

rec'd 11/21/96

November 20, 1996

3042.95-004

via Federal Express

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

Subject: Work Plans for the Rifkin Property, 4525 to 4563 Horton Street, Emeryville, California

Dear Sum:

On behalf of the Sherwin-Williams Company, Levine·Fricke·Recon Inc. (LFR; formerly Levine·Fricke and Recon Environmental) has prepared the following work plans to address additional investigations on portions of the Rifkin Property at 4525 to 4563 Horton Street, in Emeryville, California:

- Work Plan for Sample Collection and Laboratory Analyses of Building Material and Precipitate on a Portion of the Rifkin Property (Revision 1)
- Work Plan for Additional Soil and Groundwater Investigations Rifkin Property

The work plan involving building material sampling has been revised (the previous version was dated November 7, 1996) to address comments raised by Chiron. This work plan describes the proposed scope of work to evaluate the potential migration of arsenic into the brick wall and/or mortar at the Rifkin Property adjacent to the Sherwin-Williams site.

The work plan involving soil and groundwater sampling has been prepared to address data gaps regarding the impact of chemical migration from the Sherwin-Williams site as well as potential impacts from other upgradient and on-site sources of contamination.

We would appreciate an expedited review of these work plans by the RWQCB, so that the necessary data can be collected and Chiron is able to move forward promptly with their building demolition. Because the collection of data in the southern portion of the Rifkin property is the highest priority, the work near the wall will be conducted before building demolition. The other work may be done before or after building demolition, depending on the schedule to be worked out with Chiron.

If you have any questions, please call John Gerulis of Sherwin-Williams at (216) 566-2139 or the undersigned at (510) 652-4500.

Sincerely,



Mark D. Knox, P.E.
Principal Engineer

Enclosures

cc: Dennis Mishek, RWQCB
Steve Morse, RWQCB
Susan Hugo, Alameda County Health Agency
Ric Notini, Chiron
Vera Nelson, EKI
Dave Gustafson, Sherwin-Williams
Larry Mencin, Sherwin-Williams
John Gerulis, Sherwin-Williams
Ignacio Dayrit, City of Emeryville

bcc: Allen Danzig, Sherwin-Williams
Ed Sangster, McKenn & Cuneo

**Work Plan for Sample Collection and Laboratory
Analysis of Building Material and Precipitate on a
Portion of the Rifkin Property
4525 to 4563 Horton Street,
Emeryville, California**

**November 20, 1996
LF 3402.95-004
(Revision 1)**

Prepared for
The Sherwin-Williams Company
101 Prospect Avenue, NW
Cleveland, Ohio 44115

 **Levine·Fricke·Recon**
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS



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1.0 INTRODUCTION AND OBJECTIVES

Levine·Fricke·Recon (LFR) has prepared this revised work plan for sample collection and laboratory analysis of building material and precipitate on a portion of the Rifkin Property, 4525 to 4563 Horton Street, Emeryville, California (the "Site," see Figure 1). The previous version of this work plan was dated November 7, 1996. This revised version addresses comments received from Chiron at the RWQCB meeting on November 13, 1996 and detailed in Erler & Kalinowski's November 19, 1996 letter. This work plan presents the proposed scope of work to evaluate the potential migration of arsenic in soils adjacent to the Site into building materials (brick and mortar) at the Rifkin Property (the "Building"), specifically the south wall of the Building, which is adjacent to the "arsenic source area" at the Sherwin-Williams Plant at 1450 Sherwin Avenue, Emeryville, California.

2.0 SCOPE OF WORK

Based upon the objectives described above, the proposed scope of work includes the tasks listed below.

- Task 1: Sample Collection
- Task 2: Laboratory Analysis
- Task 3: Report Preparation

Detailed descriptions of the services to be provided under each work task are presented below.

Task 1: Sample Collection

Sample collection will include the collection of building materials (brick and mortar), precipitate samples (if present), and paint chips (if present) at four locations along the Building's southern wall. In addition, to assess background levels, samples will be collected at two locations on the eastern or western walls of the Building at a location as far as possible to the north where impacts from the Sherwin-Williams operations would not be expected.

Sampling will be conducted by a qualified Levine·Fricke·Recon soil scientist, geologist, or engineer, under the supervision of a California Registered Engineer. Sampling equipment will be cleaned before each use by washing with Alconox (a laboratory-grade detergent), and rinsing with potable water.

