need to re-evaluate whether the storage reservoir has the capacity to hold all wastewater inflows, precipitation, and I/I generated during a 100-year annual precipitation event.

If adopted as proposed, the CDO would require:

- With regard to reducing I/I: the City shall continue rehabilitating its collection system as described in its recently funded grant proposal, implement its private lateral program, submit annual progress reports, and evaluate the magnitude of I/I reduction by 1 May 2014. If the City's I/I peak factor remains significantly greater than what US EPA considers acceptable, then the City shall (a) evaluate whether it is more cost effective to continue to rehabilitate the sewer collection system or to increase the storage and treatment capacity of the wastewater treatment facility, (b) describe which option the City will pursue, and (c) provide a proposed schedule for financing, design, and construction.

- With regard to complying with the WDR requirement to have enough storage capacity to hold a 100 year annual rainfall event and maintain two feet of freeboard: the City shall complete the I/I rehabilitation, storage pond lining, and stress test as required by the Order, and then evaluate whether additional improvements are needed to reduce the volume of wastewater to be stored and/or increase the treatment or disposal capacity.
- With regard to dewatering the storage reservoir: the City shall implement Alternatives 1 (optimize treatment plant performance), 2 (geotechnical evaluation), 3 (enhanced evaporation), and 5 (dam seepage treatment system) as described in its June 2011 *Wastewater Treatment Plant Feasibility Analysis for Alternative Measures to Dewater Pond 3 and Meet Freeboard Requirements* with the additional requirements listed in the Order.
- With regard to lining the storage reservoir: the City shall dewater the reservoir by 31 May 2012 and complete the lining project by 30 November 2012. However, if more than 48 inches of rain falls at gauge CFC during the 2011-2012 water year, then these two dates are automatically extended by one year. The Order requires that all solids in the bottom of the storage reservoir be removed and properly disposed of.
- With regard to the final copper effluent limitation: The Order includes an interim performance-based copper limitation that is in effect until 31 December 2013. The City shall implement its copper pollution prevention plan and fully comply with the final effluent limitation found in the WDRs beginning 1 January 2014.
- With regard to the average dry weather flow limitation: The Order includes an interim average dry weather flow limitation of 0.5 mgd, which is the current design flow. The Order also allows a stress test to be conducted as described in the City's 31 October 2011 document. Depending on the results, the Order allows the Executive Officer to increase the flow limitation up to 0.8 mgd if certain improvements are made to the pumping systems. The Order also contains interim mass loading effluent limits based on the interim average dry weather flow limitation.

CDO ISSUES:

Substantial comments regarding the tentative CDO were received from the City of Colfax, Allen Edwards, the Friends of the North Fork (Friends), Save the American River Association (SARA), and the California Department of Fish and Game. Prosecution staff has prepared a detailed Response to Comments which is part of this agenda package. The comment topics include: inflow/infiltration, water balance, dewatering of Pond 3 and installation of a liner, concerns about the existing WWTF,

concerns about the stress test, whether the spring 2011 bypass event caused environmental damage, reports required by the CDO, whether a connection restriction is needed, whether the proposed Order requires compliance with the permit, the enforceability of the proposed Order, requests for specific changes, the need for CEQA analysis, and other legal issues.

Several of the issues are highlighted:

- Mr. Edwards appears to be recommending that the City be required to conduct more studies instead of completing actual improvements to the WWTF (i.e., pond lining and I/I rehabilitation). The Prosecution Team disagrees that more studies are necessary and believes that it is time to require the City to conduct work that the City has already identified as the preferred alternatives to address the issues. Conducting additional studies will further delay achieving compliance and realizing actual environmental benefits.
- Mr. Edwards and SARA look to Colfax's long history of non-compliance and have expressed doubts that the tentative CDO will achieve results. The Prosecution Team acknowledges that the City has had a long history of violations and that the regulatory process has been slower than all parties involved anticipated. However, looking at the City's record since its new WWTP began operation in January 2009, it is the Prosecution Team's opinion that Colfax has expended considerable efforts to come into compliance over that last several years and has made significant progress towards resolving all issues at its facilities. One issue that would need to be resolved after all improvements have been made is to ensure that the WWTP has sufficient storage capacity during 100-year annual precipitation events. This remaining issue is partly the reason the CDO requires the City to conduct stress tests to determine if the WWTP has the capacity to reliably treat higher flows, and is the reason that the City is required to complete an updated water balance at the conclusion of the improvements required by the CDO.
- Mr. Edwards has stated that the Colfax WWTP creates nuisance conditions, such as foam and odor in the receiving water. The Prosecution Team has carefully reviewed the monitoring reports and finds that reports do not substantiate that discharge from the WWTF created nuisance conditions. Prosecution staff also notes that Mr. Edwards' house is approximately one mile downstream from the discharge point and that there may be other inputs into the receiving water which could contribute to any nuisance conditions which he observes.
- Mr. Edwards challenges many aspects and conclusions of the

water balance developed by the City after the 2010-2011 wet season. However, the water balance was reviewed by a Water Board Registered Engineer with experience in completing and reviewing water balances, and the revised water balance is acceptable. It is possible that Mr. Edwards may not fully understand the development and capability of water balances, which are models requiring multifaceted engineering calculations.

- SARA commented that the CDO only requires the City to submit a series of reports until January 2014 and that there may be another five years of delay after that. The Prosecution Team disagrees and feels that SARA does not understand that the CDO requires the City to conduct actual physical improvements. The required report submittals are to provide documentation that the physical improvements have been completed.

- At the January 2010 CDO hearing, the Board Chairman asked that staff consider a connection restriction for the City. The purpose of a connection restriction is to prevent an increase in violations, and is not to be punitive in nature. In this case, the winter overflows are caused by excessive I/I. Given that Colfax has plenty of capacity to treat its dry weather flows, only expects to receive five sewer connection applications in the next three years, and has just received over \$3 million in grant funding to complete I/I rehabilitation, the Prosecution Team does not recommend a connection restriction. The Response to Comments contains a more detailed evaluation.

- The City of Colfax is generally accepting of the CDO and only asked for minor clarifications and revisions.

CDO RECOMMENDATION: The Prosecution Team made a number of revisions to the CDO in response to public comments and recommends that the Board adopt the CDO as proposed.

Mgmt. Review WSW
Legal Review CMC

1/2 December 2011 Meeting

Central Valley Regional Water Quality Control Board meeting
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670