

Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

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12 June 1998

Mr. Mark Johnson
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

CALIFORNIA REGIONAL WATER

JUN 15 1998

QUALITY CONTROL BOARD

Subject: Comments on (a) Levine-Fricke-Recon Draft Final Evaluation of Existing Interim Remedial Measures and Work Plan for Implementation of Future Interim Remedial Measures, and (b) Quality Assurance Project Plan for Site Investigation, the Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California (EKI 970001.85)

Dear Mr. Johnson:

On behalf of our client, Chiron Corporation ("Chiron"), Erler & Kalinowski, Inc. ("EKI") has prepared comments on the following documents related to Sherwin-Williams Facility located at 1450 Sherwin Avenue, Emeryville, California:

- *Draft Final Evaluation of Existing Interim Remedial Measures and Work Plan for Implementation of Future Interim Remedial Measures, Sherwin-Williams Facility 1450 Sherwin Avenue, Emeryville, California* ("Draft IRM Evaluation Report"), dated 20 May 1998; and
- *Quality Assurance Project Plan for Site Investigation at the Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California*, dated 30 April 1998 ("QAPP").

These documents were prepared by Levine-Fricke-Recon ("LFR") on behalf of the Sherwin-Williams Company ("SW") pursuant to Cleanup and Abatement Order No. 98-009 issued by the Regional Water Quality Control Board ("RWQCB") on 18 February 1998 (RWQCB, 1998).

I. COMMENTS ON THE DRAFT IRM EVALUATION REPORT

As discussed in prior comments submitted to the RWQCB (EKI, 1997b), Chiron is concerned about the effectiveness of the existing IRMs at the Sherwin-Williams Facility at 1450 Sherwin Avenue in Emeryville, California ("SW Site"). The fundamental basis

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of this concern is the increasing outward hydraulic gradient across the slurry wall and increasing concentrations of chemicals of concern ("COCs") outside of the slurry wall (EKI, 1997a; EKI, 1997b; EKI, 1997c).

Chiron supports rapid implementation of any modifications and expansions to the existing IRMs that will stop further migration of COCs from the SW Site and does not object to the work proposed by SW in the Draft IRM Evaluation Report to improve the IRMs. However, Chiron believes that Draft IRM Evaluation Report:

- (a) does not provide sufficient information to support conclusions made regarding the effectiveness of the existing IRMs;
- (b) does not provide sufficient information to assess adequately the proposed modifications and expansions to the IRMs;
- (c) does not provide the necessary criteria or procedures to verify that the proposed modifications will be adequate or effective; and
- (d) does not provide a schedule for meeting the stated objectives of the IRMs.

More specific comments relating to each of these issues are presented below.

I. A. Comments Regarding Assessment of IRM Effectiveness

1. No discussion or evaluation of concentrations of COCs outside of the slurry wall is provided. Chemical concentrations and trends in wells outside the slurry wall are not reported at all. Such an evaluation is critical to judge the effectiveness of the IRMs. The cause and significance of any increasing COC concentrations in monitoring wells outside of the slurry wall should be included in the IRM Evaluation Report. For reference, figures depicting arsenic concentrations detected in selected monitoring wells located outside of the slurry wall have been included as Attachment A.
2. No discussion or evaluation of downward vertical hydraulic gradients and potential downward vertical migration of COCs within the area of the slurry wall is provided. The cause and significance of downward vertical gradients and potential downward COC migration should be included in the IRM Evaluation

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- (c) does not provide the necessary criteria or procedures to verify that the proposed modifications will be adequate or effective; and
- (d) does not provide a schedule for meeting the stated objectives of the IRMs.

More specific comments relating to each of these issues are presented below.

I. A. Comments Regarding Assessment of IRM Effectiveness

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2. No discussion or evaluation of downward vertical hydraulic gradients and potential downward vertical migration of COCs within the area of the slurry wall is provided. The cause and significance of downward vertical gradients and potential downward COC migration should be included in the IRM Evaluation

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Report, particularly due to increasing water levels within the A-aquifer zone caused by the existing IRMs.

3. Conclusions regarding the hydraulic effectiveness of the slurry wall are not supported and should be removed from the IRM Evaluation Report. Although increasing water levels within the wall do indicate that the slurry wall has a lower hydraulic conductivity than surrounding soils (i.e., estimated by SW to be in the range between 6.4×10^{-4} centimeters per second to 7.4×10^{-2} centimeters per second; LFR, 1990), this does not demonstrate that COCs are being contained or that chemical migration is being inhibited. The only conclusion that can be made on the basis of existing data is that there is more water flowing into the area of the slurry wall than flowing out. Therefore, given that the quantity of water entering the area within the slurry wall is unknown, the effectiveness of the slurry wall cannot be assessed on the basis of potentiometric head data.

