FAX

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To: MARK JOHNSON

Fax No: 286-3981 Phone No: _____

Date: 2/26/97

From: Ric Notini
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Number of pages, including this cover page: 1

Remarks:

Comments on S-W Tentative Order

98 FEB -3 AM 9:34

CHIRON

January 26, 1998

Mr. Mark Johnson
Toxics Cleanup Division
San Francisco Bay Regional Water Quality Control Board
2101 Webster St., Suite 500
Oakland, CA 94612

Re: **Tentative Site Cleanup Requirements Order for The Sherwin-Williams Company 1450 Sherwin Avenue, Emeryville, California**

Dear Mr. Johnson:

Chiron Corporation ("Chiron") has reviewed the Tentative Site Cleanup Requirements Order for The Sherwin-Williams Company, 1450 Sherwin Avenue, Emeryville, Alameda County, California ("Tentative Order") issued for comment by the Regional Water Quality Control Board ("RWQCB") by letter dated December 22, 1997. Chiron's comments are provided below.

(1) Findings, Paragraph 11: The Tentative Order states that Sherwin-Williams is "again pursuing a permit to discharge the treated water to the EBMUD sewer system." We understand that EBMUD recently issued the permit, therefore, we request that this section be updated.

(2) Findings, Paragraph 13: In Paragraph 13(a), the language "as a minimum concentrations should not exceed . . ." does not appear in the February 1996 Model Site Cleanup Requirements Order ("Model SCR Order"). Chiron would appreciate an explanation of the intended effect of the additional language. If the RWQCB intends to use the following language, "at a minimum, concentrations should not exceed . . .," then such language should also be used in Paragraph 13(b).

(3) Tasks, Paragraph 1: Task #1 addresses Sherwin-Williams's evaluation of current site conditions, preparation of a site use history, and evaluation of human-made conduits at the Sherwin-Williams Property. The compliance date in the

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Tentative Order is 120 days after adoption of the Tentative Order. As the RWQCB is aware, the Work Plan outlining these Task #1 work elements is dated June 2, 1997, with certain amendments and clarifications dated September 10, 1997. RWQCB staff approved the Work Plan on October 15, 1997. Further, the December 18, 1997 "Fact Sheet on Recent Activities on the Sherwin-Williams' Property, Emeryville, California" notes that Sherwin-Williams' consultant has been conducting a survey of underground utility lines as part of ongoing environmental investigations at the Site. It would therefore appear that Sherwin-Williams has begun work on the evaluation of the current site conditions and human-made conduits at the Site.

Given the currently-existing outward hydraulic gradient at the Sherwin-Williams Site, the infiltration of arsenic-containing groundwater into storm drains and sewer lines at the Site, and discovery of arsenic-containing precipitate on the exterior of the retaining wall at the Site, prompt completion of the Task 1 technical report is imperative. Since Sherwin-Williams has already begun work on this task, we request that the time period for completion of this task be shortened.

(4) Tasks, Paragraph 3: Task #3 requires Sherwin-Williams to complete the Remedial Investigation of the Site 245 days after adoption of the Tentative Order. For the reasons set forth above, we request that the compliance date for completion of this task be shortened.

In addition, Task #3 currently states: "The technical report should define the vertical and lateral extent of soil and groundwater pollution." Chiron notes that the Model SCR Order language is as follows: "The technical reports should define the vertical and lateral extent of pollution down to concentrations at or below typical cleanup standards for soil and groundwater." Since the Model SCR Order language is more specific, we request that the RWQCB consider using this language instead of the proposed language in the Tentative Order. Alternatively, finding 13 could be referenced for clarity. Finally, if the RWQCB intends to use the language currently proposed in the Tentative Order, Chiron recommends that the word "should" be replaced by the word "shall."

(5) Tasks, Paragraph 4: Task #4 currently requires Sherwin-Williams to submit a report evaluating the performance of the existing Interim Remedial Measures ("IRMs") within 90 days after issuance of the Tentative Order. Since Sherwin-Williams has begun work to evaluate the effectiveness of the IRMs (e.g., installation of piezometers spanning the slurry wall and measuring water levels), Chiron requests that the time period for completion of this task be shortened to reflect the progress that has already been.

