

LEAD HAZARD CONTROL SPECIFICATION

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 Scope of Work: Except as otherwise expressly provided herein, the Lead Hazard Control Contractor will supply all labor, supervision, materials, equipment, tools, services, insurance and each and every item of expense necessary for the control of lead hazards resulting from the disturbance of lead-containing materials. Work impacting lead-containing materials shall comply with all applicable federal, state and local requirements and the requirements of this specification.

Pre-renovation sampling results performed by Terracon Consultants of Emeryville, California is attached to this specification. Based on analytical data the following building materials have been identified as containing lead:

- White paint on wood eaves of Administration Building contains lead in concentration of 1,100 parts per million (ppm).
- Brown paint on wood posts of Administration Building contains lead in concentration of 5,200 ppm.
- Brown paint on wood fascia of Dormitory Building contains lead in concentration of 68,000 ppm.

The intent of Lead Hazard Control work described herein is to control lead hazards that might be generated during the removal or disturbance of materials and equipment that may contain lead. The intent of this specification section is to stipulate engineering control options, work practices, and performance criteria that, if properly implemented, should minimize the likelihood of exposing personnel or the environment (air, soil or groundwater) to lead hazards. The following is the scope of work for lead related work tasks:

- Removal of Dutch-style gutter by cutting back fascia board associated with Administration and Dormitory Buildings.
- Removal of components coated with lead-containing paint facilitated during the Administration and Dormitory Building roof removal.

County will only pay for collection and analysis of one set of waste stream samples that are required from the designated landfill. The Contractor will bear the sole financial responsibility for any additional/subsequent sample and analysis that may be required from other landfills.

- 1.1.2 Applicability: Except as may otherwise be provided for, the requirements of the Lead Hazard Control Contractor will apply to the General Contractor and, by extension, to all their subcontractors engaged in "lead-related construction work", as defined herein, or other work involving the disturbance of lead-containing coatings or materials. Consequently, all those who engage in lead-related construction, whether individually or working in cooperation with others, may be designated as a Lead Hazard Control Contractor. This broad applicability is in accordance with existing regulations promulgated by the California Division of Occupational Safety and Health ("Cal-OSHA") and by the California Department of Public Health (CDPH). To the extent allowable by law, the County of Alameda (herein after referred to as the "County") will

be the sole and final arbiter of which contractor(s) or subcontractor(s) qualify on this Project Site as a Lead Hazard Control Contractor (hereinafter referred to as the "Contractor").

- 1.1.3 Lead-Containing Materials: In accordance with all applicable federal, state and local laws and regulations, and the requirements of this Specification, the Contractor will manage all lead-containing materials identified herein and as may be subsequently revealed during the Work.
- 1.1.4 Project IH Consultant: The County's Industrial Hygiene Consultant (hereinafter referred to as the "Project IH Consultant") will provide independent, third-party industrial hygiene consulting services on behalf of the County. Such services may or may not include conducting on-site work observations, materials or environmental testing, and/or consulting with the County. It is not the responsibility of the Project IH Consultant to supervise the Contractor; nor to direct the Contractor's work effort; nor to assume the management of, or responsibility for, the Contractor's health and/or safety practices, nor its waste management, nor its regulatory compliance. At all times, the Contractor shall be solely responsible for the quality and execution of all phases and aspects of the Work.

1.2 SUBMITTALS

1.2.1 General:

- 1.2.1.1 In addition to any other contractual submittals required of the Contractor, the Contractor will provide the submittals described in this Specification section. Submittals will be reviewed by both the County and the Project IH Consultant for acceptability. The Project IH Consultant will either recommend submittals to the County for acceptance, or will return them to the County as deficient, with notations for correction and re-submission. The Project IH Consultant does not have authority to "approve" submittals. The County will have final approval of submittals.
- 1.2.1.2 Documents submitted by the Contractor in an effort to comply with the requirements of this Specification section are to be separate and distinct from any other submittals provided to comply with other Specification sections. In attempting to satisfy the requirements of this Specification section, the Contractor must submit only those documents specifically requested to fulfill the specified requirements. Extraneous documentation will be rejected, but not returned.
- 1.2.1.3 Except as otherwise noted herein, the submittals required in this Specification section are required only of the Contractor(s) determined by the County to have primary responsibility for disturbing or removing the lead-containing materials identified herein. At the discretion of the County, other contractors or subcontractors may subsequently be required to provide all or part of the submittals required in this section.

1.2.2 Schedule And Format:

- 1.2.2.1 **Delivery**: Submittals listed in this section must be delivered to the County.
- 1.2.2.2 **Quantity**: Two (2) identical, legible copies of each submittal listed in this section shall be delivered in an organized fashion suitable to the County for

review. One (1) copy will be conveyed by the County to the Project IH Consultant for review.

1.2.2.3 Work Commencement: No portion of the Work shall be commenced by the Contractor until the submittals are reviewed and accepted by the County.

1.2.2.4 Delays: Delays to the Work resulting from the submittal of deficient or illegible documentation, or from the untimely submittal of potentially acceptable documentation, shall be the sole responsibility of the Contractor. Except as otherwise granted by the County, no extensions will be made to the awarded contract schedule or budget to accommodate such delays.

1.2.2.5 Format: Submittals will be provided in 8-1/2" x 11" format with sections separated by numbered tabs indexed to a printed Table of Contents. Illegible submittals will be considered deficient and returned for correction.

1.2.2.6 Schedule: Submittals delivered to the County will observe and conform with the following timetable:

1.2.2.6.1 Pre-work Submittals - Not less than ten (10) business days prior to the Contractor's mobilization onto the work site, the Contractor will deliver legible copies of the specified documents. The Project IH Consultant will review submittals and return deficient submittals to the County within five (5) business days following their receipt by the Project IH Consultant. Deficient submittals shall be corrected and resubmitted by the Contractor within five (5) business days of their return. Once accepted, the reviewed copy shall be returned to the Contractor, who shall maintain a copy of the accepted submittal at the work site.

1.2.2.6.2 Product Submittals - Not less than ten (10) business days prior to the date of intended use of the product on the work site.

1.2.2.6.3 Post-work Submittals - Except as otherwise specified herein, the Contractor shall, within twenty (20) business days following demobilization from the project site, submit 2 copies of the Post-work Submittals listed in this section. If the Project IH Consultant or the County determines that the Post-work Submittals are unacceptable, the Contractor will be required to correct the deficiencies and re-submit them for review.

1.2.3 Pre-Work Submittals:

1.2.3.1 Progress Schedule: Provide a proposed work schedule indicating the following items:

1.2.3.1.1 Indicate the sequence of the lead-related work by activity and the sequencing of lead-related work within each building, on each floor, and for each regulated area.

- 1.2.3.1.2 Show the dates for beginning and completion of each major element (work area set-ups, paint removal/stabilization, detail cleaning, preliminary visual inspections, final visual inspections, tear-down, etc.) of the lead-related work, including substantial completion dates for each building, on each floor, and for each regulated work area. Update as necessary.
- 1.2.3.1.3 Provide anticipated manpower distribution per scheduled activity and regulated work area. Distinguish between trained full-time personnel and unskilled or temporary labor. Indicate whether or not any subcontracted labor will be utilized.
- 1.2.3.1.4 Provide anticipated number of shifts per day and days per week, as well as specific hours for each shift. Indicate any anticipated overtime, weekend work shifts, night shifts or holiday work shifts planned. Unless otherwise directed, work is to be conducted during routine business hours (M-F, 7:00 a.m. to 5 p.m.).
- 1.2.3.1.5 At a minimum, the Contractor's Progress Schedule is to be formulated on a three-week, "look ahead" basis and updated weekly.
- 1.2.3.1.6 All requests for deviations from, or changes to, the initially established daily work shift hours and/or the weekly work days shall be submitted in writing to the County and the Project IH Consultant for approval not less than 3 business days prior to the anticipated implementation of said changes. This requirement will also apply to remobilizations following periods of inactivity by the Contractor. The Contractor shall not implement any work schedule changes without the prior expressed approval of the County. The Contractor shall be responsible for its Subcontractors' compliance with these requirements.
- 1.2.3.2 Materials and equipment: Provide manufacturers' catalog data for all materials and equipment to be used in the work. Data should be provided for, but not necessarily be limited to, the following equipment/materials:
 - 1.2.3.2.1 High Efficiency Particulate Air (HEPA) filtered vacuum equipment
 - 1.2.3.2.2 Air monitoring equipment
 - 1.2.3.2.3 Respirators
 - 1.2.3.2.4 Personal protective clothing and equipment
 - 1.2.3.2.5 Duct tape and sheet plastic
 - 1.2.3.2.6 Disposal containers
 - 1.2.3.2.7 SDS sheets for all chemicals proposed for use on the job site
 - 1.2.3.2.8 Rotameter and calibration curve

