



SEQUOIA ENVIRONMENTAL
Consulting Services

360 - 17th Street, Room 205
Oakland, CA 94612
(510) 614-1900
Fax (510) 614-2923

September 9, 1996

Ms. Pamela J. Evans
Senior Hazardous Materials Specialist
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: Lead Base Paint Inspection
and Risk Assessment Workplan
4701 San Leandro Street
Oakland, California

ENVIRONMENTAL
PROTECTION
96 SEP 10 AM 10:06

Dear Ms. Evans:

Enclosed for your review and approval is the lead base paint inspection and risk assessment workplan for 4701 San Leandro Street in Oakland, California.

The field work will begin as soon as we receive your approval.

Thank you for your cooperation.

Sincerely,

Chris Wabuzoh
REA #02842
Senior Geologist
DHS Inspector/Assessor #11957

Enclosure



**LEAD BASE PAINT INSPECTION
AND
RISK ASSESSMENT WORKPLAN**

**4701 San Leandro Street
Oakland, California**

Prepared For

Mr. Francis Collins
San Leandro Street Project
6050 Hollis Street
Emeryville, California 94608

Prepared By:

Sequoia Environmental

&

Environmental Lead Detection, Inc.

Project Code: SLA-04
September 9, 1996

TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
1.1 Purpose and Objectives	1
1.2 Scope of Work	1
2.0 SITE BACKGROUND	1
3.0 SAMPLING PLAN	3
3.1 Exterior And Interior Areas	3
3.2 Soil Sampling	4
3.3 Water Sampling	4
3.4 Sampling Equipment	4
4.0 PROJECT REPORT	5
5.0 PROFESSIONAL SIGNATURES	5

FIGURES

FIGURE 1 Site Location Map

FIGURE 2 Site Plan

APPENDICES

APPENDIX A Lead Certificates

APPENDIX B Radiation Training Program Certificate

**LEAD BASE PAINT INSPECTION
AND RISK ASSESSMENT
WORKPLAN
4701 SAN LEANDRO STREET
OAKLAND, CALIFORNIA**

1.0 INTRODUCTION

Mr. Francis Collins retained Sequoia Environmental to prepare a workplan for lead base paint inspection and risk assessment for the property located at 4701 San Leandro Street in Oakland, California (see Fig 1, Site Map). The activities performed are listed below.

1.1 Purpose and Objectives

The purpose of the lead base paint inspection and risk assessment is in compliance with the directives issued by the Alameda County Department of Environmental Health.

The goals of the inspection and assessment are listed below.

- Address the concerns of the Alameda County Department of Environmental Health.
- Document all activities performed at the site.

1.2 Scope of Work

Describe procedures for performing the lead base paint inspection and risk assessment using Housing and Urban Development (HUD) guidelines.

2.0 SITE BACKGROUND

The subject site is located in an area zoned for light industrial activities. There are thirteen buildings on the subject site (see Figure 2). The buildings are occupied by tenants who use them for small businesses, art studios and workshops.

Previous environmental activities performed at the site included a Phase I environmental site assessment, tank removal and soil sampling, and preliminary lead sampling.

In 1991, a Phase I Environmental Site Assessment was performed at the subject site by RGA of Emeryville. The assessment revealed the presence of three fuel underground storage tanks.

On October 15 to 18, 1991, RGA supervised the removal of one steel underground storage tank and the destruction of two concrete underground storage tanks by Verls Construction, Inc., (VCI) of San Leandro. The steel underground storage tank has a capacity of 20,000 gallons and contained fuel oil. The tank was enclosed in a secondary containment of concrete which had a thickness of 2 to 3 feet with half inch reinforced bars. Each concrete tank had a capacity of 10,000 gallons and contained fuel oil. Soil samples were collected from the tanks' locations with a hand auger. The samples were sent to Carter Analytical Laboratory in Campbell, California for chemical analyses.

The samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), as diesel (TPH-D), aromatic hydrocarbons as benzene, toluene, ethyl benzene and xylenes (BTEX), oil and grease and metals. Laboratory results showed that five of the six insitu samples contained detectable levels of TPH-G (15 ppm to 39.1 ppm). On the basis of the presence of petroleum hydrocarbons, further excavation of the steel tank pit was performed. Laboratory results showed that the insitu samples were below state action levels.

On October 28, 1993, Sequoia Environmental sampled the soil piles that were generated during the tanks' removal. Using a hand auger, eight soil samples were collected from the soil piles. The samples were sent to state-certified American Environmental Network laboratory in Pleasant Hill, California. Under laboratory conditions the eight soil samples were made to two composite samples. The samples were analyzed for TPH-G, TPH-D, oil and grease, BTEX and metals. Laboratory results showed that the soil pile contained detectable levels of petroleum hydrocarbons in the range of C₁₆ to C₄₀ (40 ppm to 2,000 ppm) and lead which ranged from 200 ppm to 5,800 ppm.

On January 17, 1996, the Alameda County Lead Poisoning Prevention Program (Lead Program) conducted a preliminary inspection and risk assessments at the subject site. The findings of the preliminary inspections and assessment showed that some of the paint and dust samples collected at the subject site contained high levels of lead. The subject site was previously owned by National Lead Company. During its occupancy, National Lead used the subject site as a paint manufacturing facility.

On the basis of the laboratory results, the Alameda County Environmental Health Agency concluded that the exterior and interior surfaces of the buildings

at the subject site pose a risk of exposure to lead. To this end, the property owners contracted environmental professionals to perform a comprehensive and thorough risk assessment and lead inspection. The findings of the assessment will inform the property owners of the areas that may contain lead, levels of lead and their present conditions.

On July 18, 19 and 21, 1996, Sequoia Environmental and Bradshaw Environmental performed a pilot survey of the subject site. Lead inspection was performed in four vacant units (15, 18, 31 and 36) and the west stairwell. The inspection was performed with X-ray Fluorescent (XRF) spectrum analyzer. The XRF allows for insitu readings of lead contents without damaging the paints' substrate. The inspection revealed a pattern that appears to show high level readings for lead based paint to be consistent with original or an old paint layer or multi layers beneath the current paint. Recent construction such as unit #31 has comparatively low levels of lead based paint.

3.0 SAMPLING PLAN

The sampling plan for the units and areas surrounding the buildings are described below.

3.1 Exterior and Interior Areas

The buildings and the spaces are all similar and should be assessed as per HUD Guidelines for multi-family units. During the pilot survey it was observed that the units appear to be similar. Representative units selected for the project are listed below and their locations are shown in Figure 2, Site Plan.

Building No.	Unit
1	51
3	29, 30, 31 33
7	12, 13, 45, 46, 47, 48
8	7, 8, 9
9	15, 17, 18, 35, 36, 37, 38, 41, 42
10	1, 54, 55, 59, 60, 62, 63

Since some of the spaces could be converted to live/work uses, and maybe subject to such use contrary to the provisions of the lease, areas that are susceptible to regular contact by young children will be the primary targets for the combination plan. It is hoped that by initially targeting these areas potential

hazards that could affect the young children can be immediately identified and the proper mechanisms be put into place to correct these potential problems. Upon completion of these target areas, random units will be selected based on similarity of construction and surface coatings.

3.2 Soil Sampling

Exterior soil samples should be taken in areas where young children are likely to have contact with and are accessible. These samples should also be taken in accordance with current HUD guidelines outlined in **Chapter 5 Subpart D, Soil Sampling**. Various areas at the subject site fall within the recommended sampling areas for soil. Composite samples of unique areas should be taken whenever feasible. High potential areas such as drip lines should be taken singularly even though HUD has stated that these may be composited.

The soil pile generated during the fuel underground storage tanks' removal has been sampled. Plans for off-site disposal are in progress.