Brick, Mortar and Precipitate Sampling Along South Wall

To evaluate the potential migration of arsenic from the Sherwin-Williams Site into building materials at the Rifkin Property, we propose to collect samples of brick, mortar, precipitate (if any), and paint chips (if any) at each of four locations along the southern wall of the Building. Sampling will be conducted along interior and exterior faces of the southern wall at locations approximately 40 feet (ft), 80 ft, 120 ft, and 160 ft from the southwestern corner of the building (see Figure 1).

At each of the four locations along the southern wall, one set of samples (brick, mortar, precipitate, if any, and paint chips, if any) will be collected at approximately 1'-6" feet above ground surface, and one set of samples will be collected at approximately 8 feet above ground surface on the external side of the southern wall (above grade of the Sherwin-Williams site remedial cap). In addition, one set of samples will be collected at approximately 1 foot above ground surface; one set of samples will be collected at approximately 5 feet above ground surface (opposite the external sample location), and one set of samples will be collected at approximately 11'-6" above ground surface (opposite the external sample location) on the internal side of the southern wall at each location (above grade of the Rifkin foundation slab). The three easternmost locations along the southern wall will be within the cinderblock-style brick. The westernmost location on the southern wall will be within the standard-style brick. Figure 2 shows a cross-sectional view of a proposed sampling location.

Precipitate samples (where present) will be collected using a clean trowel, and will be scraped into properly labeled laboratory-supplied 4-ounce glass jars. Pain chip samples (where present) will be collected using a clean paint scraper tool and will be placed into properly labeled laboratory-supplied 4-ounce glass jars. The exact location of the collected precipitate and paint samples may deviate slightly from the dimensions shown on the figures, depending on their actual presence in the field. The samples will be stored in a chilled ice chest, and maintained under strict chain-of-custody protocols until submitted to the analytical laboratory.

Brick and mortar samples will be collected using a clean hammer and chisel. Prior to collecting samples, the surface of the brick and/or mortar will be scraped off, allowing samples to be collected from interior portions of the brick and mortar. Each brick or mortar sample will be "chipped off" the wall and will be placed directly into properly labeled laboratory-supplied 4-ounce glass jars. Each sample will be at least one inch in diameter. The samples will be stored in a chilled ice chest, and maintained under strict chain-of-custody protocols until submitted to the analytical laboratory.

Background Brick and Mortar Sampling

Four brick and mortar samples will be collected from two locations along internal walls not adjacent to the Sherwin-Williams "arsenic source area" to assess background levels of the chemicals of concern. The samples will be collected as far north as possible, in

locations far enough away from the south wall that potential impact from the Sherwin Williams site would not be expected to have occurred. One location will be within standard-style brick, and the other will be within cinderblock-style brick. The brick and mortar samples will be collected using the techniques described above.

Task 2: Laboratory Analysis

The brick, mortar, and precipitate samples collected during the investigation will be submitted for chemical analysis to American Environmental Network (AEN) of Pleasant Hill, a California state-certified laboratory.

Samples will be analyzed for total arsenic, lead, and zinc using EPA Method Series 6000, and for pH. In addition, mortar and precipitate samples will be analyzed using the cation-anion scan which describes general mineral content (e.g., calcium, chloride, copper, iron, magnesium, manganese, sodium, sulfates, and zinc).

Task 3: Report Preparation

Upon receipt of the final analytical results, Levine·Fricke·Recon will prepare a letter report to document the work activities described above. This report will describe the field activities conducted, present brick, mortar, precipitate, and paint sample results, and present conclusions based on the analytical results.

HORTON STREET

RIFKIN PROPERTY

IMPERVIOUS CAP WITHIN SLURRY WALL

Brick Wall

160'

120'

80'

40'

Sampling Locations Along Interior and Exterior Faces of Brick Wall

EX-3

SHOP

BOILER HOUSE

SHERWIN-WILLIAMS

WAREHOUSE

WAREHOUSE AND OFFICE

TRI-BIO BIOLOGICAL TREATMENT SYSTEM

WAREHOUSE

FACTORY

FACTORY

ANDCO ELECTROCHEMICAL TREATMENT SYSTEM

WAREHOUSE OFFICE

WAREHOUSE

NPDES Storm Sewer Outfall

EX-1

EX-2

EXTRACTION PIPING

PAVED PARKING AREA

SOIL-BENTONITE SLURRY CUT-OFF WALL

EDGE OF PAVEMENT AND EASEMENT LINE

SHERWIN AVE

TEMESCAL CREEK



EXPLANATION

- Property boundary
- - - - - Underground extraction piping
- Aboveground extraction piping
- ⊙ Containment area ground-water extraction well location

0 40 80 FEET

SHERWIN-WILLIAMS COMPANY

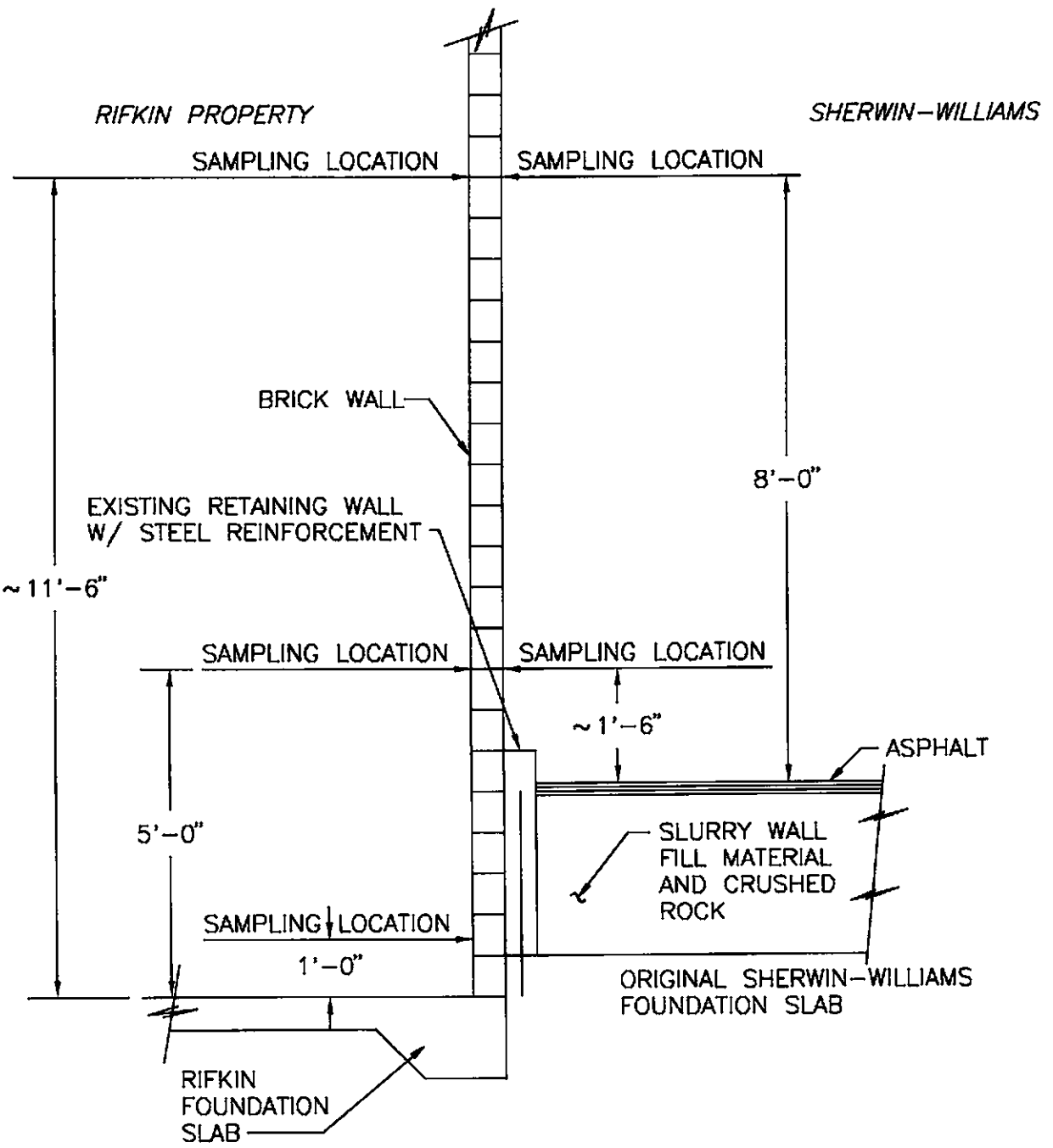
Plan View
Wall Sampling Locations

Levine-Fricke-Recon

Project No. 3042

Figure 1

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3042B007.DWG 110196DAT



NOT TO SCALE

SHERWIN-WILLIAMS
Section View
Wall Sampling Locations

Levine-Fricks-Recon

Figure 2

Project No. 3042

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