- 1.2.3.3 The Contractor will submit a project-specific lead compliance program to address the strategies for protecting workers from exposure to lead. The program will include all items required by 8 CCR §1532.1(e)(2) including the following:
 - 1.2.3.3.1 Methods for demarcation and regulation of lead Work Areas
 - 1.2.3.3.2 Plans for establishing support & decontamination areas
 - 1.2.3.3.3 Air sampling plan
 - 1.2.3.3.4 Medical surveillance plan
 - 1.2.3.3.5 Engineering controls to be used
 - 1.2.3.3.6 Personal protective equipment to be used
 - 1.2.3.3.7 Decontamination procedures to be used
 - 1.2.3.3.8 Methods of lead dust control to be used
 - 1.2.3.3.9 Employee training requirements
 - 1.2.3.3.10 Monitoring/exposure records
- 1.2.3.4 Notices:
 - 1.2.3.4.1 Lead Pre-Job Notification: As applicable by the requirements of 8 CCR §1532.1(p), the Contractor will provide documentation of compliance by providing proof of written notification made to the nearest Cal/OSHA District Office.
 - 1.2.3.4.2 Written proof that all required permits, licenses, and registrations have been applied for and/or received. This will include all Contractor and Project Superintendent Licenses and Certifications required under the federal, state, and local regulations.
 - 1.2.3.4.3 The Work to be performed, as specified herein, is not intended to be “abatement,” as defined in 17 CCR §35001.
- 1.2.3.5 Worker Documentation:
 - 1.2.3.5.1 Provide the name and social security number of each employee to be engaged in lead-related construction work.
 - 1.2.3.5.2 All workers must be trained in accordance with the requirements of Cal-OSHA’s Construction Safety Orders for Lead [8 CCR §1532.1(l)]. This may include the need for CDPH-certified Lead Workers and/or Lead Supervisors. CDPH-certified Lead Worker and/or Lead Supervisor training must be conducted by a CDPH-approved Lead Worker/Lead Supervisor training provider. Provide current valid documentation from a CDPH-approved training provider indicating the most recent training course and training date that each person listed has attended. Photocopies of

recent (within the 12 months preceding the anticipated Notice-to-Proceed date) training certification cards will suffice, as long as both sides of the card are provided and legible.

Provide the name and social security number of the Lead Supervisor responsible for this Project. Provide current valid documentation from a CDPH-approved indicating the most recent training course and training date that he/she has attended. Provide evidence indicating that he/she has a minimum of one year on-the-job experience as a Lead-Related Construction Supervisor.

All workers, machine operators, etc. involved in the handling, stockpiling, movement/transport of soil must provide current (within previous 12 months) valid documentation of worker training in accordance with Cal/OSHA Hazardous Waste Operations and Emergency Response (8 CCR §5192, "HAZWOPER").

- 1.2.3.5.3 Provide current valid documentation indicating the date and type of each worker's most recent respiratory training and respirator fit testing. Respirator fit testing documentation must contain all information required in 8 CCR §5144 (m)(2). Documentation must be provided certifying that all employees engaged in lead-related work have passed respirator fit testing within the 12 months preceding the anticipated Notice-to-Proceed date.
- 1.2.3.5.4 The Contractor will submit documentation demonstrating that employees engaged in lead-related construction work have had the appropriate medical examinations within the prescribed time periods immediately preceding project start-up. Each such medical document must be signed by a licensed physician to be acceptable. Documentation must include, but not necessarily be limited to, baseline blood lead level testing performed in accordance with the Cal-OSHA Construction Safety Orders for Lead (8 CCR §1532.1, et. seq.), and the respiratory medical examination requirements in accordance with 8 CCR §1532.1. Baseline blood lead testing will have been completed not more than 30 days prior to the start of this Work. Illegible or incomplete photocopies, or preliminary results reports will be rejected as deficient.
- 1.2.3.5.5 The Contractor will submit a statement from an examining physician, dated within the 12 months preceding the start of this work, for each employee engaged in lead-related construction work stating that the worker is medically fit to wear a respirator, in accordance with 8 CCR §5144. Each such medical determination must be signed by a licensed physician to be acceptable. Illegible or incomplete photocopies, or preliminary examination reports will be rejected as deficient.

- 1.2.3.5.6 Completed Certificates of Lead Worker's Acknowledgment forms (Attachment A to this Specification section). The Contractor's employees will not be allowed to engage in lead-related construction work on this Project prior to submitting a completed Certificate of Lead Worker's Acknowledgment form.
- 1.2.3.6 Subcontractors: Submit qualifications and 24-hour contact information for each subcontractor to be used. This shall include two (2) legible copies of federal, state, and/or local business or operating permits, as well as State and/or EPA identification numbers for the waste transporters and disposal facilities to be used.
- 1.2.3.7 Work Plan: Submit a detailed work plan of the practices and procedures proposed for use in complying with the requirements of this Specification section. Include in the plan schematic drawings with depictions of the locations and general configurations of all regulated work areas. Mark-ups of current project plans will suffice to satisfy this requirement. The text of the Work Plan should address the sequencing of the Work; the interface of trades involved in the performance of work; work schedule including work shift time, number of employees, date of start and completion including dates of preparation work, lead disturbance work, and anticipated completion/final inspection dates; methods to be used to assure the safety of building occupants and/or visitors to the site; disposal plan including name and location of accepted disposal facility(ies); and a detailed description of the methods to be employed to control worksite contamination. Expand upon the use of proposed engineering controls, methods of containment to control the potential creation of the lead hazards within the Work Area(s), and segregation and packaging of lead waste/debris. This Work Plan is not the same as the Lead Compliance Plan described in paragraph 1.2.3.3 above, although the two plans may be compiled in a single document, if all individually specified elements of the two plans are addressed. The plan must be reviewed and accepted by the County or Project IH Consultant prior to the commencement of work.
- 1.2.3.8 Contingency Plan: Submit a contingency plan for emergencies including medical, fire, accidents, injuries, power failure, or any event that may require modification of decontamination or Work Area isolation procedures. Include in plan specific procedures for decontamination and/or Work Area isolation. **Note:** Nothing in this specification should be interpreted as instructions to impede the rapid and safe exiting from the work area(s), nor to impede the provision of adequate medical attention in the event of an emergency.

Post: In a room immediately adjacent to Personnel Decontamination Unit, prominently display telephone numbers and locations of, and driving instructions to, emergency services including, but not limited to: fire, ambulance, physician, hospital, police, power company, telephone company, and the Contractor's job-site Superintendent.

- 1.2.3.9 Field Logs: Submit a sample of Daily Field Logs, Work Area Entry/Exit Logs, etc. to be used during the work.
- 1.2.3.10 Rental Equipment: If rental equipment is to be used in conjunction with this lead-related construction project, a written notification is to be provided to the rental company informing the company that the rented equipment will be used on a lead-related construction project. A copy of that written notification will be submitted to the Project IH Consultant. The notification must state how the rented equipment is to be used, how it will be decontaminated following its use, and include a space for the acknowledgement of the rental company that it has been advised of the rented equipment's intended use. The Contractor will obtain written acknowledgment from an authorized representative of the rental company and will return an original signed copy of the acknowledgment to the Project IH Consultant as documentation of compliance with this requirement. In the absence of such rentals, the Contractor will submit a signed declaration on the Contractor's letterhead and signed by an authorized representative of the Contractor stating that no rented equipment will be used by the Contractor on this project.
- 1.2.3.11 Safety Data Sheets: Submit current Safety Data Sheets for each potentially hazardous material to be used during the lead-related work.
- 1.2.3.12 Waste Hauling Qualifications: Submit proof of hazardous waste transporter's registration and the vehicle operator training. Submittals shall include, but not necessarily be limited to: business name, address (mailing address and physical location), and business telephone number of the company; primary contact name and emergency contact (24-hour) telephone number; documentation of current State and/or EPA authorization to operate; and insurance coverage.
- 1.2.3.13 Waste Disposal Facility Qualifications: Submit documentation of the California State and/or EPA-approved waste disposal facility chosen to receive shipments of lead-containing waste generated during this Project. Such information will include, but not necessarily be limited to: business name, address (mailing address and physical location), and business telephone number of the facility; primary contact name and emergency contact (24-hour) telephone number; documentation of current State and/or EPA authorization to operate; operator's facility I. D. number; classification and/or types of waste(s) accepted; name, business address and telephone number of insurance provider; documentation of insurance type(s), coverage amounts, and any limitations on liability; and any regulatory agency information pertaining to known citations issued, notices of violations issued, corrective actions ordered, Records of Decisions rendered, or on-going environmental investigations or known liabilities.
- 1.2.4 Post-Work Submittals:
 - 1.2.4.1 General: In accordance with the requirements of the above Section 1.2.2.6.3 – Post-Work Submittals, submit the following documentation:

- 1.2.4.1.1 Copies of employee and visitor Work Area Entry/Exit Logs and Daily Field Logs/Reports.
- 1.2.4.1.2 Waste manifests, weight tickets, and landfill receipts.
- 1.2.4.1.3 Results of Contractor's personal exposure air monitoring.
- 1.2.4.1.4 Copies of analytical results from waste characterization.
- 1.2.4.1.5 Incident reports describing any events such as injuries, accidents, emergencies, or loss of differential air pressure and the actions taken in response.

1.3 QUALITY REQUIREMENTS

1.3.1 Reference Standards:

- 1.3.1.1 Regulations: The Contractor will comply with the requirements of all applicable federal, state and local government regulations and guidelines governing lead-related construction work and/or the disposal of lead-containing wastes, as well as all other applicable regulations. The following regulations and/or guidelines listed herein are applicable to this Work and are incorporated into this Specification section by reference. This listing is not intended to be comprehensive, nor does it necessarily limit compliance to the following:

CODE OF FEDERAL REGULATIONS (CFR)

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|---------------------------------|--|
| 29 CFR 1926 | Construction Standards |
| 29 CFR 1926.62 | Lead in Construction Standard |
| 40 CFR Parts 50.12 | Ambient Air Quality Standard for Lead |
| 40 CFR Parts 261, 265, and 268 | Hazardous Waste Management |
| 40 CFR Parts 172, 173, 178, 179 | Hazardous Material Transportation |
| 40 CFR Part 745 | Lead Renovation, Repair, and Painting Final Rule |

CALIFORNIA CODE OF REGULATIONS (CCR)

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|--------------------------|--|
| 8 CCR §1532.1 | Construction Safety Orders for Lead |
| 8 CCR §1536 | Construction Safety Orders – Ventilation Requirements for Welding, Brazing and Cutting |
| 8 CCR §1537 | Construction Safety Orders – Welding, Cutting, and Heating of Coated Metals |
| 8 CCR §5144 | Respiratory Protection |
| 17 CCR Div. 1, Chapter 8 | Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards (revised 4/30/08) |
| 22 CCR Division 4.5 | Hazardous Waste |

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Regulation 11, Rule 1

Hazardous Pollutants – Lead

- 1.3.1.2 Guidelines: Applicable industry guidelines pertaining to lead-related construction work include, but are not limited to, the following:

Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Office of Healthy Homes and Lead Hazard Control, U.S. Department of Housing and Urban Development (HUD), Second Edition July 2012.

Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations, The Society for Protective Coatings (SSPC), Technology Guide No. 6, revised 2015.

- 1.3.1.3 Applicability. The most current version of each document will apply. Where conflicts among these regulations or standards exist, the more stringent requirement or interpretation will apply.

- 1.3.2 Definitions: In addition to definitions provided elsewhere in these Specifications, the following definitions will apply:

- 1.3.2.1 **Action Level:** Action level means an employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air ($30 \mu\text{g}/\text{m}^3$) calculated as an 8-hour time-weighted average (TWA).

- 1.3.2.2 **Air Monitoring:** The process of measuring the contaminant concentration of a specific volume of air in a stated period of time.

- 1.3.2.3 **Authorized Visitor:** The County or its designated representative, the Project IH Consultant, the Project IH Consultant's inspector or representative, or any representative of a federal, state, county, city, or local agency having legal or regulatory jurisdiction over the project while acting in an official capacity. Any person whose name appears upon an approved authorized visitor's list.

- 1.3.2.4 **Clean Room:** An uncontaminated area or room which is part of the worker decontamination enclosure with provisions for storage of worker's street clothes and protective equipment.

- 1.3.2.5 **Containment:** A system, process, or barrier used to contain lead hazards inside a Work Area such as described in *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, U.S. Department of Housing and Urban Development, June 1995, Chapter 8, "Containment and Barrier Systems," Table 8.1, Table 8.2, and Table 8.3, or "Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations," Society for Protective Coatings, Technology Guide 6, October 1, 2004.

- 1.3.2.6 **Competent Person:** One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them, as specified in 8 CCR §1504.

- 1.3.2.7 **County:** The County of Alameda and its designated representative(s).
- 1.3.2.8 **Critical Barrier:** One or more layers of plastic or other impermeable barrier sealed over an opening into a Work Area or any other similarly placed physical barrier sufficient to prevent airborne lead dust in a Work Area from migrating to an adjacent area.
- 1.3.2.9 **Curtained Doorway:** A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway.
- 1.3.2.10 **Decontamination Enclosure System:** A series of connected rooms, with curtained doorways between any two adjacent rooms, for the decontamination of workers and of materials and equipment. A decontamination enclosure system always contains at least one airlock.
- 1.3.2.11 **Differential Air Pressure Equipment:** A portable local exhaust fan or “unit” equipped with HEPA filtration and capable of maintaining a constant, negative air pressure differential within the regulated Work Area by providing a low velocity air flow into contaminated areas from adjacent uncontaminated areas and exhausting filtered air outside the Work Area (preferably to the outdoor air).
- 1.3.2.12 **DOP Testing:** The challenge testing of HEPA-filtered equipment, using appropriate aerosols. A 0.3 µm dioctylphthalate aerosol was formerly used in challenging the efficiency of HEPA-filtered equipment. Although dioctylphthalate compounds are now suspected human carcinogens, the phrase “DOP testing” is still current vernacular for the process of challenge testing the efficiency of HEPA-filtered equipment.
- 1.3.2.13 **Enclosure:** See “Containment”
- 1.3.2.14 **Equipment Decontamination Enclosure:** That portion of a decontamination enclosure system designed for controlled transfer of materials and equipment, typically consisting of a washroom and a holding area.
- 1.3.2.15 **Equipment Room:** A contaminated area or room which is part of the worker decontamination enclosure with provisions for storage of contaminated clothing and equipment.
- 1.3.2.16 **Fixed Object:** A unit of equipment, fixture or furniture in the Work Area which cannot be removed from the Work Area.
- 1.3.2.17 **HEPA Filter:** A High-Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97 percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.

- 1.3.2.18 **HEPA Vacuum Equipment:** Vacuuming equipment with a HEPA filter system.
- 1.3.2.19 **Lead:** Lead means metallic lead, all inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds.
- 1.3.2.20 **Lead-Related Construction Work:** Any construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance of a public building, including preparation or clean-up, that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead.
- 1.3.2.21 **Log Book:** A notebook or other book containing essential project data and daily project information and a daily project diary. This book will be kept up-to-date and on the project site at all times.
- 1.3.2.22 **Movable Object:** A unit of equipment or furniture in the Work Area which can be removed from the Work Area.
- 1.3.2.23 **Negative Initial Determination:** A demonstration by the employer, which complies with the criteria in paragraph (d)(5)(A) and (B) of 8 CCR §1532.1, that no employee is exposed to airborne concentrations of lead at or above the action level. The employer will make a written record of such a determination. The record will include at least the information specified in subsection (d)(3)(A) and will also include the date of determination, location within the worksite, and the name and social security number of each employee monitored.
- 1.3.2.24 **NIOSH:** National Institute of Occupational Safety and Health.
- 1.3.2.25 **Permissible Exposure Limit (PEL):** The Contractor will assure that no employee is exposed to lead at concentrations greater than fifty micrograms per cubic meter of air ($50 \mu\text{g}/\text{m}^3$) averaged over an 8-hour period. For work shifts longer than 8 hours, the maximum allowable employee lead exposure in units of micrograms per cubic meter of air will be calculated by the formula: 400 divided by the hours worked in that shift.
- 1.3.2.26 **Plasticize:** To cover floors, walls or ceilings with plastic sheeting as herein specified.
- 1.3.2.27 **Regulated Area:** An area established by an employer to demarcate areas within which lead-related construction work is conducted, and any adjoining area where debris or waste from such work may be accumulated; and a Work Area within which airborne concentrations of lead may exceed, or in which there is a reasonable expectation they may exceed, the permissible exposure limit. Requirements for regulated areas are set forth in 8 CCR §1532.1(i) (6).
- 1.3.2.28 **SDS:** Safety Data Sheet

- 1.3.2.29 **Time Weighted Average (TWA):** The TWA is an 8-hour time weighted average of the micrograms (μg) of lead per cubic meter (m^3) of air which represents the employee's 8-hour workday exposure. An 8-hour TWA is calculated in accordance with the formula:

$$\text{8-hour TWA} = \frac{(C_1T_1 + C_2T_2 + C_nT_n)}{480 \text{ minutes}}$$

where "C" is the contaminant concentration measured and "T" the measurement time period in units of minutes. If an employee is exposed to lead for more than 8 hours in any work day the employees' allowable exposure, as a time weighted average (TWA) for that day, will be reduced according to the following formula: Allowable employee exposure (in $\mu\text{g}/\text{m}^3$) = 400 divided by hours worked in the day. When respirators are used to limit employee exposure as required under subsection (c) of 8 CCR §1532.1 and all the requirements of subsections (e)(1) and (f) have been met, employee exposure may be considered to be at the level provided by the protection factor of the respirator for those periods the respirator is worn. Those periods may be averaged with exposure levels during periods when respirators are not worn to determine the employee's daily TWA exposure.

- 1.3.2.30 **Washroom:** A room between the Work Area and the holding area in the equipment decontamination enclosure system. The washroom comprises an airlock.
- 1.3.2.31 **Work Area:** Designated rooms, spaces, or areas of the project in which lead-related construction will be conducted or which may become contaminated as a result of such lead-related construction. A contained Work Area is a Work Area which has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained Work Area is an isolated or controlled-access Work Area which has not been plasticized nor equipped with a decontamination enclosure system.
- 1.3.2.32 **Worker Decontamination Enclosure System:** That portion of a decontamination enclosure system designed for controlled passage of workers, and other personnel and authorized visitors, typically consisting of a clean room, a shower room, and an equipment room separated by air locks.

PART 2 - PRODUCTS

2.1 MATERIALS

- 2.1.1 **Product Prohibitions:** The following products or product constituents are prohibited from use during these lead-related work activities:
- 2.1.1.1 Any product for which a Safety Data Sheet is available from the manufacturer and has yet to be submitted.
- 2.1.1.2 Any product for which a less hazardous substitute product is readily available, provided that the substitute product possesses similar performance characteristics.