3.3 Water Sampling

Water samples should be taken from representative fixtures in the units. Fixtures should be sampled prior to first use by using a sterile 100 ml containers provided by most analytical laboratories. First, place the container beneath the fixture and turn on fixture to a normal flow rate. Remove container when it is filled with water. Count 30 seconds from the moment the fixture was first turned on. At the expiration of 30 seconds, place a second container beneath the fixture and fill it as well. By utilizing this method one can determine if there is contamination, and where the possible source may be. Should laboratory results show contamination in the first 30 seconds, then possibly the fixture could be leaching lead. If contamination is in the second sample, then it is likely that the solder in the piping lines may be the source.

The water samples will be sent to analytical laboratory accredited by American Industrial Hygiene Association (AIHA) and will be analyzed using Environmental Protection Agency (EPA) protocol. Analytical results of the samples should be less than 15 parts per billion (ppb) which is the current EPA level for lead content in drinking water.

3.4 Sampling Equipment

All tasks involving lead sampling of the exterior and interior areas of the buildings and potable water at the subject site should be performed by California Department of Health Services (DHS) registered Lead Inspectors, Assessors and Project Designers. The inspection should use a combination of X-ray Fluorescence (XRF) technology and Atomic Absorption (AA) analysis when

conducting the inspection. The inspector shall use the performance work sheet for the model that is to be utilized. In addition, the device to be used should be a K-Shell reader rather than an L-Shell reader. The K-Shell can determine lead concentrations through the various levels of paint down to the substrate while the L-Shell reads primarily the top layers of paint. The XRF to be used will be a RMD LPA-1 XRF instrument. The user of the XRF device must be trained and licensed to use the particular model by the products manufacturer. A medical surveillance, respiratory protection, safety programs and procedures for both radiation and lead must be in place and available prior to the commencement of work. Analysis of AA samples should be analyzed by an AIHA accredited laboratory.

4.0 PROJECT REPORT

Upon completion of lead base paint inspection and risk assessment, a comprehensive report will be compiled. The report will contain the items listed below.

- All field observations.
- Laboratory analyses and results of chip and wipe samples.
- Site plan and map.
- XRF readings and sample locations.
- Recommendations for procedures regarding emergency condition, interim controls, substrate correction or abatement measures.

Should abatement be required, a DHS licensed project designer should be used as well as a DHS and California Contractors license for performing lead abatement projects

5.0 PROFESSIONAL SIGNATURES

The following professionals hereby declare that upon approval of workplan by the Alameda County Department of Environmental Health, the guidelines contained herein will be followed during the performance of this project.

Chris Wabuzoh

September 9'96

Chris Wabuzoh
REA #02842
Senior Geologist
DHS Lead Inspector/Assessor #11957

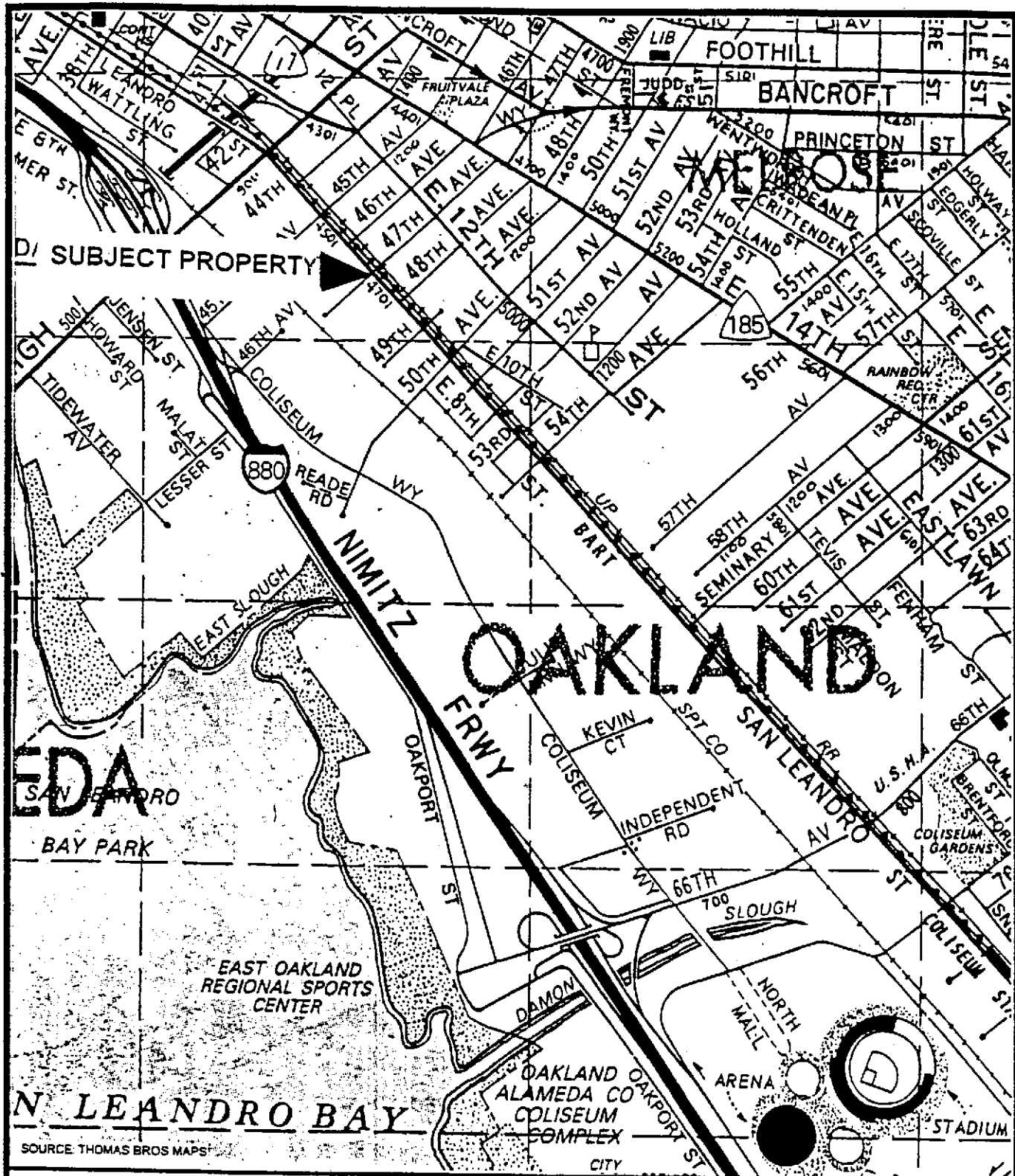
Date

James J. Ratti

9/9/96

James J. Ratti
DHS Inspector/Assessor #1316

Date



DI SUBJECT PROPERTY

FIGURE 1

MAP TYPE: SITE MAP

SITE ADDRESS: 4701 SAN LEANDRO STREET, OAKLAND, CALIFORNIA

DATE: JUNE 6, 1996 PROJECT CODE: SE-069/SLA-01 SCALE: 1" : 2200'

SEQUOIA ENVIRONMENTAL CONSULTING SERVICES

Chris E. Nwabuzoh

Inspector/Assessor
11957 (Exp: 08/15/97)

State of California
Department of Health Services
Lead-Related Construction
Interim Certificate



STATE OF CALIFORNIA HEALTH AND HUMAN SERVICES AGENCY
DEPARTMENT OF HEALTH SERVICES

2151 BERKELEY WAY
BERKELEY, CA 94704-1011



(510) 450-2453

February 16, 1995

Mr. James J. Ratti
603 Anacapa Lane
Foster City, California 94404

Dear Mr. Ratti:

Congratulations! You have met the California Department of Health Services requirements to be Interim Certified as a Lead-Related Construction Inspector/Assessor.

You will receive a photo identification card from the Department of Health Services at a later date. Until then, this letter serves as your proof of Interim Certification by the Department.

Your Interim Certification expires on 02/16/96. Your interim certificate number is I316. To renew your Interim Certification, you must apply for renewal to the Department by 10/19/95.

Thank you for your cooperation.

Sincerely,

Kim Cox, M.P.H., Acting Chief
Lead Accreditation and
Certification Unit,
Childhood Lead Poisoning
Prevention Branch

State of California
Department of Health Services

Lead-Related Construction Interim Certificate

James J. Ratti

Inspector/Assessor
I316 (Exp: 02/15/97)



Certificate of Achievement

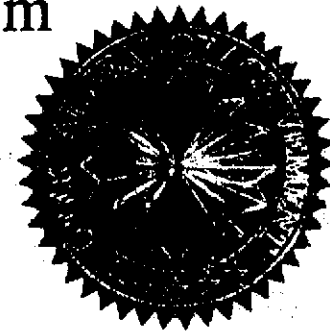
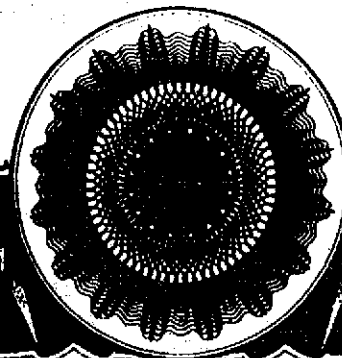
This is to certify that

Jim Ratti
of Environmental Lead Detection

on the Twenty-Fifth day of July 1994 successfully completed the factory training for
RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety
and the Proper Use of the Instrument.


Jacob Paster, Vice-President of RMD
44 Hunt St., Watertown, Massachusetts



RADIOACTIVE MATERIAL LICENSE

Pursuant to the California Code of Regulations, Division 1, Title 17, Chapter 5, Subchapter 4, Group 2, Licensing of Radioactive Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, use, possess, transfer, or dispose of radioactive material listed below, and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders of the Department of Health Services now or hereafter in effect and to any standard or specific condition specified in this license.

1. Licensee	Environmental Lead Detection	3. License No.	6065-90	Amendment No:	3
2. Address	330 Townsend Street, Suite 216 San Francisco, CA 94107	4. Expiration date	June 23, 2001		(5)
Attention:	James Ratti, President Radiation Safety Officer	5. Inspection agency	Radiologic Health Branch Berkeley		

License Number 6065-90 is hereby amended as follows:

6. Nuclide	7. Form	8. Possession Limit
A. Cobalt 57	A. Sealed sources (IPL Model CU5C0057)	A. 2 sources not to exceed 15 millicuries each.

9. Authorized Use

- A. To be used as components of RMD Model LPA-1 X-Ray Fluorescence devices for measurement of lead content of painted surfaces and other materials.

LICENSE CONDITIONS

10. Radioactive materials may be used at temporary job sites of the licensee in areas not under exclusive federal jurisdiction throughout the State of California. Radioactive materials may be permanently stored only at:
- (a) 330 Townsend Street, Suite 216, San Francisco, CA
11. This license is subject to an annual fee for sources of radioactive material authorized to be possessed at any one time as specified in Item 8 of this license. The annual fee for this license is required by and computed in accordance with Sections 30230-30232 of the California Radiation Control Regulations and is also subject to an annual cost-of-living adjustment pursuant to Section 113 of the California Health and Safety Code.
12. Radioactive material shall be used by the following individuals:
- (a) James Ratti
- (b) Maurice R. Brody
- (c) Julio Pineda, Jr.
- (d) Conrad D. Florez
- (e) Mark A. Davis

RADIOACTIVE MATERIAL LICENSE

License Number: 6065-90

Supplementary Sheet

Amendment Number: 3

13. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 7, 8 and 9 of this license in accordance with statements, representations, and procedures contained in the documents listed below. The Department's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- (a) The application with attachments dated June 22, 1994, signed by Sol Levine.
 - (b) The letter with attachments dated July 14, 1995, signed by James Ratti, regarding a change of storage address.
14. (a) The Radiation Safety Officer in this program shall be James Ratti.
(b) The Alternate Radiation Safety Officer in this program shall be Maurice Brody.
15. Sealed sources possessed under this license shall be tested for leakage and/or contamination as required by Section 30275 (c) of the California Radiation Control Regulations.
16. The following individuals are authorized to collect wipe test samples of sealed sources possessed under this license using leak test kits acceptable to the California Department of Health Services:
- (a) the Radiation Safety Officer
 - (b) qualified individuals designated in writing by the Radiation Safety Officer
17. Quantitative analytical assays for the purpose of tests for leakage and/or contamination of sealed sources shall be performed only by persons specifically authorized to perform that service.
18. Records of leak test results shall be kept in units of microcuries and maintained for inspection. Records may be disposed of following Department inspection. Any leak test revealing the presence of 0.005 microcuries or more of removable radioactive material shall be reported to the Department of Health Services, Radiologic Health Branch, 601 N. 7th Street P.O. Box 942732, Sacramento, CA 94234-7320, within five days of the test. This report shall include a description of the defective source or device, the results of the test, and the corrective action taken.
19. At any time the licensee is engaged in making measurements by authority of this license at either a permanent or a temporary job site, the licensee shall have a current copy of each of the following documents available for inspection at the job site:
- (a) A statement authorizing each qualified individual to use radioactive material (See Condition 12).
 - (b) This License.
 - (c) The manufacturer's instruction manual with appropriate emergency procedures.

For the State Department of Health Services

By: Radiologic Health Branch
P.O. Box 942732 Sacramento, CA 94234-7320Date August 21, 1995

RADIOACTIVE MATERIAL LICENSE

License Number: 6065-90

Supplementary Sheet

Amendment Number: 3

13. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 7, 8 and 9 of this license in accordance with statements, representations, and procedures contained in the documents listed below. The Department's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- (a) The application with attachments dated June 22, 1994, signed by Sol Levine.
 - (b) The letter with attachments dated July 14, 1995, signed by James Ratti, regarding a change of storage address.
14. (a) The Radiation Safety Officer in this program shall be James Ratti.
(b) The Alternate Radiation Safety Officer in this program shall be Maurice Brody.
15. Sealed sources possessed under this license shall be tested for leakage and/or contamination as required by Section 30275 (c) of the California Radiation Control Regulations.
16. The following individuals are authorized to collect wipe test samples of sealed sources possessed under this license using leak test kits acceptable to the California Department of Health Services:
- (a) the Radiation Safety Officer
 - (b) qualified individuals designated in writing by the Radiation Safety Officer
17. Quantitative analytical assays for the purpose of tests for leakage and/or contamination of sealed sources shall be performed only by persons specifically authorized to perform that service.
18. Records of leak test results shall be kept in units of microcuries and maintained for inspection. Records may be disposed of following Department inspection. Any leak test revealing the presence of 0.005 microcuries or more of removable radioactive material shall be reported to the Department of Health Services, Radiologic Health Branch, 601 N. 7th Street P.O. Box 942732, Sacramento, CA 94234-7320, within five days of the test. This report shall include a description of the defective source or device, the results of the test, and the corrective action taken.
19. At any time the licensee is engaged in making measurements by authority of this license at either a permanent or a temporary job site, the licensee shall have a current copy of each of the following documents available for inspection at the job site:
- (a) A statement authorizing each qualified individual to use radioactive material (See Condition 12).
 - (b) This License.
 - (c) The manufacturer's instruction manual with appropriate emergency procedures.

For the State Department of Health Services

Date August 21, 1995By: Radiologic Health Branch
P.O. Box 942732 Sacramento, CA 94234-7320

470

SAN LEANDRO STREET, OAKLAND, CA