In fact, water level data indicate that groundwater conditions within the slurry wall are not flat or stable and that groundwater continues to migrate from the southeast to the northwest in the area encompassed by the slurry wall (see Figure 3 of IRM Evaluation Report). The effectiveness of the slurry wall needs be reassessed after sources of water to the slurry wall area are identified and mitigated, inward hydraulic gradients are established, and groundwater conditions have stabilized. A schedule, procedures, and criteria for this assessment should be provided in the IRM Evaluation Report. In addition, the IRM Evaluation Report should clearly acknowledge that there have been and currently are outward gradients across the slurry wall all around the Site, which is a fundamental non-compliance with original design goals.

Finally, it should be noted that, contrary to statements made by SW on page 5 of the Draft IRM Evaluation Report, permeability testing conducted at the time that the slurry wall was installed did not verify that the permeability of the wall met the objectives for construction. In fact, the *Interim Remedial Measures Completion Report* states that permeability testing results conducted for the cement bentonite portion of the wall were below specification. However, LFR stated "Since the pumping wells are expected to create an inward hydraulic gradient, it was determined that the measured permeability for the cement-bentonite wall was acceptable" (LFR, 1996). As is demonstrated by the existing data, inward hydraulic gradients have not been achieved.

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4. The elevated potentiometric surface observed at wells MW-4 and MW-5 located on the former Rifkin Property indicates that substantial leakage of groundwater may be occurring across the slurry wall at this location. The competency of the slurry wall at this location is of particular concern because: (a) highly elevated concentrations of COCs exist within the slurry wall immediately upgradient of wells MW-4 and MW-5 (LFR, 1998a); (b) specified permeability criteria for the cement bentonite slurry wall that was installed along the former Rifkin Property were not achieved (LFR, 1996); (c) low pH levels identified in groundwater adjacent to the former SW acid plant may be impacting the cement bentonite slurry wall at this location; and (d) concentrations of COCs have significantly increased in wells MW-4 and MW-5 since the slurry wall was installed. Further assessment of potential leakage across the slurry wall adjacent to wells MW-4 and MW-5 should be performed. Assessment of the competency of the slurry wall in this location is very important because additional IRMs are planned in this area (LFR, 1997) and SW's ability to maintain inward hydraulic gradients across the wall at this location must be verified prior to design and installation of these additional IRMs, which will be located outside of the slurry wall.
5. LFR's calculations indicate that rates of inflow into the slurry wall exceed 30% of measured rainfall rates (page 8 of draft IRM Evaluation Report). One of the primary stated purposes of the cap and storm-water collection system is to "significantly reduce the potential for vertical leaching of chemicals into groundwater from rainwater infiltration". Although the actual sources of water to the SW Site are unclear, these data indicate that objectives of the cap and storm-water collection system are not being met and that appropriate measures need to be taken to stop further infiltration of water into the area of the slurry wall. Specific steps to identify sources of water infiltration should be stated and the schedule for implementation included in the IRM Evaluation Report. The possibility of artesian conditions in the reported former deep production well located on the SW property (EKI, 1997a; EKI 1997b) should also be assessed as a potential source of water inflows to shallower zones .
6. Data presented in the IRM Report indicate that water levels are elevated in the vicinity of the railroad tracks that run internal to the SW site. Although these data indicate that infiltration may be occurring along these tracks, as suggested by LFR, the possibility that gravel backfill along the storm sewer pipeline that runs along the railroad tracks (LFR, 1996) is acting as a preferential pathway for groundwater should also be assessed.

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I. B. Comments Regarding the Need for Procedures, Criteria, and Schedule to Verify that the Proposed IRM Modifications are Adequate and Effective

1. Until inward hydraulic gradients are established, further off-site migration of COCs will continue. Therefore, in order to judge the effectiveness of the proposed IRM modifications, the length of time that will be required to reverse current head differences across the slurry wall must be estimated and a schedule and date by which inward hydraulic gradients will be achieved must be included in the IRM Evaluation Report.

The schedule should also specify minimum reductions in outward hydraulic gradients that will be achieved over time so the effectiveness of the proposed IRM expansions can be assessed and modified as necessary to meet the ultimate schedule for creation of inward hydraulic gradients. The desired magnitude of the inward gradient, i.e., head differences, along the wall and the schedule to achieve it should be specified. The adjoining property owners should not be required to wait years to find out if the modified IRMs will meet the established objectives.

2. Chiron agrees with SW's stated objective that water levels within the slurry wall should be lowered below the existing storm sewer pipeline. However, the elevations of this pipeline and the base of the gravel backfill should be presented in the IRM Evaluation Report so the effectiveness of the IRMs can be independently assessed based on water elevations reported to the RWQCB. The potential for other underground conduits to act as pathways for contaminant migration should also be assessed with water levels within the slurry wall managed appropriately.
3. As indicated by the data presented in the IRM Evaluation Report, the existing IRMs are not adequate or effective and require modification. The schedule, procedures, and criteria that will ultimately be used to determine the effectiveness of the IRMs should be clearly stated in the IRM Evaluation Report. Established criteria should include: (a) minimum head differences that will be maintained across the slurry wall, (b) maximum water level elevations that will be allowed within the slurry wall based on elevations of conduits within the area of the slurry wall, and (c) decreasing trends in COC concentrations outside of the slurry wall. Regular reports evaluating the effectiveness of the modified IRMs should be

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prepared and submitted to the RWQCB. The schedule for submittal of these reports should be included in the IRM Evaluation Report.

II. COMMENTS ON THE QUALITY ASSURANCE PROJECT PLAN

Elevated concentrations of chlorinated volatile organic compounds ("VOCs") have been detected in groundwater samples collected in the vicinity of the former solvent storage area on the Sherwin-Williams Property. For example, trichloroethene ("TCE") was recently detected at 8,200 ug/L in a groundwater sample collected from extraction well EX-2 in September 1997 and tetrachloroethene ("PCE") was detected at 45,000 ug/L in a groundwater sample collected from monitoring well LF-6 in July 1990 (LFR, 1998b). Well LF-6 has since been abandoned and not replaced.

Due to elevated concentrations of non-chlorinated VOCs in these wells (e.g., acetone, methyl ethyl ketone, and toluene), detection limits for TCE, PCE, and other chlorinated VOCs have routinely been elevated in groundwater samples collected by LFR from wells in this area. In order to evaluate concentrations of chlorinated solvents in shallow groundwater near the former solvent storage area on the Sherwin-Williams property, a minimum of one groundwater sample per year from EX-2 should be analyzed using both high and low dilutions to obtain detection limits of 10 ug/L or less for chlorinated VOCs.

Detection limits for TCE, PCE, and other chlorinated VOCs have also routinely been elevated in groundwater samples collected from existing monitoring well LF-3. Well LF-3 is located just southwest of the slurry wall in an area where increasing arsenic concentrations have been observed (EKI, 1997c). In order to verify that chlorinated solvents are not migrating off of the SW site in this area, one groundwater sample per year from monitoring well LF-3 should also be analyzed using both high and low dilutions to obtain detection limits of 10 ug/L or less for chlorinated VOCs.

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For your convenience, we have sent copies of this letter to Sherwin Williams, LFR, and the other members of the consultative work group. If you have any questions, please call.

ERLER & KALINOWSKI, INC.

Vera H. Nelson

Vera H. Nelson, P.E.
Project Manager

Attachment A: Arsenic Concentrations Detected in Selected Monitoring Wells
 Located Outside of the Sherwin William's Slurry Wall
 (i.e., MW-5, LF-3, LF-11, LF-20, LF-21)

cc: Ric Notini (Chiron)
 Barbara Cook (DTSC)
 Susan Hugo (Alameda County Health Agency)
 Randi Parker-Germaine/Paul Germaine (Artist's Cooperative)
 Jody Sparks (Toxic Assessment Group)
 Ignacio Dayrit (Emeryville Redevelopment Agency)
 Mara Feeney (Mara Feeney & Associates)
 Jane Riggan (California DHS)
 Marilyn Underwood (California DHS)
 Larry Mencin (Sherwin Williams)
 Paul Caleo, Esq. (Lawson and Burnham)
 Robert Cave (Bay Area Air Quality Management District)
 Peggy Peischl (Environ)
 Mark Knox (Levine-Fricke-Recon)

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REFERENCES:

EKI, 1997a: Erler & Kalinowski, Inc., 9 April 1997, *Comments on Levine-Fricke-Recon Workplans for Additional Soil and Groundwater Investigations and Expansion of Existing Groundwater Remedial System on the Former Rifkin Property, 4525 to 4563 Horton Street, Emeryville, California.*

EKI, 1997b: Erler & Kalinowski, Inc., 20 June 1997, *Comments on Levine-Fricke-Recon Work Plan for Site Investigation on, the Sherwin-Williams Facility 1450 Sherwin Avenue, Emeryville, California.*

EKI, 1997c: Meeting on 15 October 1997 with representatives from Erler & Kalinowski, Inc., Chiron, Levine-Fricke-Recon, and the RWQCB.

LFR, 1990: Levine-Fricke-Recon, 4 April 1990, *Results of Second Phase Environmental Investigation, Sherwin-Williams Plan, Emeryville, California.*

LFR, 1996: Levine-Fricke-Recon, 19 April 1996, *Interim Remedial Measures Completion Report, Sherwin-Williams Facility, Emeryville, California.*

LFR, 1997: Levine-Fricke-Recon, 2 June 1997, *Work Plan for Site Investigation, The Sherwin-Williams Facility, 1450 Sherwin Avenue, Emeryville, California.*