- 2.1.1.3 Any product containing any concentration of diethylene glycol dimethyl ether; ethylene glycol monoethyl ether; or ethylene glycol mono methyl ether (skin TLV 5 ppm; CAS 109-86-4). These constituents cause reproductive damage and blood cell damage.
- 2.1.1.4 Any product containing any concentration of ethylene glycol (1,2 Ethanediol glycol; TLV = 50 ppm). This chemical causes kidney damage if ingested.
- 2.1.1.5 Any product containing any concentration of formaldehyde, a suspect carcinogen.
- 2.1.1.6 Any product containing any concentration of methylene chloride, a suspect carcinogen.
- 2.1.1.7 Any product containing any concentration of n-hexane. This chemical causes peripheral nerve damage (potential ingredient in spray adhesive).
- 2.1.1.8 Any product containing any concentration of isocyanates. An allergic sensitizer, this group of chemicals typically has no warning properties (potential ingredient in spray foams and some epoxies).
- 2.1.1.9 Non-fire rated visquene and/or non-fire rated lumber are prohibited from use.
- 2.1.1.10 Solvents with a flash point <140° F are prohibited from use.
- 2.1.2 **EQUIPMENT PROHIBITIONS:** The following equipment are prohibited from use during these lead-related construction activities:
 - 2.1.2.1 **Fasteners:** High velocity powder-actuated fasteners are prohibited from use.
 - 2.1.2.2 **Torches:** Open flame torches are prohibited from use without prior approval of the County. Open flame torches are prohibited from use as a means of removing lead-containing materials, paints or surface coatings on this Project.
 - 2.1.2.3 **Compressed Air:** Air compressors, leaf blowers or similar forced-air equipment is prohibited from use for cleaning or decontamination purposes during these lead-related work activities.
 - 2.1.2.4 **Lamps:** Sodium or mercury vapor (metal halide) lamps are prohibited from use.
 - 2.1.2.5 **Ladders:** Wooden or metal ladders are prohibited from use.
 - 2.1.2.6 **Engines:** Internal combustion engines shall not be permitted for operation indoors without the expressed written permission of the County in consultation with the Project IH Consultant.
 - 2.1.2.7 **Grounded Electrical Equipment:** Electrical equipment manufactured with internal grounding or grounded wiring shall not be used if the grounding has been removed, tampered with, or otherwise altered.

2.1.2.8 HEPA-Filtered Vacuum Cleaners without Certification of Efficiency Challenge Testing: Vacuums without certification of on-site testing for efficiency (“DOP testing”) shall not be allowed for use outside of a negative differential pressure enclosure (“containment”).

2.1.2.9 Power tools, including but not limited to sanders, grinders or needle guns, that are not equipped with HEPA-filtered dust capture systems, are prohibited from use as a means of removing lead-containing materials, paints or surface coatings on this project.

2.1.2.10 Hydro blasting or high pressure washing (“power-washing”) and/or abrasive media blasting without containment and barrier systems is prohibited on this Project.

2.1.3 Material Requirements:

2.1.3.1 Sealants: Sealants used will have a flame spread, smoke and fuel contribution of zero, and will be ASTM and UL rated for 3 hours for standard method fire test for fire stop systems

2.1.3.2 Visquene Sheeting: Visquene sheeting used will be in compliance with NFPA Standard 701 fire testing, with flame spread ≤ 5 and smoke development rating of ≤ 70 when tested by ASTM E-84. Minimal thickness will be 6 mil.

2.1.3.3 Waste Containers: Waste containers (bags, drums, bins, etc.) must be suitable for loading, temporary storage, transit, and unloading of lead waste without rupture, or otherwise causing exposure to persons or releases to the atmosphere. Use of rigid primary containers (bins, boxes, drums, etc.) is preferred and recommended. Where rigid primary containers are used, they must be lined with a secondary water-proof barrier of poly sheeting or poly bags of minimal thickness of 6 mil. All containers used for disposal of lead-containing waste must be labeled in general accordance with applicable regulations, and in specific with the requirements of 8 CCR §1532.1.

2.1.3.4 Adhesives: Adhesives, whether tape or aerosol liquid, shall be capable of securely bonding plastic to plastic, or plastic to substrate. The bonding strength and resulting seal of the material used must not be compromised by mist or water, encapsulating agent or any other product or process used in the regulated work area.

2.1.3.5 Warning Signs and Labels: Warning signs and labels will be used in compliance with applicable federal, state, and local regulations. Signs must be lettered in the language(s) necessary to communicate the specific hazard warning(s) to workers or visitors reasonably expected to be at the job site.

2.1.4 Equipment Requirements:

2.1.4.1 General: It is the responsibility of the Contractor to utilize tools and equipment that have been thoroughly and adequately decontaminated prior to their delivery to this project site. All equipment brought onto this project work site will be subject to inspection by the County and/or the Project IH

Consultant. Visible evidence of suspected equipment contamination will be sufficient to cause the equipment to be rejected from mobilization onto the project work site. All costs resulting from the need to decontaminate any part of the worksite contaminated by the Contractor's use of inadequately decontaminated equipment will be borne by the Contractor.

- 2.1.4.2 Differential Air Pressure Equipment: Differential air pressure equipment (also known as "exhaust fan units" or "negative air machines") shall be equipped with HEPA filtration. All differential air pressure equipment will be in well-maintained condition and will comply with ANSI/AIHA Standard Z9.2 for performance. Differential air pressure equipment will arrive on-site with the intake and exhaust openings sealed. Each unit must be efficiency-challenged ("DOP tested") on-site, in the presence of the Project IH Consultant and prior to use, so as to ensure a minimum 99.97% filtering efficiency of aerosol particulates of 0.3 microns or greater in size. DOP testing shall be performed by a professional third-party testing firm not otherwise financially affiliated with the Contractor. Each unit used on this project must have a certification label affixed to it attesting to its most recent successful testing. Upon arriving on-site, each unit must be visibly clean and free of apparent or suspected contamination, as judged by the Project IH Consultant. If, in the opinion of the Project IH Consultant, the differential air pressure units are judged to be in need of cleaning, maintenance, or in any other way fail to meet typical industry standards, the unit(s) may not be placed into operation on this project. If secured, negative air machines may be stacked, but no more than two high without the prior approval of the Project IH Consultant, and in no event will negative air machines be allowed to be inverted for the purpose of stacking.
- 2.1.4.3 HEPA-filtered Vacuum Cleaners: HEPA-filtered vacuum cleaners will be in well-maintained condition, and must be visibly clean and free of apparent or suspected contamination, as judged by the Project IH Consultant. **Each unit must arrive on-site sealed and empty of any debris.** Each unit must be DOP tested on-site, within a negative pressure enclosure, before it can be used outside of a regulated work area. DOP testing will be performed by a professional third-party firm not otherwise financially affiliated with the Contractor. Each unit used on this project must have a certification label affixed to it attesting to its most recent successful testing. If, in the opinion of the Project IH Consultant, the HEPA-filtered vacuum cleaners are judged to be in need of cleaning, maintenance, or in any other way fail to meet typical industry standards, the vacuum cleaners may not be placed into operation on this project. Care will be exercised by the Contractor to prevent commingling of asbestos and lead waste. Separate vacuums will be used for each type of waste clean-up.
- 2.1.4.4 Lights and Electrical Cords: Electrical lights and equipment utilizing electrical power cords will be in well-maintained condition and will be visibly clean and free of apparent contamination, as judged by the Project IH Consultant. All lighting and electrical equipment must be water resistant. Work lighting must have protective covers over the light source. Grounded electrical equipment will be used with grounded electrical supply and outlets.

Where such equipment will be used in the near vicinity of water, ground fault circuit interruption (GFCI) protection shall be used in the wiring circuit at the first feasible point closest to the source of power.

- 2.1.4.5 Decontamination Facilities: At a minimum, hand washing facilities will be provided by the Contractor for all workers who may be occupationally exposed to lead-containing paint or by demolition of lead-containing materials, irrespective of measured airborne lead concentrations. More extensive decontamination facilities may be required by regulation.
- 2.1.4.6 Water Filtration Equipment: Water will be collected from work processes and decontamination facilities and will be filtered prior to discharge. All lead-contaminated water will be collected and contained for waste characterization. Water will be filtered through a system capable of trapping particles 1 micron and larger in size. Filtered water may be discharged into a sanitary sewer system, only if the Contractor can satisfactorily demonstrate that it is acceptable to the local wastewater treatment facility to do so. The Contractor shall bear the responsibility to investigate discharge requirements and to obtain any necessary discharge permits prior to the start of work. To the extent feasible, water should be reclaimed and used on-site for application in wet method work practices prior to its discharge. Under no circumstances will water be permitted to be discharged prior to its characterization as a potential hazardous waste.
- 2.1.4.7 Fire Extinguishers: Fire extinguishers, rated not less than 2A or as specified by more stringent regulations, will be required in the regulated work area(s). The minimum allowable number of fire extinguishers in any individual work area will be one in the regulated work area and one in the clean area.

PART 3 - EXECUTION

3.1 PREPARATION

- 3.1.1 Examination of Conditions: The Contractor must carefully examine the work site before beginning work and report any previously undisclosed or special conditions to the County. Except as may be otherwise stipulated elsewhere in the Contract Documents, starting the Work shall be interpreted as implied acceptance of conditions as they exist.
- 3.1.2 Responsibility for Work: By commencing the Work, the Contractor acknowledges and agrees that they have sole and primary responsibility and obligation to the County to make inspections of their own work at all stages of the Work. This includes acknowledging and agreeing that they have sole responsibility to supervise or superintend the performance of the Work, and that said work will be in strict adherence and compliance with all applicable methods, materials, regulations, and required standards whether or not specified herein. The Contractor is responsible for site security upon starting the project. This responsibility extends 24 hours per day until project completion and final demobilization.
- 3.1.3 Coordination of Work: The Contractor is responsible to coordinate all scheduling, phasing, and completion of lead-related construction work with the County and all other

employers working on the job site during the lead-related construction activities. This includes the responsibility to make notifications or communications of hazards to other trades or employers, as required by regulation.

- 3.1.4 Measurements and Quantities: The Contractor is responsible to field verify all measurements, dimensions and/or quantities before the start of work. Discrepancies between plan and field dimensions or quantities shall be reported to the County as soon as discovered.
- 3.1.5 Job Site Postings: Prior to commencing any preparation of the Work Area(s) for lead-related construction activities, the Contractor will post all required documents, warning signs, and erect any physical barriers in order that the work area(s) may be secured. Prior to the commencement of any work, the Contractor will post bilingual or multi-lingual (as appropriate) warning signage in and around the work site in compliance with applicable regulations.
- 3.1.6 Pre-Work Conference: Prior to the start of any work, the Contractor shall meet at the project site with the Project IH Consultant, the County, and other entities concerned with the lead-related work. This will be an organizational meeting to review responsibilities and personnel assignments; to identify any special needs or conditions pertaining to the work or its completion; to identify the work area containment and decontamination areas; and to coordinate temporary facilities including power, light, water, waste storage, etc.
- 3.1.7 Work Area Preparation:
- 3.1.7.1 Containment of Work Areas: Work Areas wherein lead-related construction work will occur must, at a minimum, be prepared in general accordance with containment methods set forth in Chapter 8 of the HUD Guidelines, or alternatively, in accordance with The Society for Protective Coatings (SSPC), Technology Guide No. 6, 2012.
- 3.1.7.2 Work Area Designation: Each regulated work area will be designated by the Contractor and discussed with the Project IH Consultant prior to its preparation. At a minimum, topics will include ingress and egress points, work area configurations, containment methods, and installation of decontamination facilities. This may be accomplished at the Pre-Work Conference.
- 3.1.7.3 Electrical Lock-out: The Contractor, in coordination with the County, is responsible for the shutdown and disconnection of all electrical power within the work area. The Contractor will arrange for temporary power and lighting, and will ensure safe installation of temporary power sources and equipment per applicable electrical code requirements. The Contractor should notify the County in writing before disconnecting any power or communication lines that may service the subject buildings or adjacent buildings.
- 3.1.7.4 Work Area Preparation: Polyethylene (poly) sheeting will be used to capture and contain lead debris contamination during routine removal from a substrate. Poly sheeting can be used in combination with water misting (dust suppression) to protect the adjacent surfaces (including any exposed exterior

soils surrounding building exteriors that may be impacted by the Work) during disturbance of exterior surfaces. Adequate protection of non-impacted building areas, and/or exterior soils or pavements, may require the use of multiple layers of poly sheeting, or alternatively effective means. Where poly sheeting is used, the sheeting layers will be firmly affixed to, and extend outward a minimum of 6 feet from interior building walls and 20 feet for exterior foundations. If, during the disturbance of paint or building components, it is evident that lead-containing paint/debris are falling or will likely fall beyond the poly sheeting, the distance will be increased and/or modified as necessary to capture all debris. Doors, windows and other lead-painted or lead-containing materials subject to disturbance will be similarly prepared with poly sheeting and adhesive tape, or alternatively effective means, so as to contain lead-containing dust or debris to within the regulated Work Area. Damage to, or holes created in, poly sheeting barriers during the Work will be immediately repaired.

- 3.1.7.5 Effect of Wind on Exterior Work: The Contractor will take all necessary steps to protect exterior soils, adjacent buildings and properties, and storm drains from impact by lead debris. Work Area preparation will include wind breaks or baffles, as necessary, to prevent lead dust or debris from being wind blown out of a regulated Work Area. The Contractor will halt the Work if Work Area preparations are demonstrably inadequate to contain debris within the regulated area(s). In no case will exterior lead paint disturbance be conducted during inclement weather, nor when wind speeds reach a sustained velocity of, or repeated peak gusts of, 20 miles per hour.
- 3.1.7.6 Decontamination Facilities: Prior to the start of work, at a minimum, a hand washing facility must be provided by the Contractor for all workers who may be occupationally exposed to lead-containing paint or by demolition of lead-containing materials, irrespective of measured airborne lead concentrations. A fully functioning shower facility will be provided if work activities result in, or should reasonably be expected to result in, personal exposures to lead in excess of the PEL.
- 3.1.7.7 Movable and Loose Items: Movable and loose items located within the work area(s) and not removed by the County are to be cleaned using HEPA-filtered vacuum equipment and/or wet cleaning methods, as appropriate, and will be removed from the work area to a temporary location designated by the County. The items will be received by and protected from future damage or loss by the County.
- 3.1.7.8 Regulation of Work Areas: Prior to lead-related construction work, the Contractor will regulate the Work Area(s) by methods including, but not necessarily limited to: posting lead-warning signs at all entrances to the Work Area(s). These signs will be in compliance with the Cal-OSHA Construction Safety Orders for Lead (8 CCR §1532.1 et. seq.). Only authorized workers and visitors will be allowed into a regulated Work Area.
- 3.1.7.9 Adjacent Areas: Work areas immediately adjacent to the Work, such as corridors or hallways which will not be subject to the Work, but are

necessary routes to and from Work Areas, must be protected by the Contractor to prevent damage and/or lead contamination. Openings from these areas into areas where lead-containing material is being disturbed will have curtained doorways to further minimize airborne lead release into non-regulated areas. The Contractor will be responsible to make all required notifications to trades or other building occupants working in areas adjacent to regulated Work Areas.

3.1.7.10 Emergency Exits: The Contractor will establish and maintain emergency and fire exits from the Work Areas, or establish alternative exits, as may be required by local fire officials or applicable fire codes.

3.1.7.11 Pre-Work Inspections: Prior to the start of lead-related work, the Contractor's Supervisor (Competent Person), accompanied by the Project IH Consultant, will conduct an inspection of the equipment and Work Area isolation preparations to assure that appropriate engineering controls are in place and are functioning sufficiently to contain lead hazards to within the Work Area. The concurrence of the Project IH Consultant will be required to determine that a Work Area has undergone adequate preparation to proceed with lead-related work. This Pre-Work Inspection will be conducted for each regulated Work Area and each individual inspection will be documented in writing. Such documentation will be signed by the individuals conducting the inspection. A copy of each such documentation shall be obtained by the Project IH Consultant for conveyance to the County.

3.2 METHOD OF CONTROL

3.2.1 Work Practices:

3.2.1.1 General: At all times, the Contractor will employ Lead Safe Work Practices to minimize or eliminate the potential for creating personal exposure to lead or creating lead hazards. This will include, but not necessarily be limited to, pre-cleaning the Work Area; misting the air within the Work Area, as necessary to reduce airborne lead dust concentrations; use of wet work methods (e.g., wet sanding and/or wet scraping) to reduce dust generation; prompt clean-up of lead-containing waste or debris; use of power tools equipped with HEPA-filtered dust collection systems; use of HEPA-filtered vacuums, when vacuums are used; use of HEPA-filtered exhaust fans, where deemed necessary to create a negative air pressure differential within the Work Area (see Chapter 8 of the HUD Guidelines); removal of lead-containing coatings from metal substrates prior to torch cutting; and employing the engineering controls necessary to reduce airborne lead dust concentrations within a Work Area.

3.2.1.2 Work Crew Size: The Contractor is responsible for setting the size of its work crew(s), subject to the conditions stated in this paragraph. During lead-related construction work, a minimum of two (2) workers must be in the Work Area at any time. No worker shall be allowed to work alone in a regulated Work Area. Under no circumstances may workers be allowed to work without the supervision of an on-site foreman while within the Work

Area. The crew size on any given day will be adequate to progress and/or complete the Work in accordance with the established Project Schedule.

