

ITEM: 27

SUBJECT: Uncontested NPDES Permits

REPORT: Following are the proposed permits. All agencies and the dischargers concur, or have offered no comments. *Consideration of NPDES Permit Renewal*

	<p>a. Sierra Pine Limited, Sierra Pine – Ampine Division, Amador County</p> <p>Sierra Pine Limited (Discharger) owns and operates the Sierra Pine – Ampine Division (Facility), a particleboard manufacturing facility. The previous Order No. R5-2002-0018 was held by three parties: Wheelabrator Martell, Sierra Pacific Industries, and the Discharger. The application for renewal was intended solely for the Discharger’s particleboard manufacturing facility. The co-generation facility, run by Wheelabrator Martell, no longer exists; and stormwater run-off from properties owned by Sierra Pacific Industries no longer enters the permitted drainage course. The Discharger has eliminated process water discharges by spray irrigation with a catch basin for containment. This has resulted in no process water from the Facility since March 2004. If capacity is exceeded in the irrigation field catch basin or the Irrigation Pond, then water overflows are directed to an unlined ditch where it eventually combines with the storm water that discharges to Stony Creek.</p> <p>The Facility’s treatment system consists of a series of three unlined ponds. Wastewater is discharged to Stony Creek and a tributary to the Mokelumne River within the Sacramento–San Joaquin Delta, via Sutter Creek and Dry Creek.</p> <p>The estimated total average flow from the Facility is 47,000 gallons per day (gpd) or 0.047 million gallons per day (mgd). A number of effluent limitations have not been retained from Order No. R5-2002-0018 based on the reconfiguration of the Facility. The proposed Order includes effluent limitations for pH, TCDD-equivalents, electrical conductivity, and diethylaminethanol.</p> <p>There were no comments submitted during the public comment period.</p> <p>Minor Clarification: The effluent limitations for acute toxicity that are being carried over from the existing Order were inadvertently left out of the Tentative Order. They have been included in the final Order.</p>
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	<p>b. The City of Woodland (hereinafter Discharger) is the owner and operator of the City of Woodland Water Pollution Control Facility (hereinafter Facility). (The current City residential monthly flat rate sewer charge is \$68.62.) Tertiary treated effluent is discharged to Tule Canal, a part of the Yolo Bypass. The existing Waste Discharger Requirements (NPDES permit) authorizes a major discharge of up to 7.8 million gallons per day (mgd) to the receiving water. The proposed NPDES permit renewal includes an increased regulated flow of up to 10.4 mgd based on the antidegradation analysis performed by the Discharger.</p> <p>The Discharger recently completed an expansion and upgrade to the Facility. Tertiary filtration and ultraviolet disinfection were added and the secondary treatment system was upgraded. The proposed NPDES Permit contains new and/or more stringent effluent limitations for ammonia and selenium. Proposed effluent limitations for ammonia are based on implementation of the narrative Basin Plan objective, with the interpretation (and calculations of effluent limitations) based on USEPA's National Recommended Ambient Water Quality Criteria for protection of aquatic life.</p> <p>The Discharger, the Yolo Audubon Society, the Central Valley Bird Club, the Conaway Preservation Group, and Reclamation District 2035 submitted public comments regarding the tentative NPDES Permit. The major issues discussed in the public comments are summarized below. Further detail on all comments is included in Regional Water Quality Control Board staff Responses to Comments:</p> <p>General Comments: The Discharger made numerous minor, non-substantive wording changes in their comment letter. Changes have been accepted and incorporated into the tentative NPDES Permit.</p> <p>Use of Inhibition Concentration – 25 Percent (IC25): The Discharger requests the option of substituting the IC25 method in place of the No Observed Effects Concentration (NOEC) method when measuring whole effluent toxicity in the effluent. The Discharger believes that the IC25 method is a more dependable approximation of the no effect level and provides a better indication of the ability to see an effect in the toxicity test.</p> <p>The NOEC method is required in NPDES permits to calculate the numeric chronic toxic monitoring trigger (1 Toxicity Unit = 100/NOEC) for whole effluent toxicity (WET) testing because the NOEC endpoint represents no toxicity. This is consistent with the Regional Water Board Basin Plan's narrative toxicity objective and</p>
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	<p>toxicity testing required in the other Regional Water Board's regulatory programs. The NOEC value is used in WET testing to determine the monitoring trigger for chronic toxicity that determines whether follow-up accelerated monitoring and corresponding toxicity identification and reduction evaluations (TIE/TRE) are necessary. Use of the NOEC value to determine the numerical trigger is more likely to detect toxicity than the point estimate, IC25. This is particularly important for discharges to the Delta. Other statistical methodologies, including IC25, may be appropriate for the follow-up TIE/TRE because the IC25 provides more precise information regarding the cause of the toxicity. The tentative NPDES permit does not require the use of NOEC value for the follow-up TIE/TRE, and allows the Chronic WET testing results to be expressed using both the NOEC value and the IC25 value.</p> <p>Use of Fixed Solids as a Measure of Salinity: The Discharger states that "fixed dissolved solids" is a more accurate measure of salinity than electrical conductivity (EC) or total dissolved solids (TDS). The Discharger recommends that monitoring for fixed dissolved solids be added to the monitoring and reporting requirements in the NPDES permit.</p> <p>There are various ways to measure salinity in wastewater. In its comment, the Discharger did not state the test methods proposed to be used and if they are approved in 40 CFR Part 136, as required in the Federal regulations. The Discharger may submit monitoring data for fixed dissolved solids in its monitoring reports and meet with Regional Water Board staff to discuss its perspective of why fixed dissolved solids is a more representative measure of salinity than EC or TDS. However, the requested monitoring requirement for fixed dissolved solids is not being added to the NPDES permit.</p> <p>Restricted Access to Facility to Conduct Birding Activities: The Yolo Audubon Society and Central Valley Bird Club stated their concerns with provisions in the tentative NPDES Permit that may limit access to the public to the City of Woodland Water Pollution Control Facility ponds. The commenters both cited their need to monitor migratory and wintering species of birds at the facility and are concerned that language in the tentative NPDES Permit may restrict or eliminate public access to the ponds.</p> <p>The provision corresponding to the concern is in Section VI.C.4.b. (Treatment Pond Operating Requirements) of the tentative permit. The proposed provision was modified to address the commenters' concern as follows:</p> <p>b. Treatment Pond Operating Requirements.</p>
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- i. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- ii. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.

The above modifications are intended to safeguard the public by limiting exposure to untreated wastewater, which may be present in the ponds since they are also used as emergency storage ponds. These wastewaters can contain pathogens and other hazardous constituents. The requirement is that the facility precludes public contact with wastewater. The Discharger is to decide how to comply with the operational requirements for the treatment ponds. The Regional Water Board is not mandating how such compliance is to be achieved. If the Discharger determines that the current control measures are appropriate then it may continue utilizing those control measures. It is up to the Discharger to determine the best means of compliance for their facility.

Regional Water Supply and Recycled Water Program: The Conaway Preservation Group and Reclamation District 2035 comment that the two organizations expressed a desire to work collectively with the cities of Woodland and Davis to develop a regional water supply and recycled water program. In addition, they requested that language be added to the tentative NPDES permit requiring the Discharger to participate in the discussion and evaluation of an integrated water management plan.

The suggestion to look for a regional approach in dealing with water supply and water recycling efforts is fully supportive. In the tentative NPDES permit, the Discharger is required to provide updates to the Regional Water Board with their annual operations report as to the progress of improving the city's potable water supply. There are potential consequences if the Discharger fails to make discernable progress. The addition of further new requirements in the tentative NPDES Permit that have not been circulated for public review will delay the adoption of this permit and require an additional public notice. Regional Water Board staff will assist the regional recycling effort and understand its importance to the Cities of Davis and Woodland as well as the surrounding area. The existing reporting requirements should be sufficient to ensure the Discharger participates in regional efforts.

Proposed Permit Impairs Existing Beneficial Uses (3) and

	<p>Proposed Permit Violates State and Federal Antidegradation Policies: The Conaway Preservation Group And Reclamation District (RD) 2035 comment that the proposed NPDES permit will allow increases in EC, TDS, selenium, and boron in discharges to the Tule Canal. The organizations state that this impairment will preclude RD 2035's use of the Tule Canal as a water conveyance for irrigation purposes. In addition, it was stated that the proposed increase in discharge volume violates antidegradation policies.</p> <p>An Antidegradation Analysis was included in the Discharger's Report of Waste Discharge. The analysis is discussed fully in the fact sheet of the proposed NPDES permit. The analysis was conducted in accordance with the guidance provided by State Water Board APU 90-004. In conjunction with the proposed increase in discharge volume, the Discharger has completed a significant upgrade to the treatment system. This has allowed the facility to comply with Title 22 requirements and has resulted in the elimination of certain pollutants due to the cessation of the use of chlorine for disinfecting purposes. In the fact sheet discussion, it was noted that the Antidegradation Analysis concludes that the projected increase in flow "will not adversely affect existing or probable beneficial uses of Tule Canal, nor will it cause water quality to fall below applicable water quality objectives."</p> <p>The commenter did not provide any data or analysis to support the claim that the beneficial uses of the receiving water would not be maintained, therefore, no modifications have been made to the proposed NPDES permit.</p> <p>Legal Authority to Discharge into the Tule Canal: The Conaway Preservation Group and Reclamation District 2035 comment that the Tule Canal runs entirely within lands managed by RD 2035 and owned by Conaway Ranch. The commenters maintain that since the lands adjacent to and underlying the Tule Canal are privately owned, the Discharger has no legal authority to discharge into the Tule Canal and that the discharge constitutes a trespass and a public and private nuisance.</p> <p>This permitting action is the reissuance of an existing NPDES permit for the City of Woodland Water Pollution Control Facility. Tule Canal is a physical part of Yolo Bypass and is a water of the United States. The permit is not an entitlement for use and does not allow violations of other applicable laws.</p>
	<p>c. U.S. Department of the Interior, Bureau of Reclamation, Sliger Mine, El Dorado County</p> <p>The U.S. Department of Interior, Bureau of Reclamation (Discharger) owns Sliger Mine (Facility), an inactive gold mine.</p>

	<p>Sliger Mine discharges an average of 0.0646 million gallons per day of mine drainage water from its ventilation adit (V-Adit) mine shaft to the Middle Fork of the American River within the Sacramento River Basin.</p> <p>The Discharger originally requested a mixing zone for the Facility's discharge in a December 2006 submittal. The submittal also outlined several treatment alternatives for the Facility. The request was based on applying dilution in lieu of controlling or treating the effluent from the Facility. Staff denied this request and required treatment of the Facility's discharge, if a mixing zone was to be granted.</p> <p>In March 2008 the Discharger installed a passive treatment system (which utilizes sulfate-reducing bacteria to precipitate metals contained in the V-Adit drainage water prior to discharge) thereby satisfying the Board's requirement for treatment prior to allowing a mixing zone. The Discharger brought the treatment system online in March 2008. The Discharger requested that a mixing zone be allowed and dilution credits be applied to the discharge from 1 December through 31 May of each year. Staff concurs with the mixing zone study, and has granted seasonal (limited) dilution credits for arsenic, iron and electrical conductivity.</p> <p>There were no comments submitted during the public comment period.</p>
	<p>d. UNITED STATES DEPARTMENT OF THE AIR FORCE AIRCRAFT CONTROL AND WARNING SITE - GROUNDWATER TREATMENT SYSTEM, FORMER MATHER AIR FORCE BASE SACRAMENTO COUNTY</p> <p>The former Mather Air Force Base is a National Priorities List site regulated under the Comprehensive Environmental Response and Compensation Liability Act (CERCLA). The site no longer is an Air Force Base. The United States Department of the Air Force owns and operates a groundwater treatment and disposal system at the Aircraft Control and Warning Site that extracts groundwater contaminated with volatile organic compounds (VOCs), removes the contaminants, and discharges the treated water to Mather Lake. Historic remedial investigations at the site have discovered leaking underground storage tanks and subsurface disposal of trichloroethylene (TCE) and other VOCs. Groundwater has been contaminated from these unregulated site activities. Groundwater remedial action began in 1995, and the plume has been undergoing cleanup since that time.</p> <p>The existing Waste Discharger Requirements (NPDES permit) authorizes a minor discharge of up to 0.49 million gallons per day</p>

		<p>(mgd) to Mather Lake. The proposed NPDES permit renewal is consistent with the existing permit. There were no comments submitted during the public comment period.</p>
	e	<p>SPX Corporation, SPX Marley Cooling Technologies, San Joaquin County</p> <p>The SPX Corporation (Discharger) owns the property and owns SPX Marley Cooling Technologies (formerly Marley Cooling Tower Company), an industrial groundwater extraction and treatment facility (Facility). Wastewater is discharged from the Facility to the Stockton Diverting Canal a tributary to the Calaveras River.</p> <p>The treatment system consists of an electrochemical reduction and precipitation unit operating in parallel to an ion exchange treatment system. This system is used to remediate groundwater that was contaminated as a result of wood preserving activities previously performed at the site. Past operational practices have resulted in contamination of soils and groundwater underlying the site. Soils have been contaminated with copper, chromium, and arsenic; groundwater has been contaminated with chromium and copper. A groundwater pilot study was initiated in June 2003 to evaluate the effectiveness of in-situ reduction to address mobile hexavalent chromium (chromium (VI)) in the subsurface. Full-scale implementation of the in-situ treatment at the site was authorized in June 2007. This treatment method is expected to clean up the groundwater in about 3 years rather than the previously estimated 17-year clean up time.</p> <p>Regulation of stormwater is included in the Order because of the past wood treatment activities on the North Yard. Rain falling on the North Yard is contaminated after contact with treated cooling tower components. The contaminated rainwater is collected in a storm drain system and is passed through the treatment plant in the northeast portion of the site.</p> <p>The NPDES Permit authorizes a minor discharge. Effluent limitations for flow, pH, arsenic, copper, chromium, chromium (IV), total dissolved solids, and acute toxicity have all been retained in this Order. New “fixed” effluent limitations for copper replace the existing “floating” effluent limitations. Time Schedule Order (TSO) R5-2008-0011 was adopted in January 2008, which extended the compliance date for the final TDS effluent limitations from 1 February 2008 to 1 February 2012. Limitations for total residual chlorine have not been retained and mass based limitations have also been eliminated for effluent limitations based on water quality objectives.</p>

	<p>The existing Order established a maximum daily discharge flow at 0.94 million gallons per day (mgd) which represents the treatment plant capacity, and a monthly average discharge flow at 0.72 mgd. The proposed Order retains the maximum daily and the average monthly flow rates.</p> <p>The Discharger and the California Sportfishing Protection Alliance (CSPA) submitted comments on the tentative NPDES permit issued for public review. The major issues identified in the public comments are summarized below. Further detail on all comments is included in Regional Water Board staff Responses to Comments.</p> <p>Mass-based Effluent Limitations – CSPA commented that the proposed permit fails to contain mass-based effluent limitations for several constituents as required by 40 CFR 122.45(b). CSPA also commented that the removal of mass-based effluent limitations for these parameters is contrary to the antibacksliding requirements of the CWA and 40 CFR 122.44(l)(1). Those pollutants for which effluent limitations are concentration-based, mass-based effluent limitations are not included in the proposed Order. Furthermore, there is a de facto mass limit as the flow limit and effluent concentrations are lower or the same as the previous permit.</p> <p>Acute Toxicity Limits – CSPA commented that the effluent limitations for acute toxicity allow mortality to aquatic life that exceeds the water quality objective and does not comply with 40 CFR 122.44(d)(1)(i) or the CWA. The proposed permit protects aquatic life beneficial uses by implementing numerous measures to control individual toxic pollutants and whole effluent toxicity. Both the acute toxicity limitations and receiving water limitations are consistent with numerous NPDES permits issued by the Regional Water Board and throughout the State.</p> <p>Chronic Toxicity Limits – CSPA commented that the proposed permit does not contain effluent limitations for chronic toxicity and therefore does not comply with 40 CFR 122.44(d)(1)(i) or the SIP. Chronic whole effluent toxicity monitoring data from the previous Order term indicated periodic exceedances above chronic toxicity criteria. Staff agrees that an effluent limitation for chronic toxicity should be included in the Order. In particular, a narrative effluent limitation for chronic toxicity (“There shall be no chronic whole effluent toxicity in the effluent discharge”) has been added to the Order.</p> <p>Hardness-based Metals – CSPA commented that the proposed Order establishes effluent limitations for metals based on the hardness of the effluent as opposed to the ambient upstream receiving water hardness as required by the California Toxics Rule</p>
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	<p>(CTR, 40 CFR 131.38(c)(4)). For some pollutants (i.e., cadmium (chronic), chromium (III), copper, nickel, and zinc), the lowest recorded effluent hardness for establishment of water quality objectives is fully protective of all beneficial uses regardless of whether the effluent or receiving water hardness is higher. For others (i.e., cadmium (acute), lead, and silver (acute)), a water quality objective based on either the effluent hardness or the receiving water hardness alone, would not be protective under all mixing scenarios. Instead, both the hardness of the receiving water and the effluent is required to determine the reasonable worst-case ambient hardness.</p> <p>Incomplete Data – CSPA commented that the proposed Order is based on an incomplete Report of Waste Discharge (ROWD) and incomplete data in accordance with State and federal requirements, and the permit should not be issued until the discharge is fully characterized. Staff used all available data and information in developing the limitations and provisions contained in the proposed Order. This data and information was compiled from several sources, including a complete ROWD and NPDES permit applications, as well as 3 years of monthly self-monitoring data. Discharge data from 2003 for priority pollutants and other non-conventional pollutants was not available to determine reasonable potential, however recent data contained in the EPA Form 2C application for priority pollutants was used. The proposed Order requires the Discharger to monitor for the priority pollutants in the effluent and receiving water to enable a reasonable potential analysis prior to reissuance of the next Order</p>
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RECOMMENDATION: Adopt the proposed NPDES permits.

Mgmt. Review _____

Legal Review _____

24 October 2008
 Central Valley Regional Water Quality Control Board meeting
 11020 Sun Center Dr. #200
 Rancho Cordova, CA 95670