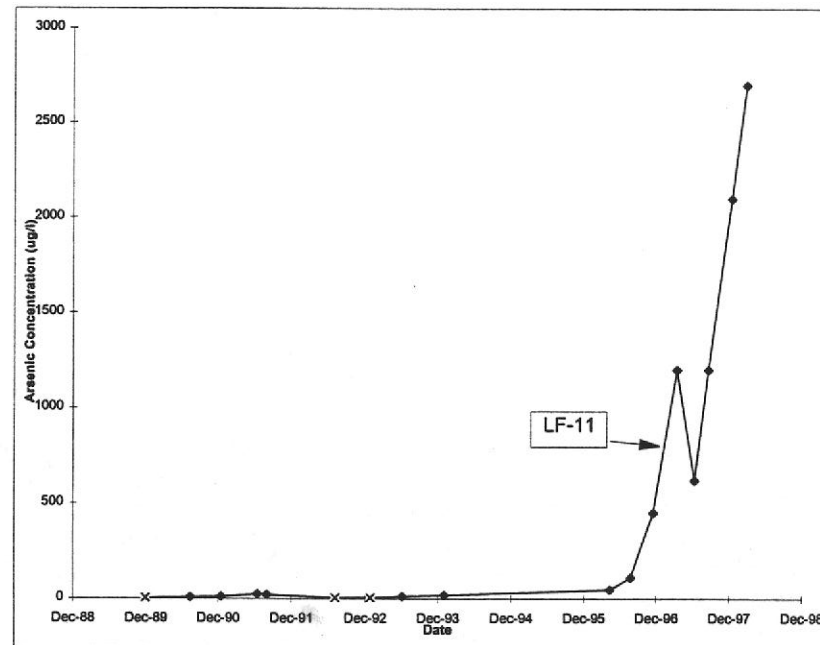
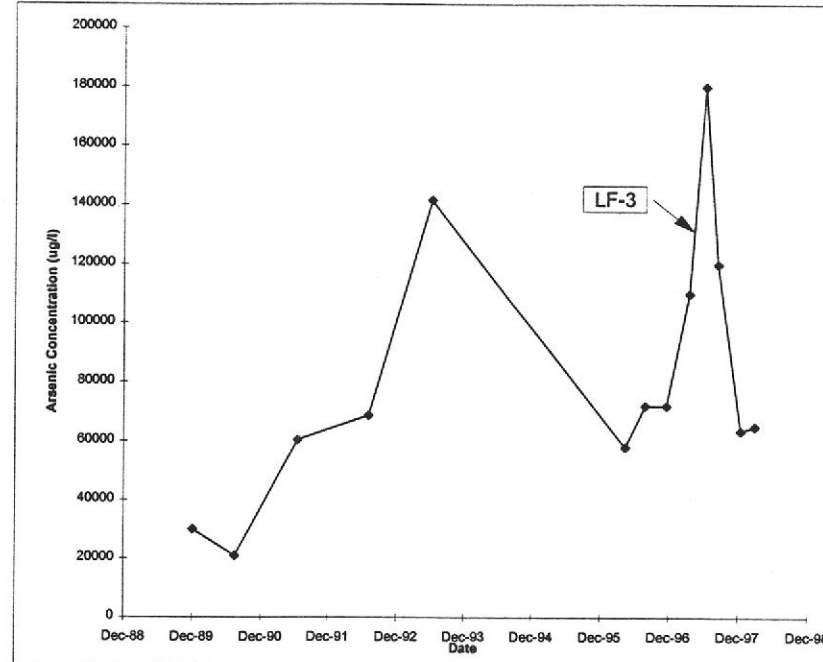
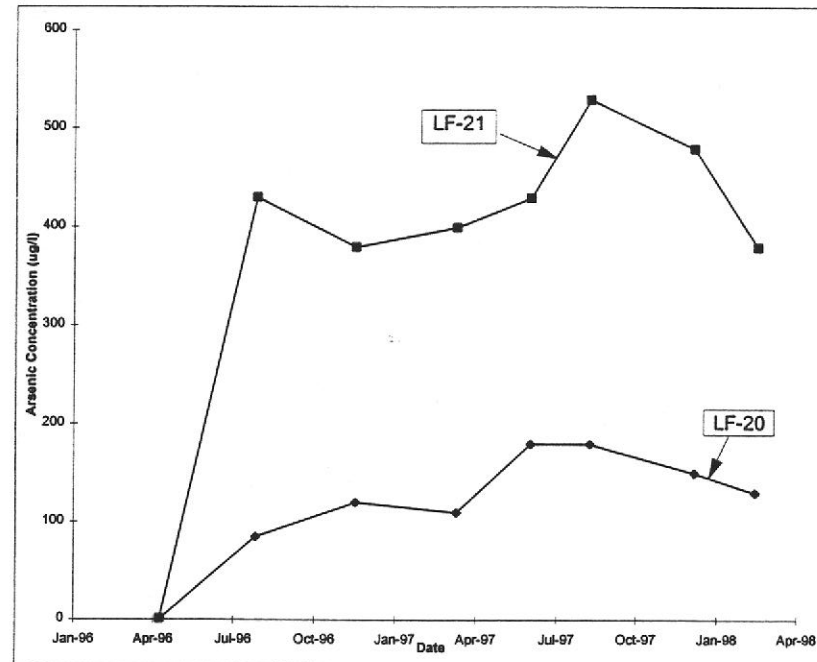
LFR, 1998a: Levine-Fricke-Recon, 30 April 1998, *Quarterly Groundwater Monitoring Report for January 1 to March 31, 1998, Site Cleanup Requirements (SCR) Order No. 98-009, The Sherwin-Williams Facility, Emeryville, California.*

LFR, 1998b: Levine-Fricke-Recon, 20 May 1998, *Draft Final Evaluation of Existing Interim Remedial Measures and Work Plan for Implementation of Future Interim Remedial Measures, Sherwin-Williams Facility, Emeryville, California.*

RWQCB, 1998: Regional Water Quality Control Board, 18 February 1998, *Order No. 98-009, Adopted New Site Cleanup Requirements for the Sherwin-Williams Company, 1450 Sherwin Avenue, Emeryville, Alameda County.*

Attachment A

Arsenic Concentrations Detected in Selected
Monitoring Wells Located Outside of the Sherwin William's Slurry Wall
(i.e., MW-5, LF-3, LF-11, LF-20, LF-21)



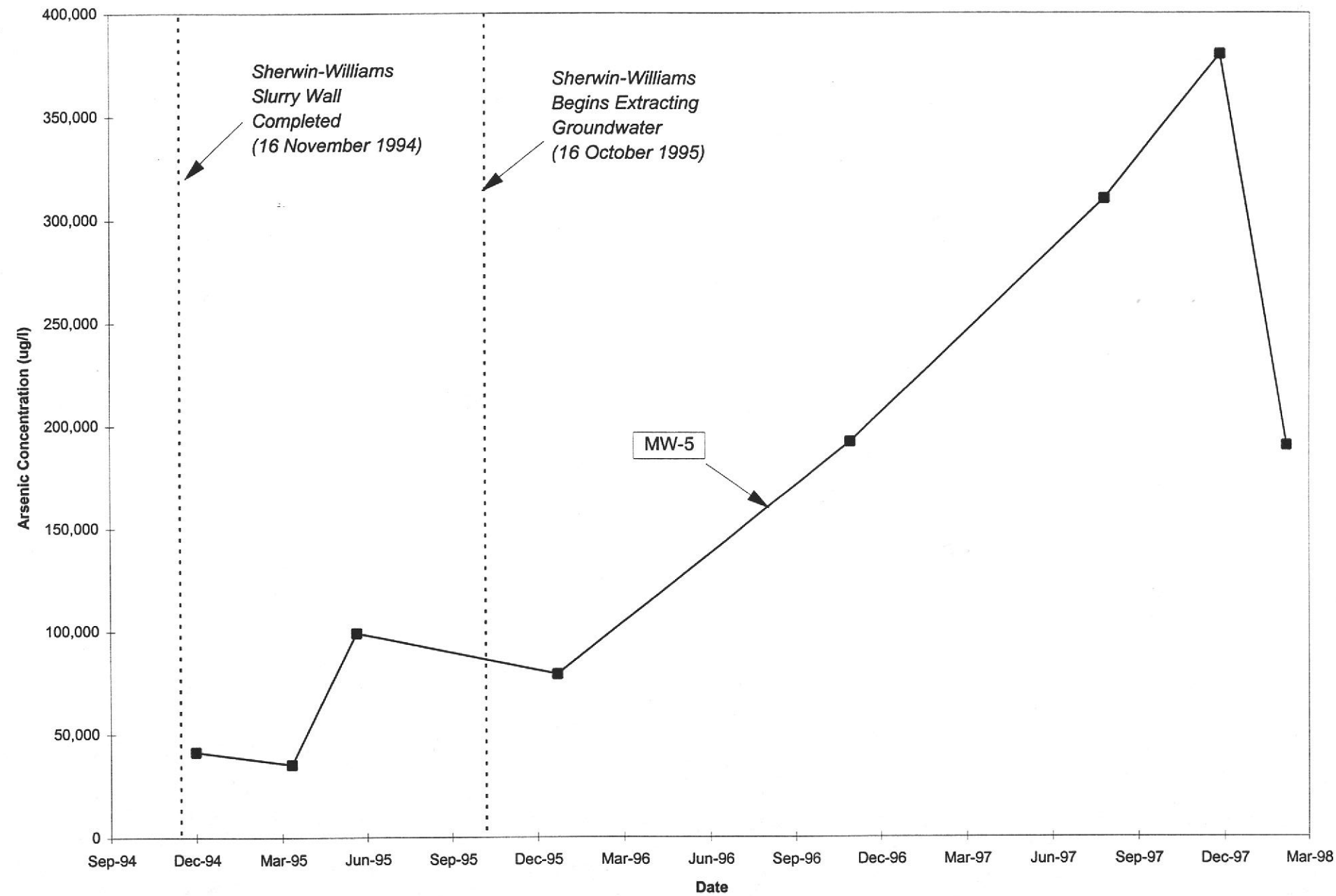
Notes:

1. Samples collected by Levine-Fricke-Recon.
2. For duplicate samples the average of the two concentrations is shown.
3. "X" indicates that arsenic was not detected above analytical reporting limit. The posted value is equal to one-half of the reporting limit.

