



Ms. Aide Ortiz
California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, California 93706-2007

Subject:
Comments on Tentative WDRs and TSO
NPDES Permit No. CA0082708
Former Rockwell Facility Groundwater Cleanup System
914 West Pioneer Avenue
Porterville, California 93257-1240

Dear Ms. Ortiz:

On behalf of Rockwell Automation, Inc. (Rockwell), ARCADIS U.S., Inc. (ARCADIS) hereby submits the following comments on the California Regional Water Quality Control Board, Central Valley Region's (CVRWQCB's) Tentative Waste Discharge Requirements (WDRs; National Pollutant Discharge Elimination System [NPDES] Order No. CA0082708) and Time Schedule Order (TSO), recently drafted for the groundwater cleanup system in operation at the former Rockwell facility located at 914 West Pioneer Avenue in Porterville, California. Please consider these comments when finalizing the WDRs and TSO.

Comments

Comment 1. WDRs Section IV.A.1.a, Table 6, Effluent Limitations – Discharge Point 001.

This table appears to be missing an average monthly effluent limitation for ammonia. Furthermore, the effluent limitations for selenium and mercury have changed slightly from previous CVRWQCB (2010) correspondence with Rockwell. Please ensure that the calculations have been appropriately checked.

Comment 2, Attachment E, Sections III and IV.

Although there is an effluent monitoring requirement for nitrate, there is no corresponding requirement for influent. Given the agricultural land use in the area,

Imagine the result

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background concentrations of nitrate in groundwater may be detectable and could potentially be erroneously attributed to the groundwater cleanup system if influent samples are not collected simultaneously. Rockwell may collect such samples from time to time to protect its interests. Results would be shared with CVRWQCB.

Comment 3. Attachment E, Section IV.A.1, Table E-3 – Effluent Monitoring.

The text in footnote 4 should be made clearer with respect to the analytes. It appears that the analytes are listed in alphabetical order, but the alkalinity fractions should be placed together in parentheses to avoid confusion as follows: “General minerals shall include alkalinity (bicarbonate, carbonate, and hydroxide), boron, calcium, chloride, electrical conductivity at 25°C, hardness (as CaCO₃), iron, ...”

Comment 4. Attachment E, Section V.B, Chronic Toxicity Testing.

At the bottom of page 4 of the previous NPDES permit's Monitoring and Reporting Program (CVRWQCB Order No. R5-2005-0092), it states that “if chronic toxicity analyses conducted for four consecutive quarters demonstrate that the effluent does not exhibit toxicity, chronic toxicity monitoring may be discontinued, subject to the approval of the Executive Officer.” Despite the fact that the results collected to date (see Table 1, attached) clearly indicate that the effluent is not chronically toxic, the tentative WDRs have been written to continue annual chronic toxicity testing. Rockwell requests that CVRWQCB eliminate the requirement for chronic testing altogether in the new permit.

Comment 5. Attachment E, Section VIII.A, Monitoring Location RSW-002.

ARCADIS worked with the Lower Tule River Irrigation District and CVRWQCB last summer to identify a suitable location to sample receiving water in the Pioneer Ditch Pipeline. Monitoring location RSW-002 is one of two locations that were identified. Although this location is certainly appropriate for receiving water sampling, Rockwell requests that CVRWQCB consider adding the second location on North Plano Road as an alternate and allowing sampling to occur at either location for compliance. Doing so will provide some measure of contingency should access to one location become unsafe or otherwise infeasible.

Comment 6. Attachment F, Section II.B.3, Groundwater.

This section discusses background groundwater quality, including occasional tetrachloroethene impacts, but does not mention potential impacts from agriculture-related chemicals (e.g., nitrogen compounds) or other constituents (e.g., mercury and selenium). Considering that the tentative WDRs include an effluent limitation for ammonia and that agriculture is a common land use in the area, Rockwell is interested in understanding what background concentrations are for nitrogen compounds in groundwater and requests that CVRWQCB provide such information in the Fact Sheet to provide context. A similar assessment for mercury and selenium would also be helpful.

Comment 7. Attachment F, Section II.C, Table F-2.

Footnote 3 indicates an irrigation season of late April through October, but Receiving Water Limitation 12 (WDRs Section V.A.12) indicates March through 1 December. As Rockwell is subject to an electrical conductivity limit with respect to receiving water during the irrigation season, the definition of the irrigation season should be standardized in the permit.

Comment 8. Attachment F, Sections IV.C.4.e and IV.D.5, Tables F-11 through F-13.

It is unclear to ARCADIS and Rockwell as to what the maximum daily effluent limitation for 1,1-dichloroethene should be. According to Tables F-11 and F-12, it should be 0.11 microgram per liter ($\mu\text{g/L}$), but according to Table F-13, it should be $<0.5 \mu\text{g/L}$. The text in Attachment F, Sections IV.B and IV.D.5, suggests that the more stringent of technology- and water-quality-based effluent limitations are used in the permit, but the identification of $<0.5 \mu\text{g/L}$ (technology) as opposed to $0.11 \mu\text{g/L}$ (water quality) in Table F-13 does not seem to follow that rationale.

Closing

Thank you for considering these comments before finalizing the WDRs and TSO. Should you need clarification on any of the items above, please contact us.

Sincerely,

ARCADIS U.S., Inc.



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Senior Geologist



Anthony Parenteau, REA I
Project Manager

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Troy Pfaff, Rockwell Automation, Inc.
Peter Elleman, Colfax

Attachment:

Table 1 Historical Acute and Chronic Toxicity Testing Results

Reference:

CVRWQCB. 2010. Letter from Mr. Lonnie M. Wass, Supervising Engineer, to Mr. Troy M. Pfaff, Environmental Manager, Rockwell Automation, re: Request for Infeasibility Report, Rockwell Automation, Inc., Groundwater Cleanup System (NPDES No. CA0082708), Tulare County. California Regional Water Quality Control Board, Central Valley Region. 26 July.

**TABLE 1
HISTORICAL ACUTE AND CHRONIC TOXICITY TESTING RESULTS**

**Comments on Tentative WDRs and TSO
Former Rockwell Facility
914 West Pioneer Avenue
Porterville, California**

Species & Endpoint	No Observed Effect Concentration (% Effluent) ²								
	09/12/05 ³	11/28/05 ⁴	03/13/06 ⁵	06/05/06 ⁶	9/18/06 ⁷	9/10/07 ⁸	8/4/08 ⁹	8/10/09 ¹⁰	11/8/10 ¹¹
<i>P. promelas</i> (fathead minnow)									
96-Hour Survival	100	NA	NA	NA	100	100	100	100	100
7-Day Survival	100	100	100	100	100	100	100	100	100
7-Day Growth (biomass)	100	100	75	100	100	100	100	100	100
<i>C. dubia</i> (water flea)									
7-Day Survival	100	100	100	100	100	100	100	100	100
7-Day Reproduction	100	100	100	75	100	100	100	100	100
<i>Selenastrum</i> (green algae)									
7-Day Survival	100	100	100	100	100	100	NA	NA	NA
7-Day Growth (cell density)	100	100	100	100	100	100	100	100	100

Notes:

1. Toxicity tests with *Pimephales promelas* (*P. promelas*), *Ceriodaphnia dubia* (*C. dubia*), and *Selenastrum capricornutum* (*Selenastrum*) were conducted by Nautilus Environmental LLC or Pacific EcoRisk.
 2. Units expressed in percent (%). 100 = there was no observable effect on the reproduction, survival, or growth of the organism at a sample concentration of 100 percent; i.e., no toxicity was observed.
 3. Follow-up samples were collected on September 14 and 16, 2005.
 4. Follow-up samples were collected on November 30 and December 2, 2005.
 5. Follow-up samples were collected on March 15 and 17, 2006.
 6. Follow-up samples were collected on June 7 and 9, 2006.
 7. Follow-up samples were collected on September 20 and 22, 2006.
 8. Follow-up samples were collected on September 12 and 14, 2007.
 9. Follow-up samples were collected on August 6 and 8, 2008. *Selenastrum* results are for 96-hour growth.
 10. Follow-up samples were collected on August 12, 14, and 18, 2009.
 11. Follow-up samples were collected on November 10 and 12, 2010.
- NA = not analyzed.