

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2007-0081

WAIVER OF WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF CLOVIS
SURFACE WATER TREATMENT PLANT
FRESNO COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board), finds that:

1. The City of Clovis (hereafter "Discharger") submitted a Report of Waste Discharge (RWD) and a Sludge Management Plan, dated 26 December 2003 for its new Surface Water Treatment Plant (hereafter "Facility"). Additional information to complete the RWD was received on 2 March 2004.
2. The Facility is on a 21-acre property at 5805 North Leonard Avenue in Clovis, Assessor's Parcel No. 554-030-10 in Section 12, Township 13 South, Range 21 East, Mount Diablo baseline and meridian.
3. The Facility is owned and operated by the Discharger to treat and disinfect surface water from the Kings River and provide potable water for domestic use. The facility is designed to treat up to 15 million gallons of water per day (mgd) with a build out capacity of 45 mgd.
4. Surface water from the Kings River is pumped from the Enterprise Canal for treatment prior to distribution as a public water supply. The treatment process includes clarification, filtration, chlorination, and pH adjustment.
5. The Facility utilizes a ballasted flocculation (Actiflo®) system to clarify the surface water. Polyaluminum chloride, microsand, and a food grade polymer are added during the clarification process to facilitate the formation of high-density ballasted flocs, which settle to the bottom of the settling tank. The settled sludge is pumped to a hydrocyclone, which recovers the microsand for reuse prior to discharging the sludge to the drying beds.
6. There are eight sludge drying beds at the Facility. The sludge drying beds are designed to act as dewatering beds using the Quick Dry Dewatering Process by Deskins® and are approximately 48 feet wide by 60 feet long and four feet deep at center. The beds are equipped with filtering media similar to a sand bed with layers of sand, stone, dewatering media, and a piped underdrain system. Below the underdrain system the beds are double lined on the bottom with a 125 mil geotextile and a 30 mil PVC geombrane liner attached to the concrete dividers and foundation walls.

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7. A polymer is added to the diluted sludge prior to discharge to the drying beds. The sludge is filtered from the liquid stream and collects in the beds on top of the layers of sand and stone and allowed to dry by evaporation after which the dried sludge is placed in drop bins and transported to the City of Clovis Landfill.
8. The liquid in the sludge drying beds leaches down through the filtering media where it is collected in the underdrain system and gravity fed to a wet well and then returned to the beginning of the treatment process.
9. The holding capacity for each bed is approximately 44,720 gallons while maintaining half a foot of freeboard. Freeboard is maintained through the use of cutouts in the sides of the drying beds, which allows excess water to flow to the adjacent beds and prevent overflow of the beds. In addition, the sludge drying beds are surrounded by an asphalt and concrete apron, which is designed to divert any overflow or storm water runoff to a concrete lined Residual Area Runoff Basin (RARB).
10. After the clarification process the clarified water is filtered through microfiltration membranes. The microfiltration membranes consist of thousand of hollow fiber strands made of a polyvinylidene fluoride plastic with submicron pores to filter out impurities.
11. The membrane filters are periodically backwashed to dislodge particles from the membranes surfaces. Backwash water at the facility is collected in a holding tank and then recycled into the system via the sludge drying beds or directly to the intake pipe at the beginning of the treatment process. In addition, the membrane filters periodically undergo chemical cleaning to restore the capacity of the system. The chemical cleaning solutions consist of sodium hydroxide and/or citric acid. Water from the chemical wash is contained in a neutralization tank where it is neutralized and returned to the system or off hauled for disposal.
12. Storm water runoff in the vicinity of the sludge drying beds is collected in the concrete lined RARB where it can then be diverted into the system at the beginning of the treatment process. Storm water on the remaining areas of the Facility is discharged to an unlined storm water retention pond on the northeast corner of the site.

CEQA

13. On 27 December 2002, the City of Clovis adopted a Mitigated Negative Declaration for the proposed Surface Water Treatment Plant.
14. The Regional Water Board, as a responsible agency under CEQA, has reviewed the Mitigated Negative Declaration for the project relative to impacts to groundwater

quality and concurs that the mitigation measures required therein will mitigate the project's potential groundwater impacts.

DETERMINATION

15. California Water Code Section 13269(a) provides that the Regional Water Board may waive WDRs for a specific discharge if it determines the waiver is consistent with any applicable water quality control plan and is in the public interest. Section 13269 further provides that any such waiver of WDRs shall be conditional, must include monitoring requirements unless waived, may not exceed five years in duration, and may be terminated at any time by the Regional Water Board.
16. Waiving requirements for the City of Clovis' Surface Water Treatment Plant is in the public interest because: this Waiver includes conditions that are intended to reduce and prevent pollution and nuisance and protect beneficial uses of the waters of the State; it provides for an efficient and effective use of limited Regional Water Board resources; and the Discharger is a public agency providing a necessary service to the citizens of the State.
17. California Water Code section 13267 states, in part:

“(b)(1) In conducting an investigation . . . , the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

This Resolution waiving waste discharge requirements includes the requirement to submit technical and monitoring reports. The reports are necessary to assure protection of waters of the state and compliance with the conditions of the waiver. Failure to submit the required reports may result in enforcement action, which may include the imposition of administrative civil liability pursuant to Water Code section 13268.

18. Failure to comply with the conditions of this Waiver of Waste Discharge Requirements may subject the discharger to enforcement actions, which may include the imposition of administrative civil liability pursuant to Water code section 13350.

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19. The Discharger and interested agencies and persons have been notified by the Regional Water Board of its intent to waive waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
20. All comments pertaining to this waiver were heard and considered in a public meeting on 22 June 2007.

THEREFORE BE IT RESOLVED that the Regional Water Board, based upon the findings set forth above, in accordance with Water Code section 13269 and 13267, hereby waives waste discharge requirements for the above described discharge at the City of Clovis' Surface Water Treatment Plant, conditional upon complying with the prohibitions and conditions set forth below:

A. Prohibitions:

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous', as defined in Section 2521(a) of Title 23, CCR, Section 2510 et seq., is prohibited.
3. Bypass or overflow of untreated wastes into the Facility's unlined storm water pond, is prohibited, without receiving prior written approval from the Regional Water Board.

B. Conditions:

1. The discharge shall not degrade groundwater or any water supply, and shall not create pollution or nuisance as defined in the California Water Code.
2. Sludge collected from the drying beds shall be disposed of in accordance with the *Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid Waste* as set forth in Title 27, California Code of Regulations, Division 2, Subdivision 1, Section 20005 et. seq.
3. Any proposed change in sludge use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

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C. Reporting Requirements:

1. The Discharger shall submit by **1 March** of each year a report for the previous calendar year containing the following:
 - a. A list of names, certificate grades, and general responsibilities of all persons employed at the Facility;
 - b. A copy of the Sludge Management Report including an estimate of the average annual dry tons and percent solids produced, and the disposal locations; and
 - c. Results of the semi-annual groundwater sampling of the on-site monitoring wells for constituents of concern. At a minimum the semi-annual groundwater sampling should include depth-to-water, electrical conductivity, alkalinity as CaCO₃, total and fixed dissolved solids, chloride, sulfate, sodium, magnesium and the dissolved metals aluminum, copper, iron, and manganese.

D. Provisions:

1. The Discharger shall maintain a copy of this Resolution at the Facility, for reference by operating personnel. Key operating and site management personnel must be familiar with its contents.
2. The Discharger shall permit Regional Water Board representatives to (a) enter premises where wastes are stored or disposed of, (b) copy any records required to be kept under the terms of this Resolution, (c) inspect any monitoring equipment required by this Resolution, and (d) sample, photograph, and video tape any discharge, waste management unit, or monitoring device.
3. In the event of any change in control or ownership of the Facility, the Discharger shall notify the succeeding owner or operator of the existence of this Waiver by letter, a copy of which shall be immediately forwarded to the appropriate Regional Water Board office (currently, the Fresno office).
4. At least **140 days** before this Waiver expires (1 February 2012) the Discharger shall submit a report of waste discharge requesting review and renewal of the Waiver or adoption of waste discharge requirements.

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I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on 22 June 2007.

PAMELA C. CREEDON, Executive Officer

KC/kes: 6/22/07