INCREASING ARSENIC CONCENTRATIONS DETECTED IN MONITORING WELLS OUTSIDE OF THE SLURRY WALL ON THE SHERWIN-WILLIAMS PROPERTY

Erler & Kalinowski, Inc.

Chiron
Emeryville, CA
June 1998
EKI 970001.82



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
June 1998
EKI 970001.82



**CITY OF EMERYVILLE
REDEVELOPMENT AGENCY**

2200 POWELL STREET, SUITE 1200
EMERYVILLE, CALIFORNIA 94608

(510) 596-4350

98 JUN 16 PM 3:58
EMERSONIAN
PROTECTION

June 12, 1998

Mark Johnson
Regional Water Quality Control Board, San Francisco Bay Region
2101 Webster Street, 5th Floor
Oakland, CA 94612

Re: "Evaluation of Existing Interim Remedial Measures and Work Plan for
Implementation of Future Interim Remedial Measures - Sherwin Williams"

Thank you for the opportunity of making written and oral comments to this report. These comments/questions are made considering that comments made by the Consultative Working Group at the June 10, 1998 meeting at your offices have been noted and will be incorporated into the final document.

1. Please provide a conceptual graphic(s) depicting existing and ideal differences in water elevations on both sides of the slurry wall, depths of the water bearing zones, elevations at points of extraction, storm drains and other man-made conduits.
2. In areas where "city water sources" are cited, please make reference to what the actual or suspected sources are (i.e., supply, storm, sewer, etc.). Given the fact that the City does not own the water perhaps it is more appropriate to use the term "other water sources". Also, given indications that the slurry wall may be inadequate, is it not premature to rule out groundwater as one of the "other water sources"? Please provide a map showing areas of known and suspected water sources and conduits.
3. Figure 4 and Section 2.2.1 describe suspected areas where surface waters may be infiltrating the cap. The City understands that the cap is composed of a concrete asphalt layer. Are the cap and underlying soils structurally able to support foot/vehicle traffic loads and Baker tanks - and could these be causes of infiltration? The report states that a "superficial" inspection of the cap was conducted. Will a more extensive inspection of the cap be conducted? What are the criteria for measuring stability?

4. Is there any correlation between the locations of the worse groundwater and soil hotspots? If so, would it be appropriate to conduct in-situ soil treatment on the most contaminated soils to reduce leaching to groundwater? Alternatively, while we are aware that these are interim measures, given the lack of proven technologies to stabilize arsenic impacted soil, would it not appear to be most appropriate to remove and off-haul these soils? The proximity of this site to Temescal Creek, which flows into the Emeryville Crescent and San Francisco Bay concerns the City immensely that arsenic will continue to leach into the groundwater for many years to come and impact these areas. While it may be the rightful jurisdiction of the State and Federal governments to protect these bodies of water, it is the City of Emeryville that holds the public trust over the Emeryville crescent tidelands, as exercised by the City on May 2, 1989, by Resolution No. 89-31. The Emeryville Crescent is an environmentally sensitive area which is to be preserved in its natural state as ecological units for scientific study, as open space and an environment that provides food and habitat for birds and marine life. Consequently, protection of the crescent's water quality is of critical concern and continued exposure to arsenic impacted groundwater is inconsistent with the Trust. Likewise, discharges of treated groundwater directly to Temescal Creek are of concern.
5. As noted above, the Emeryville Crescent is an important ecological resource that warrants protection from discharges of arsenic impacted groundwater. The storm water discharge system utilizes Temescal Creek which flows directly into the Crescent. The City understands that arsenic impacted groundwater may possibly be infiltrating the storm water discharge system in the area, as well as the sanitary sewer system, thereby discharging untreated groundwater to Temescal Creek, the Emeryville Crescent and the EBMUD treatment facility. Please consider the replacement of sanitary sewer and storm water facilities in the area as an interim remedial measure.
6. As you are aware, portions of the sidewalk along the west side of Horton Street adjacent to the site were recently fenced off and contained, due perhaps to the inadequacy of the slurry wall, resulting in the presence of arsenic crystals in the public right-of-way. This fence remains in place to this day in order to protect the public from this public nuisance. All the more reason to order the removal of soil, at least to the street level, to remove this on-going trespass into the public right-of-way.
7. The City vehemently contests any claims of delayed approval of connection from the treatment system to the sewer system, and any references to this must be stricken from the report. The delay stems from Sherwin Williams' refusal to comply with valid and reasonable conditions of the City. As you will recall, on very short notice, the City Manager, City Attorney, other City staff and myself met with you, Larry Mencin of Sherwin-Williams and Mark Knox of Levine-Fricke-Recon in the City's offices on