In addition, the Tentative Order states: "Sherwin-Williams shall continue to operate the groundwater extraction and treatment system to **minimize** migration of affected groundwater and **attempt to** create an inward hydraulic gradient within the slurry wall." Given the potential adverse impact of continued migration of Sherwin-Williams contaminants onto the former Rifkin property, Chiron does not believe that further migration of affected groundwater should be permitted nor should it be sufficient for Sherwin-Williams to only "attempt to" create an inward hydraulic gradient within the slurry wall. Further, because the slurry wall was located approximately 10 feet back from the Sherwin-Williams property line, a 10-foot wide zone of affected soil and groundwater lies outside the slurry wall on Sherwin Williams Property and beyond onto the Rifkin Property. Accordingly, Chiron request that the foregoing sentence be revised to read as follows: "Sherwin-Williams shall continue to operate the groundwater extraction and treatment system to ***eliminate*** migration of affected groundwater, ***shall create and continuously maintain*** an inward hydraulic gradient within the slurry wall, ***and shall take all necessary additional measures to eliminate migration of affected groundwater outside the slurry wall."***

(6) Self Monitoring Program: As RWQCB staff is aware, Chiron's original requested that Sherwin-Williams also sample and analyze groundwater from monitoring wells LF-4, LF-7, LF-8, LF-22, LF-26, MW-4 and MW-5 (see Chiron letter dated September 15, 1997). At the October 15, 1997 meeting among Chiron, Sherwin-Williams and RWQCB representatives, Sherwin-Williams agreed that it would sample monitoring wells MW-4 and MW-5 at least twice, as part of its evaluation of the existing IRMs. The results of this sampling indicate that concentrations of arsenic in monitoring wells MW-4 and MW-5, which are located on the Rifkin property outside and immediately downgradient of the Sherwin-Williams slurry wall have significantly increased (see figure attached). In order to monitor both the effectiveness of the slurry wall and other IRMs in eliminating migration of affected groundwater onto Rifkin, and the impact on Rifkin, we request that, at a minimum, monitoring wells MW-4 and MW-5 be included in the Self Monitoring Program.

In addition, we request that wells LF-8 and LF-26 be added to the self-monitoring program. These wells are located at the northern portion of the Sherwin-Williams Site near Temescal Creek and the storm sewer outfall from the Sherwin Williams Site. Infiltration of arsenic impacted groundwater into the storm sewer recently discovered by Sherwin-Williams indicates that the storm sewer and the gravel backfill surrounding this sewer are likely acting as preferential pathways for

groundwater flow within the slurry wall. Therefore, given that the storm sewer installed by Sherwin-Williams in 1995 extends from the arsenic source area to the northern portion of the Site where wells LF-8 and LF-26 are located, it is likely that the sewer is acting as a preferential pathway and accelerating arsenic migration within the slurry wall onto the northern portion of the Site. Regular sampling of monitoring wells LF-8 and LF-26 will allow Sherwin-Williams to identify potential increases in arsenic concentration in this area, aid in the evaluation of existing interim remedial measures, and allow better assessment of potential off-site migration of arsenic in the area.

Finally, we recommend that the Self Monitoring Program ("SMP") require that "low limits of detection" be achieved on an annual basis for all groundwater laboratory analyses performed pursuant to the SMP. These low limits of detection should be consistent with estimated EPA Method quantification limits specified under EPA SW-846 in the absence of matrix interference. This requirement will allow monitoring of concentrations of compounds such as volatile organic compounds, which have elevated detection limits (e.g., ranging from 500 ug/1 to 3,000 ug/1 in EX-2) in highly chemically impacted groundwater wells.

Thank you for the opportunity to provide you with our comments.

Sincerely,

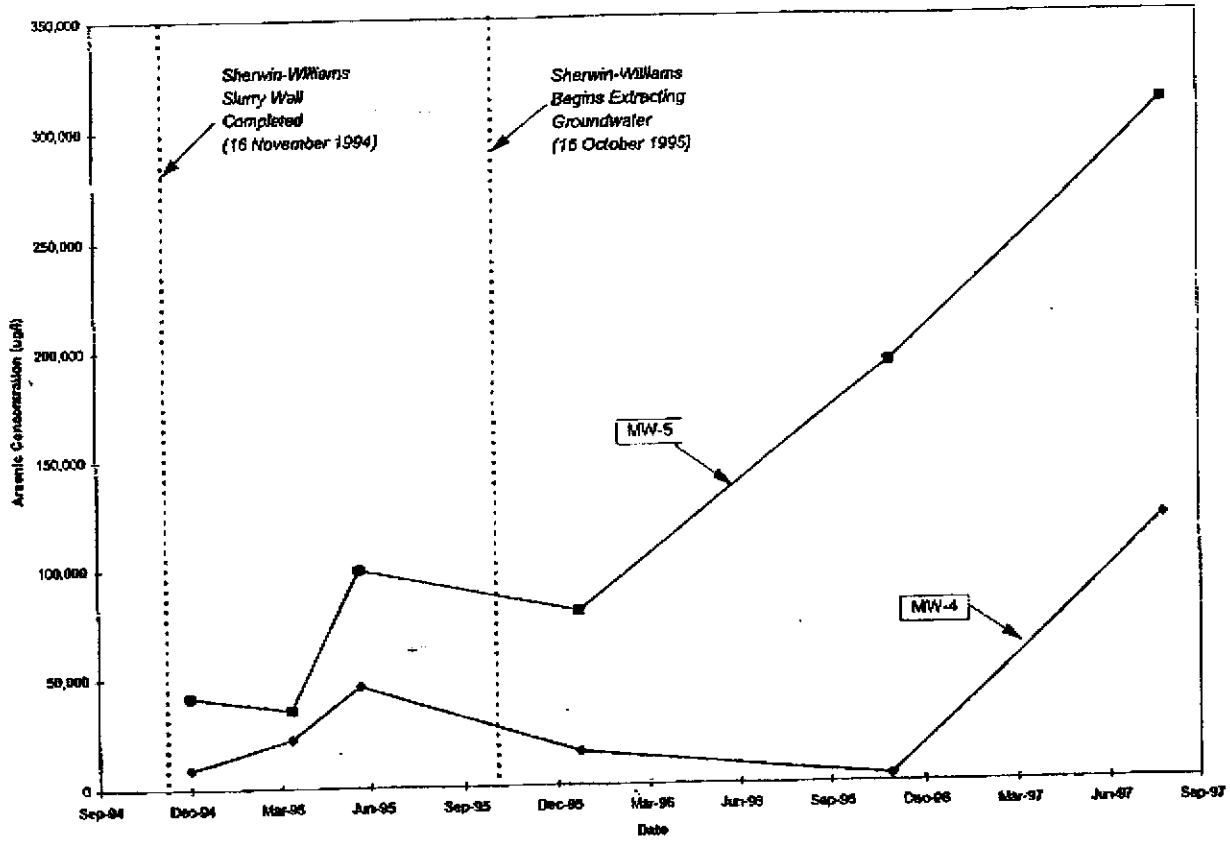
CHIRON CORPORATION

Ric Notini
Manager Environmental Health & Safety

Attachment(s)

at:RN

cc: Mark Johnson, RWQCB
Larry Mencin, Sherwin-Williams
Mark Knox, LFR
Edward Sangster, Esq.
Richard W. Raushenbush, Esq.



Notes:

1. Samples collected by Levine-Fricke-Recon.
2. For duplicate samples the average of the two concentrations is shown.

INCREASING ARSENIC CONCENTRATIONS DETECTED IN MONITORING WELLS ON THE FORMER RIFKIN PROPERTY

Erler & Kalinowski, inc.

Chiron
Emeryville, CA
January 1998
EKI 970001.02