

ITEM: 14

SUBJECT: Uncontested NPDES Permits

REPORT: Following are the proposed permits. All agencies and the dischargers concur, or have offered no comments.

	<p>a. Aerojet-General Corporation operates a rocket-testing and chemical manufacturing facility in eastern Sacramento County. Past practices at the facility has led to pollution of the groundwater on and off the Aerojet property. In the process of cleaning up the polluted groundwater, Aerojet extracts and treats the groundwater. The water is discharged to ground, to surface water and injected back into the aquifers. The discharges to surface water are currently at six locations under an NPDES permit. In the previous permit Aerojet was given an interim effluent for N-nitrosodimethylamine (NDMA) of 0.01 ug/L for its discharge from the GET J facility while Aerojet assessed the ability to remove NDMA to the then Public Health Goal of 0.002 ug/L, that was recently revised to 0.003 ug/L by the Office of Health Hazard Assessment. Aerojet's conducted numerous evaluations of the best available/cost effective treatment for NDMA. Those evaluations concluded that 0.007 ug/L was the value that met that criteria. The revised permit establishes the effluent limit for GET J (discharge to Buffalo Creek) and future GETs L, L1 and GET K (discharges to the American River) at 0.007. Sufficient dilution in Buffalo Creek exists from the presence of the discharges from ARGET and GET E/F that will keep the concentration in Buffalo Creek below 0.003 ug/L. Ample dilution is also available in the American River (AMM)</p>
	<p>b. Bell Carter Olive Company, Inc. owns and operates an industrial wastewater treatment plant to treat olive processing wastewater. The property is owned by the City of Corning. The treatment system consists of an influent pump station, influent metering and sampling equipment, a two stage extended aeration lagoon system (configured as Class II Surface Impoundments and regulated by separate WDRs in Order No. 5 00 114), followed by an ultrafiltration membrane solids separation process prior to being discharged to the Sacramento River. On a regular basis, the solids are removed utilizing a floating hydraulic dredge for centrifuge dewatering. Dewatered solids are then trucked to a suitable landfill.</p> <p>The discharge of saline olive processing wastes in the Corning area has a highly contentious history. In the 1970s, olive wastes were conveyed to the City's treatment facility where the wastes were only screened to remove solids and then discharged with the City's poorly treated (pond) effluent directly to the Sacramento River. A NPDES permit in 1974 required the City to improve domestic sewage treatment to full secondary standards and prohibited discharge of combined domestic/industrial wastewater to land or the river that contained TDS above 650 mg/L. The City and industry sought a Clean Water Grant (87.5% grant funds) to comply with the NPDES permit. C&amp;D Orders were adopted in 1977 and 1979 requiring the City to comply. Treatment options considered for funding included total evaporation of domestic and olive wastewater, blending and biological treatment of both wastes and partial evaporation of olive wastes with full biological treatment of domestic wastes and the remaining olive wastes. Public hearings conducted during the EIR process for the grant project resulted in overwhelming opposition from residents in the area regarding construction of a new facility that proposed evaporation ponds (no discharge to the river or to land). The</p>

	<p>USEPA and the SWRCB, in response to this opposition and the increased land and construction costs, selected a project that provided for all domestic and olive wastes to be discharged to the river after receiving full biological treatment. The USEPA and SWRCB in approving discharge to the river, stated that there is no acute toxicity associated with either waste stream and the TDS and chloride increases in the river are and would be insignificant due to substantial dilution. The original grant limited olive industry flow to 42 million gallons annually (0.2 MGD).</p> <p>New C&amp;D Orders were issued in 1982 and 1985 as it was determined that industrial and domestic flows increased beyond the design capacity of the approved grant for the new treatment plant. The 1982 C&amp;D included a connection ban on new industrial dischargers and the 1985 C&amp;D placed a connection ban on new domestic connections. The grant was revised in 1986 to allow the industrial olive flow to increase to 75 million gallons annually (0.4 MGD) and provided for increased domestic flows. The grant also limited the TDS and chloride discharge to a monthly average of 47,000 and 17,000 lbs/day respectively. In order to meet these discharge limitations, Bell Carter, at the time the major olive producer in Corning, switched from using a salt brine solution to store olives to an acetic acid solution. Salt use prior to the switch in storage was 117 lbs of salt per ton of olives processed. Production data over the last 9 years indicates that salt usage today has been reduced to approximately 31 lbs per ton. Bell Carter also reduced the volume of wastewater discharged to meet the grant restrictions. To provide additional treatment effectiveness and increased evaporation Class II Surface impoundments were constructed by the olive industry on the same site in 1987.</p> <p>In 1990, Bell Carter purchased the remaining olive producer in Corning and determined that additional capacity was needed to meet production demands. The City decided to increase its domestic sewage treatment capacity at the same time. The City completed a CEQA review and requested a permit revision to increase industrial flow to their domestic facility from 0.21 to 0.38 MGD and to increase domestic flow to 1.0 MGD. The NPDES permit was revised in 1990 to allow the flow increase. However, the 1990 permit did not allow an increase in the mass loading limits for TDS and chlorides. In 1993 Bell Carter purchased Lindsay Olives and as a result partnered with the City to complete an EIR for expansion of both the domestic and industrial facilities. The EIR concluded that even with the increased industrial flow, TDS and chloride concentrations in the Sacramento River downstream of the outfall would not significantly increase. The NPDES permit was revised in 1995 to allow an increase in average annual flow to 0.75 MDG and an increase in maximum daily TDS and chloride loading to 87,600 and 31,000 lbs/day respectively in accordance with the approved EIR. The NPDES permits for Bell Carter and the City were again renewed in 2000. The 2000 permit limited the average annual flow to that of the 1995 permit, 0.75 MGD. However, the allowable maximum daily discharge load (lbs/day) of TDS and chlorides in the 2000 NPDES permits were reduced approximately 10 percent based upon observed influent and effluent levels.</p> <p>The discharge to surface waters is currently regulated by the latest NPDES permit adopted on 16 June 2000 and Special Order No. R5 2004 0074 adopted on 4 June 2004. The industrial facility was originally conceived as a pretreatment facility, but process improvements, including the ultrafiltration separation (Zenon) process, have allowed the conversion to a direct discharge to surface waters, capable of meeting stringent surface water effluent limits. After installation of the Zenon system, it became evident that diverting a portion of the industrial waste to the City's domestic facility did not provide additional reduction in pollutants. Special Order No. R5 2004 0074</p>
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	<p>was adopted by the Regional Board to allow all treated industrial wastewater to be directly discharged to the Sacramento River. The Special Order maintained the existing average annual flow limit and TDS and chloride limits.</p> <p>The City of Corning owns the outfall structure that both Bell Carter Olive Company, Inc. and the City of Corning Wastewater Treatment Plant (WWTP) discharge from. During periods of high rainfall or river flows, the City of Corning restricts the flow that Bell Carter Olive Company, Inc. is allowed to discharge to the outfall because of it's configuration and size.</p> <p>The technology-based effluent limitations for BOD, TSS, pH, chloride and TDS are being carried forward from the previous permit. All effluent limitations are at least as stringent as in the existing permit. The USEPA has promulgated daily maximum, 30-day average and annual average limitations for BOD and TSS for olive processing. The annual average effluent limitations for BOD and TSS in the draft permit are based on these limitations; however, the average monthly and daily maximum limitations for these parameters are more restrictive than those required by USEPA. These more restrictive limitations are based on Best Professional Judgment of Regional Water Board staff and are reflective of the pollutant reduction achievable by the Discharger. There are new water quality based effluent limitations for ammonia in the draft permit. Bell carter can meet the proposed ammonia limitation.</p> <p>The draft permit requires the Discharger to prepare and submit a Treatment Feasibility Study to examine the feasibility, costs and benefits of potentially varying the volume of effluent discharged in relation to river flows and reducing discharge when there are critical salinity issues in downstream waters including the Sacramento/San Joaquin Delta. This study will focus on minimizing salinity impacts to the receiving water and determine if such variable discharges will impact the combined outfall with the City of Corning. In addition, the Discharger shall examine the effects of color in the discharge and focus on minimizing the impacts of effluent color to the receiving water.</p> <p>The draft permit also requires the Discharger to prepare and submit Salinity/EC Site-Specific studies to determine appropriate salinity/EC levels necessary to protect downstream beneficial uses. The studies shall recommend site-specific numeric values for Salinity/EC that fully protect the Sacramento River's agricultural irrigation use designation. The Regional Water Board will evaluate the recommendations, select appropriate values, reevaluate reasonable potential for Salinity/EC, and reopen the permit, as necessary, to include appropriate effluent limitations for these constituents. Although, the TDS loading from this industrial facility is substantial, the impact on the river immediately downstream of the outfall is generally not measurable. The data cited in the Fact Sheet even indicates a reduction in TDS/EC values downstream of the outfall as compared to values upstream. However, considering the maximum daily discharge rate for TDS and chlorides staff believes there could be some actual small increase in downstream TDS chloride concentrations that are not measurable. The Sacramento River near Corning is considered a very low salinity water body as EC values rarely exceed 130 umhos/cm. Because of the very high river flow in the discharge area and below, the discharge from Bell Carter does not cause and will not cause an exceedence of EC or chloride limits specified in the Basin Plan for the Colusa Basin Drain area (first downstream designated location) and all other downstream designated locations.</p>
c.	<p>The City of Anderson (Discharger) owns and operates a wastewater treatment facility and discharges an average dry weather flow of 2.0 mgd of treated domestic wastewater (advanced secondary treatment) into the</p>

	<p>Sacramento River. The discharge receives a minimum, worst case dilution of 307:1 in the Sacramento River. The Discharger has completed a mixing zone and dilution study and subsequently, the dilution credit at 200 feet downstream of the discharge was utilized for specific criterion for each parameter. A reasonable potential analysis was conducted for priority and non-priority pollutants, and effluent limitations calculated for those pollutants having reasonable potential. Specifically, effluent limits are included for zinc, chlorodibromomethane, dibromochloromethane, beta-BHC, and ammonia.</p> <p>Due to the large dilution the Sacramento River provides, established water quality-based effluent limits for some parameters are relatively high in relation to the parameter-specific criteria and/or water quality objective. Therefore, this Order requires annual effluent quality trend monitoring and a requirement for an Effluent Quality and Treatment Performance Study if a trend of declining treatment plant pollutant removal efficiency or a trend of increasing effluent concentration is observed.</p>
	<p>d. Lehigh Southwest Cement Company (hereinafter Discharger) operates a cement manufacturing plant, a limestone quarry, and a shale quarry in Shasta County:</p> <p>Gray Rocks Limestone Quarry. The Discharger quarries limestone on property northeast of the cement manufacturing plant. An undetermined quantity of storm water discharges through a pipe (Discharge 001A) and a sediment control device (Discharge 001B) and enter an intermittent tributary of the West Fork of Stillwater Creek.</p> <p>Falkenbury Shale Quarry. The Discharger quarries shale in an area southwest of the cement plant. Storm water discharges from sedimentation basins through a pipe to Koala Creek (Discharge 002A and 002B and Spring Branch Creek (Discharge 003A and 003B) both intermittent tributaries of the West Fork of Stillwater Creek.</p> <p>Cement Manufacturing Plant. The Discharger's cement manufacturing plant is on the west side of Wonderland Boulevard. Wastes generated at the cement plant include: non contact cooling water, wheel wash wastewater, truck and equipment wash wastewater, sand filter backwash water, domestic wastewater, waste petroleum products and storm water runoff from raw material and fuel storage piles. Storm water is discharged to the West Fork of Stillwater Creek at discharge point 00X.</p> <p>The proposed Order requires the Discharger to implement a combination of BMPs, numeric effluent limitations, and receiving water limitations to ensure the quality of the receiving waster is protected. As specified in 40 CFR Section 122.44(k), BMPs may be used in lieu of numeric effluent limitations.</p>
	<p>e. Chevron U.S.A. Inc. (Chevron) is currently authorized to discharge treated oil field produced water to the Carrier Canal, a water of the U.S., pursuant to WDR Order No. R5 2002-0052 (NPDES Permit No. CA0080853) and Special Order R5 2005-0136. Discharge to the Carrier Canal is a contingency when the pipeline which normally conveys treated produced water to the Cawelo Water District Reservoir B is unavailable. Texaco Exploration and Production, Inc. (Texaco), previously discharged to the Canal separately under Order No. R5 2002-0053 (NPDES Permit No. CA0078352). Chevron and Texaco completed a corporate merger in 2003 and since then operates as Chevron. In June 2002, Chevron consolidated the discharge outfalls to the Canal and now only one permit is necessary. Discharge to the canal is limited to 480 hours annually by agreement with the canal owners, the City of Bakersfield and the Kern Delta Water District. The tentative Order renews</p>

		the contingency discharge to the Carrier Canal and authorizes a maximum discharge flow limit of 18 mgd, or one-third the rate of freshwater flow in the Canal, whichever is less. The discharge specifications and effluent limitations authorized in the tentative Order are at least as stringent as those in Order No. R5 2002-0052 and Special Order R5 2005-0136, and the discharge is consistent with the anti backsliding requirements of the Clean Water Act and federal regulations. Also, the discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16. (DAM)
	f.	WDR Order No. 95 031 (NPDES Permit No. CA0082295) authorizes the discharge of treated oil field produced water from the Chevron U.S.A. Inc. (Chevron) Kern River Area Station 36 Facility to Cawelo Water District (CWD) Reservoir B. At Reservoir B, treated produced water is commingled with surface water and used to irrigate farmland within the CWD. As authorized by Order No. 95-031, excess blended water in the CWD irrigation system is periodically discharged to Poso Creek, a water of the U.S., for intentional recharge of groundwater. For discharge of treated produced water to CWD Reservoir B, the tentative Order authorizes an increase of the maximum daily flow limitation to 33.5 mgd. The increase of flow is supported by a technical study conducted by the discharger that demonstrates consistency with groundwater salinity objectives set forth in the Basin Plan. The discharge specifications and effluent limitations authorized in the tentative Order are at least as stringent as those in Order No. 95 031 and the discharge is consistent with the anti backsliding requirements of the Clean Water Act and federal regulations. Also, the discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16. (DAM)
	g.	<p>The Mariposa Public Utility District owns and operates a sanitary sewer collection system and 0.61 mgd WWTF that serves the unincorporated community of Mariposa. The WWTF provides secondary treatment with chlorination and dechlorination. Discharge is to Mariposa Creek, an effluent dominated waterbody that is indirectly tributary to the San Joaquin River. Discharge is authorized pursuant to Waste Discharge Requirements Order No. 5-00-122 and NPDES Permit No. CA0079430.</p> <p>The proposed TWDRs renew the NPDES Permit and include interim and final effluent limitations and compliance schedules for copper, zinc, dichlorobromomethane, and nitrate. The Permit also includes a time schedule for the District to implement tertiary treatment to protect REC-1 uses of the Creek.</p> <p>Mariposa Creek also has the designated beneficial use of MUN, which may not be attainable due primarily to flow conditions. The proposed TWDRs provide the District the opportunity to provide information necessary for the Regional Water Board to conduct a use attainability analysis to dedesignate MUN if appropriate. The permit can then be reopened and related requirements appropriately modified. (WDH)</p>
	h.	State Center Community College District is authorized to discharge treated groundwater from a groundwater cleanup system and non-contact cooling water from campus air conditioners pursuant to WDR Order No. R5-2002-0107 and NPDES Permit No. CA0083615. Treated groundwater is routed to two lined storage ponds which also historically received cooling water from campus air conditioners. Accumulated pond water is periodically discharged to a reclamation area for crop irrigation or, when irrigation demand is low, to the Kings River, a water of the U.S. The Discharger requested the Regional Water Board rescind the NPDES Permit due to planned changes in the cleanup strategy for soils and groundwater. The ponds no longer receive

	<p>non-contact cooling water and have sufficient capacity to contain all treated groundwater for irrigation. Discharge of treated groundwater and/or non-contact cooling water to the Kings River will no longer occur and the NPDES provisions of Order R5-2002-0107 are no longer necessary. The tentative Special Order amends Order No. R5 2002 0107 to rescind authorization to discharge under the NPDES program and to amend the concomitant limitations and provisions, where appropriate, to allow the balance of Order No. R5-2002-0107 to continue in full force. The proposed action also modifies Monitoring and Reporting Program No. R5 2002-0107. As an existing discharge, the action to adopt the Special Order is exempt from CEQA. (DAM)</p>
	<p>i. The City of Stockton and the County of San Joaquin (Permittees) requested renewal of their NPDES permit to discharge storm water runoff from their Municipal Separate Storm Sewer System. The discharge consists of surface runoff generated from various land uses that discharge into storm drains, which in turn discharge to natural drainage watersheds. The major natural drainage watersheds in the Stockton Urbanized Area are Bear Creek, Mosher Slough, Five Mile Slough, Fourteen Mile Slough, the Calaveras River, Smith Canal, the Deep Water Channel, Mormon Slough, Walker Slough, Duck Creek, and Little Johns Creek, Smith Canal and Five Mile Slough. All of these water bodies discharge to the Sacramento-San Joaquin River Delta and are tidal freshwater. Federal regulations require the Permittees to develop a management program to reduce the discharge of pollutants in storm water to the Maximum Extent Practicable (MEP). The proposed Order requires the Permittees submit a Storm Water Management Plan (SWMP) that prescribes specific Best Management Practices (BMPs) and Performance Standards to be implemented. The SWMP is a comprehensive document that provides a schedule for the study of the source and effects of storm water pollution, and control measures to reduce pollutant discharge to surface waters. Regional Board staff has responded to the Permittees' comments and, where appropriate, has made revisions to the permit to address their concerns. (KAS)</p>

RECOMMENDATION: Adopt the proposed NPDES permits.

Mgmt Review \_\_\_\_\_

Legal Review \_\_\_\_\_

Central Valley Regional Water Quality Control Board  
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 6 December, 2007