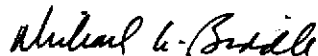
page 3
Mark Johnson
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February 3, 1998, to discuss the conditions under which the City would issue a permit. The City Attorney prepared the conditions which were discussed and agreed to by Mr. Mencin and Mr. Knox and sent them to these gentlemen and Mr. Allan Danzig the very next day, February 4, 1998. A copy of the cover memo, conditions and facsimile confirmation sheets are enclosed. Thereafter, Sherwin-Williams continued to try and negotiate revisions since they didn't want to pay the sewer connection fee set forth as condition no. 2. Further, and of greater significance to the City and its Redevelopment Agency, Sherwin-Williams was unable to obtain the confirmation from EBMUD that these discharges of approximately 29,000 gallons of water per day would not be counted towards the allowable design flows from Sewer Basin 23 to the EBMUD Interceptor. To the extent Sherwin-Williams' discharges take up capacity of the sewer basin, it effectively precludes redevelopment of other areas of the City. However, recently, the City Attorney has advised that discharge of groundwater to the sanitary sewer system is not permitted by the City's Sanitary Sewer Ordinance. Therefore, it appears that it will be necessary for Sherwin-Williams to request an amendment to the Sewer Ordinance or some other special consideration before such a connection is made. Such an amendment or special consideration will require an action of the Emeryville City Council along with the appropriate environmental review under the California Environmental Quality Act. All costs of conducting the review, including City staff time, and all costs of appropriate mitigation measures will be the responsibility of Sherwin-Williams.

With these comments, we are inviting Sherwin Williams' representatives to make a presentation before City Council on the June 16 or July 21, 1998 meetings. Please contact Michael Biddle, City Attorney, at (510)596-4381 or me at (510)596-4356 to make arrangements for the presentation.

Thank you again for the opportunity to comment.

Sincerely,



for
Ignacio Dayrit
Project Manager

cc. Emeryville City Councilmembers
John A. Flores
Michael Biddle
Distribution List



CITY OF EMERYVILLE

INCORPORATED 1896

OFFICE OF THE CITY ATTORNEY
2200 POWELL STREET, 12TH FLOOR
EMERYVILLE, CALIFORNIA 94608

TEL: (510) 596-4370 FAX: (510) 596-3724

To: Larry Mencin, Sherwin-Williams
Mark Knox, Levine Fricke Recon
Alan Danzig, Sherwin-Williams

From: Michael G. Biddle, City Attorney *WMB*

Date: February 4, 1998

Subject: Temporary Sewer Connection Conditions of Approval

In accordance with our discussions yesterday enclosed are the conditions under which the City is willing to authorize the initial installation of your groundwater extraction/treatment system to the City's sanitary sewer system. Note that based on conversations with our Planning Director we will need to conduct an analysis of the impact of this discharge program on the aforementioned system. We will require a deposit to conduct this study which will obviously utilize the results from the flow meter readings. These readings will be analyzed to determine if anything needs to be done to mitigate any impacts on the system. We believe \$10,000 is an outside figure and will not in fact cost this much; however, Sherwin-Williams will be responsible for the costs of this study.

cc: Ravi Arulanantham, RWQCB
Sumadhu Arigala, RWQCB

Ed. Sanyin +15-2674198

CONDITIONS OF APPROVAL FOR ENCROACHMENT PERMIT FOR PURPOSES OF TEMPORARY CONNECTION TO SANITARY SEWER FOR SHERWIN-WILLIAMS' GROUNDWATER EXTRACTION SYSTEM PURSUANT TO RWQCB ORDER