- 3.2.1.3 Worker Discipline: The Contractor will at all times establish and maintain discipline and good order over its employees. The Contractor will not employ on the work crew any person not skilled in the Work to which he/she is assigned, nor anyone who has not received notice and instructions in the dangers of lead exposure, and in the methods of reduction of the dangers associated with its disturbance. Workers must also receive training in the proper use of respirators, safety procedures, equipment, protective clothing, and appropriate work procedures. The Contractor will remove from the job site any employee repeatedly failing to adhere to any standard or requirement set forth herein.
- 3.2.1.4 Visible Emissions: The Contractor is solely responsible for conducting ongoing visual observations of the Work Area(s). If, at any time, visible emissions appear to be emanating from the Work Area, the Contractor will immediately cease work and establish more stringent engineering controls, or otherwise revise its work practices, to eliminate the visible emissions.
- 3.2.1.5 Demolition of Components: All work which disturbs deteriorated ("loose, flaking or peeling") lead-containing paint or lead-containing materials will be done utilizing hand tools. Loose, flaking or peeling paint will be removed with hand tools prior to demolition of building components. Power tools may be used for such work only if the power tools are equipped with HEPA-filtered dust collection systems. Surface preparation prior to demolition will likewise be done by hand with wet methods. Water may be used in sanding or scraping ("wet work methods") only in quantities sufficient to minimize airborne dust, but may not be used in such a volume as to cause run-off. All lead-contaminated water will be collected and contained for filtration and/or waste characterization. For this reason, power-washing should be avoided.
- 3.2.1.6 Removal of Toxic Coatings: In accordance with 8 CCR §1537, et. seq., all surfaces covered with toxic preservatives, including coatings which generate toxic substances upon heating, will be stripped for a minimum distance of four inches from the area of heat application, or the employee(s) engaged in such work will be required to use supplied-air respirators in accordance with 8 CCR §5144, et. seq., or the provisions of 8 CCR §1536(b), (c) will apply.
- 3.2.1.7 Indoor Torch Cutting: Where indoor torch cutting will be conducted which involves building components coated with hazardous materials including, but not necessarily limited to lead, the work will be conducted in accordance with 8 CCR §1536, et. seq. Materials or surfaces from which lead-containing paints or coatings have been removed are not to be considered "lead-free," and are still subject to this requirement until and unless a Negative Exposure Assessment has been established in accordance with 8 CCR §1532.1(d)(5).
- 3.2.1.8 Material Handling: Where lead-painted or other lead-containing building components are to be removed, the Contractor will, to the extent possible, remove them substantially intact and, where elevated, lower them to the

ground for containerization. At no time may materials be allowed to drop to, nor accumulate upon, unprotected soil surfaces. Any loose or peeling paint will be removed before a painted building component is removed from the building and before the building is demolished. Painted building components with intact coatings (no loose or peeling paint) can be demolished with the paint in place. All lead-containing particulate debris must be collected and placed in leak-proof containers and stored for waste characterization.

- 3.2.1.9 Work Area Cleaning: Clean-up and containerization of lead-containing waste will be an on-going activity throughout the Work. Lead-containing debris must not be allowed to accumulate within the Work Area for subsequent clean-up. Containerized waste may be stored within the Work Area during the Work, but should be removed from the Work Area for storage in a secured location on a periodic basis. In no event will the accumulation of containerized waste within the Work Area be allowed to impede the work progress, nor compromise work-site safety.
- 3.2.1.10 Containerization of Waste: Unless otherwise specified, lead-containing debris and waste will be containerized in rigid primary waste containers (boxes, drums, bins, etc.) suitable for loading, temporary storage, transit, and unloading of lead waste without rupture, or otherwise causing exposure to persons or releases to the atmosphere. Rigid primary containers will be lined with a leak-proof barrier of poly sheeting or poly bags of minimum thickness of 6 mil. Waste containerized in bags will be double-bagged, evacuated of air, and sealed with duct tape. All containers used for disposal of lead-containing waste will be labeled in general accordance with applicable regulations.
- 3.2.1.11 Waste Load Out: Prior to the removal of containerized waste from the Work Area, each container will be decontaminated by wet-wiping to remove any residual lead contamination. Double-bagging of waste will be completed within the regulated Work Area and the exterior of each container will be individually wet-wiped prior to removal from the Work Area. Waste shall be loaded out of the Work Area through the equipment decontamination (waste load out) chamber and not through the personal decon. Once outside of the Work Area, the waste will be transported in rigid movable bins, wheelbarrows or comparable directly to a secured waste storage location.
- 3.2.1.12 Equipment Decontamination: Prior to removal from a Work Area, the Contractor will decontaminate all tools and equipment. Decontamination will include, but not be limited to: wet-wiping, HEPA-vacuuming, and containerizing tools into subsequently decontaminated containers. Prior to removal from the Work Area, HEPA-filtered vacuum cleaners will be emptied of debris, wet-wiped and wrapped, bagged or otherwise containerized for transport from the Work Area. Likewise, differential air pressure equipment is to be sealed with poly sheeting and tape, and externally decontaminated before removal from the Work Area. All equipment will be subject to inspection by the Project IH Consultant prior to its demobilization from a regulated work area.

- 3.2.1.13 Detail Cleaning: Following completion of the Work, the Work Area will be cleaned using a combination of hand tools (mops, rags, etc.), wet-wiping, and HEPA vacuuming. Dry sweeping or shoveling of lead-containing waste or debris is prohibited. Any poly sheeting protecting the Work Area will be considered to be adequately cleaned when no visible and no three-dimensional remnant of debris or lead-containing waste can be seen or felt. Porous substrates such as wooden or concrete will similarly be considered to be adequately cleaned when no three-dimensional remnant of debris or lead-containing waste can be seen or felt. In no event will bridging encapsulants be allowed in lieu of detail cleaning.
- 3.2.1.14 Post-Work Inspections: Subsequent to the completion of the cleaning phases and waste load-out, the Contractor's Supervisor (Competent Person), accompanied by the Project IH Consultant, will conduct a detailed inspection of the Work Area to assure that the Work Area has been adequately cleaned. The concurrence of the Project IH Consultant will be required to conclude that a Work Area has undergone adequate cleaning following lead-related construction work. If a Work Area is not visibly free of all debris, the Contractor will re-clean the Work Area using wet-wiping and HEPA vacuums until a satisfactory condition is established. This Post-Work Inspection will be conducted for each regulated Work Area and each individual inspection will be documented in writing. Such documentation will be signed by the individuals conducting the inspection. A copy of each such documentation will be obtained by the Project IH Consultant for conveyance to the County. All non-essential equipment is to be decontaminated, as described herein, and removed from the Work Area prior to commencing a Post-Work Inspection.
- 3.2.1.15 Poly Removal: At the end of the work within a regulated Work Area, the poly sheeting will be cleaned, the Post-Work Inspection will be conducted and the poly sheeting will be removed. The poly sheeting must be thoroughly cleaned and decontaminated to allow it to be disposed of as "non-hazardous" waste. Cleaning will include wet wiping and vacuuming with a HEPA-filtered vacuum, as necessary. Following the successful completion of the Post-Work Inspection in each Work Area, the Contractor may remove the final layer(s) of plastic from the walls, floors, and/or ceilings (as applicable). All other isolation engineering controls including decontamination facilities will likewise remain in place until the successful completion of the Post-Work Inspection is achieved. No alternative approaches may be implemented without the concurrence of the Project IH Consultant. The Contractor will containerize removed plastic and any remaining debris, decontaminate the container, and dispose of the container and its contents as lead-contaminated waste. All other isolation engineering controls including decontamination facilities may similarly be removed once all specified clearance criteria have been met. **Removal of plastic layers and isolation engineering controls ("teardown") may not occur without the knowledge and consent of the Project IH Consultant.** The Contractor will conduct a post-teardown visual inspection of the work area to identify and remove any debris that may have resulted from containment breaches or from containment removal.

3.2.2 Worker Protection And Personal Decontamination

- 3.2.2.1 General: The Contractor will be solely responsible for the safety, efficiency, and adequacy of its work, workers, equipment and methods, and for any damages which may result from their negligent actions, practices, construction, maintenance, or operations. The Contractor will erect and maintain at all times, as required by the condition and progress of the Work, proper safeguards for the protection of the workers and the public, including the posting of appropriate and applicable warning signage on the site.
- 3.2.2.2 Competent Person: The Contractor will designate a responsible member of its organization to be present on the work site, whose duty shall be the detection, recognition, and prevention of accidents and potential accidents. The designated individual will assume and fulfill the duties of the Competent Person, as defined in 8 CCR §1504. In the absence of notice to the contrary, provided in writing to the Project IH Consultant, this person will be the on-site Lead-Related Construction Supervisor of the Contractor.
- 3.2.2.3 Toxic Exposure Responsibility: To the extent allowable by law, the Contractor assumes all responsibility for any toxic exposures or effects experienced by workers as a result of the air quality supplied to respirators. The Contractor will assume all responsibility for any toxic exposures or effects to all personnel or property caused by airborne particulates, mists, vapors, or any wetting agent(s), or hazardous substances, and for the legal disposal of said substances and/or any residual toxic residues. Commencement of the Work by the Contractor will constitute implied acceptance of these responsibilities.
- 3.2.2.4 Separation of Facilities: Workers engaged in lead-related construction or lead-disturbing activities will not be permitted to eat, drink, smoke, chew gum, apply cosmetics, or use tobacco products within a regulated Work Area. Lavatory facilities, eating facilities and clothing change areas are to be established and maintained separate from the regulated Work Areas.
- 3.2.2.5 Environmental Quality: At the discretion of the County, on-site environmental sampling for airborne or surface wipe concentrations of lead may be conducted at any time, in any location, with or without prior notice. The purpose of this environmental sampling will be to evaluate whether existing containment or engineering controls are adequate and sufficient to prevent the release of lead outside of regulated Work Areas. Such sampling, if conducted, would not be intended to meet the definition of a “lead hazard evaluation”, as defined in 17 CCR §35038(a).
- 3.2.2.6 Respiratory Protection: Prior to commencement of work, all workers engaged in lead-related construction or lead-disturbing activities will be instructed in, and will be knowledgeable of, the use of respiratory protective equipment. Respiratory protection will be utilized only after all other feasible lead exposure hazard reduction methods have been implemented and demonstrated to be insufficient to reduce worker exposures to below the Action Level. All respiratory protection measures will be provided to workers in conjunction with a respiratory protection program which will

meet the requirements of Cal-OSHA regulations set forth in 8 CCR §5144 and 8 CCR §1532.1(f). This includes qualitative or quantitative fit testing. The following additional requirements will apply:

- 3.2.2.6.1 The Contractor will provide its workers with respiratory equipment approved by the National Institute for Occupational Safety and Health (NIOSH) for use in atmospheres containing lead dusts. Respiratory protection will be issued to workers for their sole and individual use. Respiratory protection will be worn by all on-site personnel entering the regulated Work Area(s). Respiratory protection will be worn at all times when inside the regulated Work Area, as well as during personal decontamination.
- 3.2.2.6.2 Where respirators with disposable filters are employed, the Contractor will provide sufficient filters for replacement as necessary by the worker, or as required by the applicable regulation.
- 3.2.2.6.3 In the absence of exposure monitoring data conforming to all Cal-OSHA requirements, the Contractor will assume lead exposures within work areas exceed the PEL and will, at a minimum, utilize the respiratory protection required for Low Exposure Trigger Tasks (i.e. manual demolition). In such instances, half-face mask, negative pressure, air-purifying respirators fitted with P-100 filter cartridges may be utilized during the disturbance of lead-containing materials. If half-face mask, negative pressure, air-purifying respirators are utilized, the workers will also be required to wear approved safety glasses or goggles. Workers engaged in Medium Exposure Trigger Tasks or High Exposure Trigger Tasks will, at a minimum, utilize the respiratory protection prescribed for those exposures and Trigger Tasks.
- 3.2.2.6.4 The Contractor will supply its workers with adequate respiratory protection, to meet the minimum standards of the applicable Cal-OSHA requirements. In accordance with 8 CCR §1532.1, the Contractor will have a Competent Person conduct exposure assessments and periodic monitoring to establish the minimum appropriate respiratory protection to be used and the effectiveness of the chosen respiratory protection. Until the Contractor performs exposure assessments in compliance with 8 CCR §1532.1(d) which determine actual employee exposures, the Contractor is to assume that workers conducting Low Exposure Trigger Tasks (i.e. manual demolition) are being exposed to airborne lead in excess of the PEL, but not in excess of 10 times the PEL, and will protect employees accordingly. In addition, the Contractor will require and enforce the use of the following activity-related requirements:
 - (a) Work involving the use of solvents or volatile organic compounds will be conducted with the

use of air purifying respirators equipped with HEPA and Organic Vapor cartridges.

- (b) Any question as to respiratory protection requirements for any activity unnamed or not otherwise described herein, by default, will require the maximum respiratory protection required by regulation.
- (c) Appropriate respiratory equipment will be required of all persons entering into regulated Work Areas.

3.2.2.6.5 The Contractor will post in the Equipment Room and the Clean Room, all decontamination and safety procedures to be followed for ingress and egress from Work Areas.

3.2.2.7 Protective Clothing: The Contractor will provide workers with sufficient sets of hooded, disposable, full-body coveralls recommended for use in lead-related work operations equivalent to DuPont "TYVEK-Type 14". Such full body protective clothing will include, but not be limited to:

3.2.2.7.1 Foot coverings including safety shoes or boots.

3.2.2.7.2 Protective head coverings (hard-hats).

3.2.2.7.3 Protective clothing should be hooded, full-body coverall type.

3.2.2.7.4 Durable water-proof gloves (plastic, latex, rubber, nitrile, etc.) selected for chemical compatibility of the glove material and the liquid materials to be handled. Cloth or leather gloves may also be worn for comfort, but shall not be worn alone when handling hazardous liquids.

3.2.2.8 Additional Clothing Requirements: The Contractor will observe the following additional work clothing requirements:

3.2.2.8.1 Any non-decontaminated protective clothing will remain within the contaminated areas, and will be disposed of as lead-contaminated waste upon completion.

3.2.2.8.2 Provide authorized visitors with disposable sets of protective full-body clothing, as needed to enter into regulated Work Areas.

3.2.2.8.3 Provide eye protection and hard hats as required for job conditions or by applicable safety regulations. Where negative pressure respirators are worn, they will be full-faced, unless the Contractor also provides protective eye wear.

3.2.2.8.4 All clothing will be sealable by design or by securing with tape at the workers' ankles and wrists.

3.2.2.9 Personal Exposure Monitoring: It will be the Contractor's responsibility to conduct required personal exposure monitoring. Such exposure monitoring will be in full compliance with the requirements of 8 CCR §1532.1 and 8 CCR §5144. The Contractor will monitor the airborne lead exposures of not less than 10% of the work crew, or a minimum of two (2) workers, whichever is greater. Workers will be monitored in "worst case scenario" tasks, as well as those conducting less hazardous work. Personal exposure monitoring is not the responsibility of the County, nor of the Project IH Consultant, however, the Project IH Consultant may elect to conduct such monitoring as a supplemental or quality assurance measure. Personal exposure monitoring conducted by the Project IH Consultant is not to be construed as a substitute for, nor in any way to obviate, the Contractor's duty to conduct such monitoring. Analytical results of Contractor's personal exposure monitoring will be posted daily at the work site, and copies of the analyses are to be submitted to the County along with the Post-Job Submittals.

3.2.3 Waste Management And Disposal

3.2.3.1 General: The Contractor will be responsible for the safe handling, packaging, labeling, storage and transportation of all lead-containing waste (hazardous and non-hazardous) generated by the Work. By commencing this work, the Contractor implicitly agrees to bear all costs arising from any claims, damages, losses, and/or clean-up expenses incurred which, as a result of the Contractor's negligence, result from a lead release(s) on the job-site or while lead waste is in transport to a waste disposal facility. The Contractor or its designated subcontract waste hauler will deliver all lead-containing waste materials to an appropriately designated waste disposal facility that has been accepted by the County and which is permitted in accordance with applicable regulations.

3.2.3.2 Waste Segregation: All removed lead-containing paint, ceramic tile glaze debris, rags, respirator cartridges, disposable suits and any other lead-containing wastes generated during lead-related construction work will be considered potential hazardous waste until characterization has been performed in accordance with 22 CCR §66261.24. Waste will be segregated into distinct waste streams according to the waste categories suggested in the HUD Guidelines, which include:

3.2.3.2.1 Category I: Low Lead Waste – typically consists of non-hazardous construction materials, filtered wash water, cleaned plastic sheeting, and other items that test as non-hazardous;

3.2.3.2.2 Category II: Architectural components such as painted finished items like doors, windows, trim, etc. which demonstrate intact, undeteriorated and/or stabilized surface coatings;

3.2.3.2.3 Category III: Concentrated Lead Waste - typically hazardous materials such as paint sludge, paint chips vacuum debris, vacuum filters, and any waste testing hazardous; and

3.2.3.2.4 Category IV: Other waste requiring characterization testing.

- 3.2.3.2.5 Any asbestos-containing or asbestos-contaminated waste generated during the work will be segregated from suspected lead waste. Care will be exercised by the Contractor to prevent, where feasible, commingling of asbestos and lead waste. In general, separate vacuums will be used for each type of waste clean-up.
- 3.2.3.3 **Storage Facilities:** The Contractor will assure that all lead-containing waste (hazardous and non-hazardous) generated by the Work is stored in a secured manner until received at the waste disposal facility. Debris bins, storage enclosures, etc. will be locked overnight and whenever the Contractor is off-site or unable to directly monitor their contents and management. The Contractor will ensure that the appropriate and required warning signs are posted on waste storage locations. The Contractor will be responsible to maintain the waste storage facilities in an orderly and well-kept condition at all times. The Contractor will conduct routine waste storage area inspections to assure that appropriate storage conditions are maintained. Waste is not to be co-mingled with stored non-waste material or equipment. All waste will remain stored in secured waste storage areas until results of waste characterization are available. Due to analytical methods required for waste characterization, this may require storage for up to 10 working days or more.
- 3.2.3.4 **Waste Characterization for lead hazard content** will be performed as stipulated in Title 22 of the California Code of Regulations, including using one or more of the following testing procedures, as required:
- 3.2.3.4.1 Total Threshold Limit Concentration (TTLC);
- 3.2.3.4.2 Waste Extraction Test (WET)/STLC; and/or
- 3.2.3.4.3 Toxicity Characteristic Leaching Procedure (TCLP).
- 3.2.3.5 **Hazardous Waste Determination:** Based on the testing protocols, any waste containing greater than or equal to 5 ppm lead using WET/STLC or any waste containing greater than or equal to 1000 ppm using the TTLC test will be considered a California Hazardous Waste/Non RCRA waste. Wastes containing greater than 5 ppm lead using the TCLP analysis will be considered a hazardous RCRA waste. Wastes reported by the laboratory to contain more than 50 ppm and less than 1000 ppm using the TTLC test may still be hazardous waste and will require analysis using WET/STLC and/or TCLP tests.
- 3.2.3.6 **Off-site Shipment of Wastes:** The Contractor will notify the County in advance, whenever lead-containing waste materials are to be removed from the work-site. A copy of the Uniform Hazardous Waste Manifest or any other documents required by Federal, State or Local agencies shall be completed by the Contractor and submitted to the County for review and signature prior to transporting lead-containing waste materials to a disposal facility. The Contractor will provide the County with sufficient advance notice of the need to obtain manifest signatures, so as to not delay waste shipment, nor to otherwise impede the Project Schedule. The Project IH Consultant will have authority to sign or approve waste shipping documents on the County's behalf. It is the Contractor's responsibility to obtain the

necessary authorized signature(s) to ship wastes off-site. Delays or expenses resulting from the untimely coordination of waste shipment documentation will be borne by the Contractor.

3.2.3.7 Waste Shipment Documentation: EPA Uniform Hazardous Waste Manifest forms will be used for all waste transported off-site for hazardous waste disposal. The Contractor will submit original "Generator" copies of all hazardous and non-hazardous waste manifests to the Project IH Consultant at the time the waste is transported off-site for disposal. All waste loads removed from the Project Site shall either be weighed by a Certified Weighmaster prior to delivery to a waste disposal facility or at the waste disposal facility. Weight tickets will be submitted by the Contractor as a part of the Post-Job Submittals. At the conclusion of the Work, the Contractor will provide documentation that the lead-containing waste materials were disposed of at an appropriate EPA-approved waste disposal facility. The documentation will be submitted as part of the Post-Job Submittals.

3.2.3.8 Waste Shipment Containers: All waste shipping containers will be individually labeled with appropriate signage and warnings, as required by applicable regulations, codes and ordinances. All waste hauling vehicles and/or waste debris bins will, at all times, be enclosed and sealed while in transport to a waste disposal facility.

3.2.4 Work Area Evaluation Criteria

3.2.4.1 General: The Contractor will not be authorized to de-mobilize from a Work Area until the Post-Work Inspection criteria have been met and documented, as described herein.

3.2.4.2 Post-Work Inspection Criteria: A visual evaluation of each regulated Work Area (including poly sheeting) will be performed following completion of the Work in order to evaluate the substantial completion of the stated scope of work and the thoroughness of the Contractor's Work Area cleaning. Each regulated Work Area must be free of all visible debris to satisfy this assessment. If a regulated Work Area is not visibly free of all three-dimensional debris, the Contractor will re-clean the Work Area using wet-wiping and/or a HEPA-filtered vacuum until a satisfactory condition is achieved. The Contractor will be released only after each regulated Work Area has met the above criteria.

3.2.4.3 Optional Dust Wipe Sampling: At the discretion of the County, dust wipe sampling of a regulated Work Area may be conducted. The purpose of the dust wipe sampling will be to evaluate the effectiveness of the Contractor's containment measures. Sample analytical results will be compared to the lead dust concentrations established in 17 CCR §35035. If sample analytical results equal or exceed the lead-contaminated dust concentrations established in 17 CCR §35035 within the regulated Work Area, the Contractor will re-clean the Work Area using wet wiping and HEPA vacuums until satisfactory conditions are achieved.

END OF SECTION

ATTACHMENT - A

CERTIFICATE OF LEAD WORKER'S ACKNOWLEDGMENT

Project Name: _____

Today's Date: _____

Project Address: _____

Contractor's Name: _____

WORKING WITH LEAD CAN BE DANGEROUS TO YOUR HEALTH. INHALING LEAD DUST HAS BEEN LINKED WITH VARIOUS HEALTH PROBLEMS.

Your employer's contract for the above-named project requires that you: 1) be supplied with appropriate personal protective equipment, including respiratory protection, and be trained in its use; 2) that you be trained in lead-related construction work practices and in the use of the equipment used on this job; and 3) that you receive a medical examination. These things are to be provided at no cost to you.

RESPIRATORY PROTECTION: Your employer must provide you with training in the proper use of respirators and inform you of the appropriate type of respirator to be used on the above-named project. You must be provided access to the personal exposure sampling data used to determine the appropriate type of respirators selected for this work. You must also be provided access to the written respiratory protection manual issued by your employer. You must be equipped at no cost to you with the appropriate respirator for use on the above-named project.

TRAINING COURSE: Applicable regulations require that you be trained in the dangers inherent in working with lead and lead-contaminated dust and in proper work procedures and personal protective measures. The topics covered in the training must, at a minimum, include the following:

- The content of the Cal/OSHA Construction Safety Orders for Lead (8 CCR §1532.1, et. seq.) and its appendices;
- The specific nature of operations on this project that could result in exposure to lead above the action level;
- The purpose, proper selection, fitting, use, and limitations of respirators;
- The purpose, and a description, of the medical surveillance program, and the medical removal protection program including information concerning the adverse health effects associated with excessive exposure to lead;
- The engineering controls and work practices associated with the employee's job assignment including training of employees to follow relevant good work practices as described in Appendix B of 8 CCR §1532.1;
- The contents of any compliance plan and the location of regulated areas in effect;
- Information informing employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician; and
- The employee's right of access to records under 8 CCR §3204.

In addition, the Contractor must ensure that all employees and supervisors who are engaged in lead-related construction work as defined in Title 17, California Code of Regulations, Section 35022, and have been shown to be exposed at or above the permissible exposure limit, meet the training requirements of this section, are trained by an accredited training provider and are certified by the California Department of Health Services.

(Continued on Back)

MEDICAL EXAMINATION: Applicable regulations require that you have a medical examination within the past 12 months and that it be provided at no cost to you. This examination must, at a minimum, include:

- Health history;
- Pulmonary function tests;
- Physical examination that pays particular attention to teeth, gums, and hematological, gastrointestinal, renal, cardiovascular and neurological systems;
- Blood pressure measurement;
- Blood sample - blood lead levels, hemoglobin and hematocrit, red cell indices, peripheral smear, morphology, blood urea nitrogen and serum creatine;
- Routine urinalysis with microscopic examination; and
- May include an evaluation of a chest X-ray

By signing this document you are acknowledging that you have been advised of your rights, as pertain to training and personal protection, and of the worker protection requirements applicable to your employer, the Contractor.

Signature: _____

Social Security No.: _____

Name: _____

Witness: _____

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1023

Steff Steiner
Terracon Consultants, Inc.
1466 66th Street
Emeryville, CA 94608

PROJECT:
JOB NO. R1177890
2600 FAIRMONT DRIVE
SAN LEANDRO, CA

Micro Log In 235361
Total Samples 3
Date Sampled 08/02/2017
Date Received 08/02/2017
Date Analyzed 08/03/2017

| Lead Concentration | | | |
|--|----------------|-------------|-----------------------|
| Sample ID | Weight Percent | mg/kg (ppm) | RDL |
| Client: 2600-PB-01 Lab: 235361-01 WHITE - WOOD - EAVES ADMIN BUILDING | 0.11 % | 1100 | 0.00806 % 81 mg/kg |
| Client: 2600-PB-02 Lab: 235361-02 BROWN - WOOD - POSTS ADMIN BUILDING | 0.52 % | 5200 | 0.0658 % 658 mg/kg |
| Client: 2600-PB-03 Lab: 235361-03 BROWN - WOOD - FASCIA DORM BUILDING | 6.8 % | 68000 | 0.34 % 3,401 mg/kg |

Technical Supervisor

Tess Tagorda, Chemistry Supervisor

8/3/2017

Date Reported

Analyst:

AY

AIHA-LAP LLC ELLAP Accredited Laboratory, ID #101768. SOP M23-Paint. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS). U.S. EPA SW-846 Method 7420 is used for the instrumental analysis. Nitric acid and hydrogen peroxide digestion procedures are based on ASTM E-1645. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

235361

Terracon**LEAD PAINT
SAMPLE DATA SHEET**X PM - S. Steiner
spsteiner@terracon.comPM - K. Schroeter
kmschroeter@terracon.comPM - K. Pilgrim
kmpilgrim@terracon.comPM - M. Benefield
msbenefield@terracon.comPM - T. Kattchee
takattchee@terracon.comPM - W. Frieszell
wmfrieszell@terracon.com

* Lead Analysis

Flame AA (EPA 7420)

TTL

PAGE 1 OF 1

Project Name/Address/Building No.: 2600 FAIRMONT DR, SAN LEANDRO

Project #: R-1177890

Sampled By: MC

Sampling Date 8/2/17

Sample(s) Sent To: QuanTem MAL Other: TAT: Rush 24 Hrs 48 Hrs 3-5 Days

| Sample ID | Paint Description and Sample Location | Condition (I/F/P) |
|--------------|---|----------------------|
| 1 2600-Pb-01 | Paint Color: WHITE Substrate: WOOD Component: LEAVES Sample Location: Bldg. # Unit # Room ADMIN BLDG | |
| 2 2600-Pb-02 | Paint Color: BROWN Substrate: WOOD Component: POSTS Sample Location: Bldg. # Unit # Room ADMIN BLDG | |
| 3 2600-Pb-03 | Paint Color: BROWN Substrate: WOOD Component: FASCIA Sample Location: Bldg. # Unit # Room DRUM BLDG | |
| | Paint Color: Substrate: Component: Sample Location: Bldg. # Unit # Room | |
| | Paint Color: Substrate: Component: Sample Location: Bldg. # Unit # Room | |
| | Paint Color: Substrate: Component: Sample Location: Bldg. # Unit # Room | |
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| | Paint Color: Substrate: Component: Sample Location: Bldg. # Unit # Room | |
| | Paint Color: Substrate: Component: Sample Location: Bldg. # Unit # Room | |

Relinquished By: M. Chen

Signature: [Signature]

Date/Time: 8/2/17

Received By:

Signature: [Signature]

Date/Time: 8/2/17 13:57

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:

