

**Regional Water Quality Control Board  
Central Valley Region  
Board Meeting – 4/5 December 2014**

**Response to Written Comments for**

**City of Fresno  
Consolidated Land Company and Consolidated Industries, Inc.  
North Fresno Wastewater Reclamation Facility  
Fresno County  
Tentative Waste Discharge Requirements**

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At a public hearing scheduled for 4/5 December 2014, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) will consider adoption of Waste Discharge Requirements for City of Fresno and Consolidated Land Company and Consolidated Industries, Inc., (hereafter collectively referred to as Discharger) for the North Fresno Wastewater Reclamation Facility (WWRF) in Fresno. This document contains responses to written comments received from interested parties regarding the tentative WDRs circulated on 5 September 2014. Written comments from interested parties were required by public notice to be received by the Central Valley Water Board by 5:00 pm on 10 October 2014 to receive full consideration. Written comments were received from the City of Fresno and the Central Valley Clean Water Association (CVCWA) on 10 October 2014. Written comments are summarized below, followed by the responses of Central Valley Water Board staff. Based on the comments, Central Valley Water Board staff did make some changes to the tentative WDRs.

During the public comment period, the State Water Resources Control Board, Division of Drinking Water (DDW), approved the Discharger's addendum to its existing Title 22 Engineering Report for recycled water use. Also during the public comment period, the Discharger requested to operate the ultraviolet (UV) light disinfection system in accordance with the 2003 National Water Research Institute (NWRI)/Water Research Foundation *Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse* (UV Guidelines) until the control system can be reprogrammed in accordance with the 2012 NWRI UV Guidelines. This document also summarizes the revisions made to the tentative Order in response to this information received during the public comment period.

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**CITY OF FRESNO COMMENTS**

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**Comment No. 1: Cloth Filtration System.**

Finding 10 on page 2 indicates, "In addition, effluent from the cloth filtration system can be recirculated back to the influent pump station of the WWRF." This is incorrect; effluent from the cloth filters cannot be recirculated back to the influent pump station. The line showing recirculation from the cloth filters to the influent pump station in the Process Flow Diagram in Attachment B should also be removed.

**RESPONSE:** The recirculation of effluent from the cloth filters back to the influent pump station has been removed from Finding 10 and the Process Flow Diagram on Attachment B.

**Comment No. 2: Total Coliform Detection.**

Footnote 1 from the Table in Finding 11 on page 3 indicates total coliform was detected at 900 MPN/100mL in the effluent on 9 October 2011. The footnote should be deleted since the sample was collected from an incorrect location and is not representative of treated effluent from the WWRF. Furthermore, effluent from the WWRF on 9 October 2011 was not discharged, but rather sent to the Fresno-Clovis Regional Wastewater Reclamation facility for further treatment.

**RESPONSE:** Footnote 1 from the Table in Finding 11 has been removed.

**Comment No. 3: Former Chlorine Contact Basin.**

Finding 13 on page 3 indicates, "The former chlorine contact basin will be utilized for flow equalization following UV disinfection." This is incorrect; the former chlorine contact basin will be utilized for flow equalization prior to UV disinfection.

**RESPONSE:** Finding 13 has been revised to indicate the former chlorine contact basin will be utilized for flow equalization prior to UV disinfection.

**Comment No. 4: Web Soil Survey.**

Finding 17 on page 4 indicates, "Uses include annual range and dry farmed small grain, usually barley and limited sprinkler irrigated pasture." The City of Fresno is not clear as to what "uses" are referring to and suggest changing the use to "golf course."

**RESPONSE:** No change has been made in response to this comment. The "uses" listed in Finding 17 are typical uses identified in the Web Soil Survey for Pollasky-Montpellier complex soils; which, according to the Web Soil survey, are the types of soils found at the golf course.

**Comment No. 5: Section 24400 of the California Health and Safety Code.**

Finding 21 on page 5 and Provision I.3 on page 24 both reference section 24400 of the California Health and Safety Code. However, section 24400 of the California Health and Safety Code does not exist.

**RESPONSE:** The Health and Safety Code sections that section 24400 was found in were relocated (Chapter 415 of the Statutes of 1995, which took effect on 1 January 1996). The correct section is 115700, which identifies actions well owners must undertake to properly maintain inactive wells. The references to section 24400 of the California Health and Safety Code in Finding 21, Provision I.3. and the Groundwater Conditions section on page 3 of the Information Sheet have been changed to section 115700.

### **Comment No. 6: Ultraviolet Disinfection System Operating Specifications.**

Ultraviolet Disinfection System Operating Specification B.14.e on page 17 states the following:

Conditions that shall divert effluent to waste include the following:

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- e. Flow above the maximum flow commissioned of 150 gpm per reactor.

However, the City of Fresno indicates:

The commissioned [UV disinfection] system automatically calculates the treatment capacity for each train, which typically will be greater than the 150 gpm design flow per reactor [tested during the spot-check bioassay]. In order to prevent having to turn on additional lamps and use power that would otherwise not be necessary, and to make full use of the specified control system functions that are required, this requirement should be modified to allow each individual reactor to treat flow rates up to the capacity of the individual train, as determined by the control system specified in [Ultraviolet Disinfection System Operating] Specification D4.

**RESPONSE:** Compliance with Provision I.5 on page 24 allows the Discharger to increase the discharge flow rate of the WWRF above 150 gpm per reactor; therefore, specifying a flow rate in Ultraviolet Disinfection System Operating Specifications B.14.e is inappropriate. As a result, Ultraviolet Disinfection System Operating Specification B.14.e has been revised as following:

Conditions that shall divert effluent to waste include the following:

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- e. Flow above the maximum flow ~~commissioned of 150 gpm~~ per reactor ***approved by the State Water Resources Control Board, Division of Drinking Water and the Executive Officer.***

In a letter from DDW to Trojan UV, dated 19 August 2014, DDW, "[F]inds that the [manufacturer's] validation testing and report have demonstrated the ability of the TrojanUVFit™ 18AL40 UV reactor to meet the minimum coliform and virus disinfection criteria found in Title 22..." The August 2014 letter also indicates, "Detailed testing was performed to determine the flow-specific performance of the TrojanUVFit™ 18AL40 UV reactor for flow rates ranging from 0.11 to 1.01 MGD (78.4 to 702.5 gpm)..." However, the maximum flow rate tested by the Discharger during its July 2014 spot-check bioassay of the TrojanUVFit™ 18AL40 UV reactor installed at the WWRF was 150 gpm per reactor. Finding 13 on page 3 and Provision I.5 on page 24 have been revised to allow flexibility for the Discharger to obtain approval from DDW to increase the flow rate above 150 gpm per reactor without necessarily conducting a spot-check bioassay.

**Comment No. 7: Units for UV Intensity and Dose.**

In the table in the Ultraviolet Light Disinfection System Monitoring section on page 3 of the Monitoring and Reporting Program, the units for UV intensity should be changed from mW/cm to mW/cm<sup>2</sup> and the units for UV Dose should be changed from mW-sec/cm<sup>2</sup> to mJ/cm<sup>2</sup>.

**RESPONSE:** The units for UV Intensity have been changed to mW/cm<sup>2</sup>. Although mW-sec/cm<sup>2</sup> is equivalent to mJ/cm<sup>2</sup>, for consistency, the units for UV Dose have been changed to mJ/cm<sup>2</sup>.

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**CENTRAL VALLEY CLEAN WATER ASSOCIATION COMMENTS**

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**Comment No. 1: Pretreatment Program.**

CVCWA requests the Pretreatment Program requirements in Section H on page 22 and 23 be removed from the tentative Order for the following reasons:

1. The tentative Order does not include Findings that indicate a Pretreatment Program is appropriate for the WWRF,
2. The Copper River Ranch Development, which the WWRF serves, does not include significant industrial users, and
3. The City of Fresno must already comply with the Pretreatment Program requirements for the Fresno-Clovis Metropolitan Regional Wastewater Reclamation Facility and including Pretreatment Program requirements in the tentative Order is duplicative and adds an unnecessary expense in permitting fees and program implementation to the City of Fresno.

**RESPONSE:** The tentative Order has been revised to include a Finding indicating the Pretreatment Program at the WWRF is necessary to protect the collection and treatment systems and prevent disruption of the treatment processes at the WWRF, requires the Discharger to continue to implement its existing Pretreatment Program at the WWRF, as it did under Order R5-2006-0090-01, and as it committed to in the May 2011 RWD. CVCWA has not demonstrated that continuing the existing Pretreatment Program at the WWRF will incur unnecessary expense. Central Valley Water Board staff has verified that the California Integrated Water Quality System database, which is the database from which permitting fees are calculated, does not include any surcharges associated with Pretreatment Programs for the annual fee for the WWRF. The City of Fresno will only be invoiced for Pretreatment Program surcharges on its annual fees for the Fresno-Clovis Regional Wastewater Reclamation facility.

**Comment No. 2: Discharge Specification B.2.**

Discharge Specification B.2 on page 13 prohibits the discharge from violating the groundwater limitations on page 22. CVCWA contends this specification is unnecessary since it is duplicative with the groundwater limitations and creates unnecessary liability. Furthermore, CVCWA indicates it is inappropriate to include reference to "mass" in the discharge specification with respect to compliance with the groundwater limitations since the groundwater limitations are concentration-based requirements.

**RESPONSE:** Discharge Specification B.2 has been modified for clarity, but it is neither duplicative nor unnecessary. Violations of the groundwater limitations may occur when waste disposal is improperly managed. Discharge Specification B.2 requires the Discharger to manage its waste disposal in a way that will not cause a violation of the groundwater limitations.

**Comment No. 3: Schedule for Technical Report Submittal.**

Provisions I.4 and I.6 on page 24 require the Discharger to submit documentation that DDW has approved a UV disinfection system Operations Plan and an addendum to its existing Title 22 Engineering Report, respectively, prior to initiating discharge to the Copper River Country Club golf course. However, CVCWA is concerned this schedule will put the Discharger in noncompliance as soon as the tentative Order is adopted because, "As it is explained in the Tentative Order, however, the City has been periodically discharging tertiary effluent to the golf course since July 2010." CVCWA requests the submittal of the information within 30 days following adoption of the tentative Order.

**RESPONSE:** No change has been made in response to this comment. Although the WWRF had been operating periodically since July 2010, it was shut down in October 2013 to facilitate construction of the UV disinfection system and has yet to resume operation. DDW has approved an addendum to the Title 22 Engineering Report (see Approval of Addendum of Title 22 Engineering Report section below); however, the submittal and approval of a UV disinfection system Operations Plan is still outstanding and required prior to initiating discharge to the Copper River Country Club golf course.

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**APPROVAL OF ADDENDUM TO TITLE 22 ENGINEERING REPORT**

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In a letter dated 3 October 2014, DDW approved the Discharger's addendum to its existing Title 22 Engineering Report for recycled water use. As such, Provision I.6 on page 24, requiring the Discharger to submit documentation of DDW approval of the addendum, has been removed from the tentative Order.

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**UV DISINFECTION SYSTEM OPERATION IN ACCORDANCE WITH 2003 UV GUIDELINES**

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The Discharger submitted a letter, dated 5 September 2014, requesting to operate the UV disinfection system in accordance with the 2003 NWRI UV Guidelines until the control system can be reprogrammed in accordance with the 2012 NWRI UV Guidelines. The Discharger indicated it may take two to three months to complete reprogramming of the control system. In an email dated 15 September 2014, DDW indicated it had no objections to the Discharger's submitted control proposal. As such, a Finding has been added, and the Ultraviolet Disinfection System Operating Specifications have been revised to allow the UV disinfection system to operate in accordance with the 2003 NWRI UV Guidelines until the control program can be reprogrammed in accordance with the 2012 NWRI UV Guidelines.