1. Prior to execution of this temporary permit by the City of Emeryville ("City"), the Sherwin-Williams Company ("Applicant") shall provide City a complete copy of the approved permit and any conditions thereto, issued by the East Bay Municipal Utility District ("EBMUD") for the discharge of treated groundwater into the sanitary sewer system. Applicant shall also provide City written confirmation from EBMUD that the groundwater discharged by the Applicant pursuant to this temporary permit will not be counted towards the allowable design flows from the City of Emeryville and the City of Oakland, Basin 23, into the EBMUD Interceptor.
2. Applicant hereby acknowledges that a sewer connection fee of \$136,145.00 is presently required pursuant to ordinances of the City. Said fee is calculated based on the City adopted fee of \$746.00 per single family dwelling equivalent and Applicant's permit from EBMUD which allows a discharge of 28,800 g.p.d. A single family dwelling equivalent assumes a discharge of 640 cubic feet of water per month. Said sewer connection fee is hereby deferred by City for the period of this temporary permit but shall be assessed and collected by City at the then current rate in effect upon issuance of a permit renewal.
3. Applicant is only authorized to maintain the temporary sewer connection for the discharge of treated groundwater pursuant to permit from EBMUD and the Regional Water Quality Control Board ("RWQCB") for a period of one (1) year from the date this temporary permit is executed by City. If Applicant desires to continue the use of the sewer connection after said one (1) year period, Applicant shall reapply to the City for a new sewer connection permit ten (10) months from the date this temporary permit is executed, pay the sewer connection fee due as set forth in Section 1 above and comply with all reasonable conditions of the City required for issuance of the permit. Applicant acknowledges that such conditions may include taking reasonable and appropriate steps to mitigate the impacts, if any, of Applicant's discharge on the capacity of the sanitary sewer system, Basin 23, as identified by the study referred to in section 7 below.
4. Applicant shall only discharge treated groundwater as permitted by EBMUD and RWQCB into the sanitary sewer system.
5. Applicant shall meter all discharges into the City's sanitary sewer system and shall provide City with complete copies of quarterly monitoring reports that Applicant is required to submit to EBMUD. Said reports shall be forwarded to the attention of Maurice Kaufman, Sr. Civil Engineer, City of Emeryville, 2200 Powell Street, 12th Floor, Emeryville, CA 94608. Applicant shall pay the sewer user fee based on the rate of discharges shown on said meter. Sewer user fees are imposed by City ordinance and are collected by EBMUD.
6. Applicant shall discharge treated groundwater to the sanitary sewer system at a rate that will not surcharge the sanitary sewer system. In the event of a surcharge as determined by the City Engineer in his/her sole discretion, Applicant shall immediately shut-off the groundwater extraction system at the direction of the City Engineer or his/her designee.

7. Upon execution of this temporary permit by Applicant, the City will immediately request EBMUD to install one (1) flow meter to assist the City in studying the impacts of Applicant's discharges on the City's sanitary sewer system, Basin 23. Upon receipt of an invoice from EBMUD for the provision and installation of said flow meters City shall transmit said invoice to Applicant for immediate payment to EBMUD. Applicant shall make payment to EBMUD for the full amount of said invoice within thirty (30) calendar days of receipt of said invoice. Concurrently with the execution of this temporary permit Applicant shall deposit \$10,000 with the Planning and Building Department to conduct a focused analysis in conformance with the California Environmental Quality Act ("CEQA") of the impacts of the issuance of a permanent permit for the discharge of 28,800 g.p.d. of treated groundwater on the City's sanitary sewer system, Basin 23. Applicant shall bear all costs of said study and any amounts held by City in excess of funds on deposit by Applicant shall be refunded to Applicant upon completion of said analysis.

8. Applicant shall take all reasonable steps to sufficiently screen, shield and muffle the groundwater extraction equipment in order to reduce noise impacts to the immediate neighborhood, if necessary.

9. Applicant shall indemnify, defend and hold harmless the City of Emeryville and its officers, officials, employees and agents from and against any and all liability, loss, damage, expense and cost, including without limitation reasonable attorney's fees, of every nature and description arising out of or in connection with the City's issuance of this temporary permit or the Applicant's performance of the work hereunder or its failure to comply with any of its obligations in carrying out said work, except such loss or damage which is caused by the active negligence, sole negligence or wilful misconduct of the City. For purposes of this provision, issuance of this temporary permit and all work by City necessary for the issuance of this permit shall not be deemed to be an act of active negligence, sole negligence or wilful misconduct by the City.

10. Failure of Applicant to comply with any of these conditions of approval shall result in the automatic and summary revocation of this temporary permit and City shall be deemed authorized to take all necessary steps to immediately remove and disconnect the groundwater extraction system from the sanitary sewer system.

Agreed to and accepted this ____ day
of _____, 1998.

Approved this ____ day of _____, 1998.

The Sherwin-Williams Company

The City of Emeryville, a municipal
corporation

By: _____

John A. Flores, City Manager

Its: _____

Hank Van Dyke, Public Works Director

TRANSMISSION VERIFICATION REPORT

Larry Merini

TIME : 02/04/1998 16:32
NAME :
FAX :
TEL :

DATE, TIME	02/04 16:30
FAX NO./NAME	912165662730
DURATION	00:02:03
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

TRANSMISSION VERIFICATION REPORT

Alan Danzig

TIME : 02/04/1998 16:29
NAME :
FAX :
TEL :

DATE, TIME	02/04 16:27
FAX NO./NAME	912165661708
DURATION	00:01:28
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

TRANSMISSION VERIFICATION REPORT

Mark Knox

TIME : 02/04/1998 16:26
NAME :
FAX :
TEL :

DATE, TIME	02/04 16:24
FAX NO./NAME	95522246
DURATION	00:01:48
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

TRANSMISSION VERIFICATION REPORT

Ed Saugster

TIME : 02/23/1998 15:33
NAME :
FAX :
TEL :

DATE, TIME	02/23 15:32
FAX NO./NAME	914152674198
DURATION	00:01:28
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM