VOLUME 2 PROJECT SPECIFICATION & SAMPLE RESULT REPORTS

SECTION 02150 - SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Demolition and removal of selected portions of building or structure.
 - 2. Demolition and removal of selected site elements.
- B. See Division 1 Section "Construction Waste Management" for disposal of demolished materials.
- C. See Division 2 Section "Site Clearing" for site clearing and removal of aboveand below-grade improvements.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 SUBMITTALS

- A. Schedule of Selective Demolition Activities: Indicate detailed sequence of selective demolition and removal work, with starting and ending dates for each activity, interruption of utility services, use of elevator and stairs, and locations of temporary partitions and means of egress.
- B. Predemolition Photographs: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by selective demolition operations. Comply with Division 1 Section "Photographic Documentation." Submit before Work begins.
- C. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.
 - Comply with submittal requirements in Division 1 Section "Construction Waste Management."

1.4 QUALITY ASSURANCE

A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.

- B. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.
- C. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Standards: Comply with ANSI A10.6 and NFPA 241.
- F. Predemolition Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

- G. Notify City's Authorized Representative of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
 - D. Hazardous Materials: Owner to supply contractor Waste Abatement Report.
- H. Storage or sale of removed items or materials on-site is not permitted.
- I. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to City's Authorized Representative.
- E. Engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.

- F. Survey of Existing Conditions: Record existing conditions by use of measured drawings, and preconstruction photographs.
- G. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 ADDITIONAL REQUIREMENTS

- A. Demolition: All existing work designated for removal, including but not limited to walls, floors, ceilings, mechanical equipment, etc., shall be disposed of by the Contractor. "Remove" shall mean completely and entirely from premises.
- B. Terminating Utilities: The Contractor shall be responsible for terminating plumbing and electrical where items are removed, by dead-ending piping and wires in a safe, Code conforming and permanent manner.
- C. Utility Shutdowns: Owner must receive a minimum of 48 hours for all utility shutdowns and the shutdown must be approved by Owner. Shutdowns should be scheduled for "off" hours or weekends.
- D. Temporary Protection: During any required demolition of designated areas, Contractors shall provide adequate temporary protection and shall secure adjacent areas from dust and debris. All temporary partitions shall maintain existing fire ratings and required fire egress paths and exits. All emergency exit signs shall be fully operational during construction.
- E. Patching and Repair: Where partitions or other work is noted to be removed, adjacent walls, ceiling, floors and finishes shall be replaced, patched and/or leveled, as required, to blend together and match existing.

3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
- B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Arrange to shut off indicated utilities with utility companies.
 - 2. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.

3.4 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities. Comply with requirements for access and protection specified in Division 1 Section "Temporary Facilities and Controls."
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

3.5 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
 - 4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 5. Dispose of demolished items and materials promptly. Comply with requirements in Division 1 Section "Construction Waste Management."

3.6 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.

- 1. Comply with requirements specified in Division 1 Section "Construction Waste Management."
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.7 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION

SECTION 02 8333

LEAD ABATEMENT AND LEAD RELATED CONSTRUCTION WORK

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

- 1. Abatement, Lead Related Construction Work or painting of lead-containing materials and/or Lead Based Paint.
- 2. Transportation and disposal of lead-containing materials and/or Lead Based Paint.

B. Related Requirements:

- 1. Section 00 3126 Existing Hazardous Materials Information.
- 2. Division 01 General Requirements.
- 3. Cal/OSHA Title 8, California Code of Regulations (CCR).
- 4. California Air Resources Board Ambient Air Quality Standard, Title 24 CCR.
- 5. California Department of Public Health, Title 17, CCR.
- 6. Cal/EPA, Title 22 CCR.
- 7. California Labor Code, Division 5, Part 1, as it pertains to safety in employment and with the applicable provisions of the Title 8, CCR as it pertains to Occupational Safety and Health in the work place.
- 8. Environmental Protection Agency, 40CFR, Part 745.
- 9. UD Title X, Residential Lead-Based Paint Hazard Reduction Act of 1992.
- 10. Los Angeles County Public Health Code (Chapter 11).

1.02 DEFINITIONS AND ACRONYMS

- A. AAS Atomic Absorption Spectrophotometry used for lead paint chip and dust wipe sample analysis.
- B. Abatement Any set of measures designed to reduce or eliminate lead hazards or Lead Based Paint for public and residential buildings, but does not include containment or cleaning.

- C. Action Level Means the Action Level as defined in Title 8, California Code of Regulations, Section 1532.1.
- D. ANSI American National Standards Institute.
- E. ASTM American Society for Testing and Materials.
- F. Building ID number An alphanumeric identification code assigned to each building on an Owner site, also referred to as the insurance code, ID number or similar terms.
- G. Certificate Means the document issued by CDPH to an individual meeting the certification requirements as described in CCR Title 17, Sections 35083, 35085, 35087, 35089, or 35091.
- H. Clean Room An uncontaminated area or room which is a part of the worker Decontamination Enclosure System with provisions for storage of worker's street clothes and clean protective equipment.
- I. Clearance Inspection Means visual examination and, as applicable, collection of environmental samples upon completion of the Work of this section.
- J. Component Means a structural element or fixture, including but not limited to, walls, floors, ceilings, doors, window molding, trim, trestles, tanks, stairs, railings, cabinets, gutters, or downspouts.
- K. 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 exiting or temporarily framed doorway, securing each along the top of the 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. Other effective designs may be submitted for review.
- L. Decontamination The process of eliminating lead contamination from building surfaces, and property by cloths, mops, or other utensils dampened with water and disposed of as lead contaminated waste.
- M. Decontamination Enclosure System A minimum a two-stage Decontamination unit consisting of a compartment for Decontamination, and a Clean Room. Unless otherwise specified, it shall be adjacent to the Abatement area.
- N. Demolition The wrecking or taking out of any load supporting structural member of a facility together with any related handling operations.
- O. Deteriorated Lead Based Paint Means Lead Based Paint or a surface coating that is cracking, chalking, flaking, chipping, peeling, non-intact, failed, or otherwise separating from the substrate to which it is applied to.
- P. CDPH– California Department of Public Health.

- Q. CDPH-Approved Course Means any lead construction course that satisfies the requirements specified in CCR Title 17, Sections 35056, 35061, 35066, or 35067 as determined by CDPH pursuant to Sections 35076 and 35078.
- R. DOSH California Division of Occupational Safety & Health or Cal/OSHA.
- S. DOT Department of Transportation.
- T. DTSC California Department of Toxic Substances Control.
- U. Encapsulating Material Are coatings or rigid materials adhesively applied to Lead Based Painted surfaces in the Encapsulation process.
- V. Encapsulation The application of an Encapsulating Material to Lead Based Paint to provide a barrier between the Lead Based Paint and the environment.
- W. Enclosure A rigid durable barrier mechanically attached to building Component, with edges and seams sealed with caulk or other sealant.
- X. EPA; Renovation, Repair and Painting (RRP) Means a lead-related construction course that satisfies the requirements specified in 40 CFR, Part 745, Section 745.90.
- Y. Firm Means a company, partnership, corporation, sole proprietorship or individual doing business, association, or other business entity; a Federal, State, Tribal, or local government agency; or a nonprofit organization and satisfies the requirements specified in 40 CFR, Part 745, Section 745.89.
- Z. Fixed Object A piece of equipment, furniture, or improvement in the Work Area, which cannot be removed from the Work Area.
- AA. Hazardous Waste Means any waste stream determined by an Owner approved laboratory to exceed the regulatory thresholds for lead hazardous waste.
- BB. HEPA Filter Means a filtering system capable of trapping and retaining at least 99.97 percent of mono-dispersed particles 0.3 micrometers in diameter or larger.
- CC. HEPA Vacuum A vacuum system furnished with HEPA filtration.
- DD. HUD United States Department of Housing and Urban Development
- EE. HVAC Heating, Ventilation, and Air Conditioning system.
- FF. ICP-AES Means Inductively Coupled Plasma-Atomic Emission Spectroscopy used for heavy metal analysis, including lead.
- GG. Lead Based Paint Means paint or other surface coatings that contain an amount of lead equal to or greater than 0.7 milligrams per square centimeter (0.7 mg/cm²) or equal to or greater than 0.5 percent by weight.
- HH. Lead Containing Paint Means paint or other surface coatings that contain lead in an amount equal to or greater than 0.06 percent lead dry weight (600 ppm) but does not meet

the definition of Lead Based Paint. In the absence of paint chip or surface coating bulk sample results, any surface coating shall be assumed to be above 0.06 percent lead dry weight (600 ppm) until surface coating samples are collected and analyzed that indicate otherwise. Lead concentration shall be determined by a method that has an accuracy of not less than plus or minus 25 percent at 0.06 percent lead dry weight, to a confidence level of 95 percent.

- II. Lead Contaminated Dust Means dust that contains an amount of lead equal to, or greater than, forty micrograms per square foot ($40 \mu g/ft^2$) for interior floor surfaces; two hundred and fifty micrograms per square foot ($250 \mu g/ft^2$) for interior horizontal window surfaces; and eight hundred micrograms per square foot ($800 \mu g/ft^2$) for exterior floor and exterior horizontal window surfaces.
- JJ. Lead Contaminated Soil Means bare soil that contains an amount of lead equal to, or greater than, four hundred parts per million (400ppm).
- KK. Lead Hazard Means deteriorated Lead Based Paint, Lead Contaminated Dust, Lead Contaminated Soil, the disturbance of Lead Based Paint or Presumed Lead Based Paint without containment, or any other operation that may result in persistent and quantifiable lead exposure.
- LL. Lead Inspection Means a surface by surface investigation to determine the presence of Lead Based Paint as described in Chapter 7: Lead Based Paint Inspection, "Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing," U.S. Department of Housing and Urban Development, 1997 Revision.
- MM. Lead Related Construction Work Means any construction, alteration, painting, Demolition, salvage, Renovation, repair, or maintenance of any residential or public building, including preparation and cleanup that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead.
- NN. Lead Safe Schools Program Means the training program for lead safe working practices as developed by the Labor Occupational Health Program at U.C. Berkley.
- OO. Location Code Refers to a unique numeric code assigned by the Owner to each of its Project sites.
- PP. Member A Component part of a structure complete in itself.
- QQ. Movable Object A piece of portable equipment or furniture in the Work Area, which can be removed from the Work Area.
- RR. NESHAP The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 50.12).
- SS. NIOSH The National Institute for Occupational Safety and Health.
- TT. Owner's Authorized Representative Consultant (OAR) Refers to the firm, company or individual designated by the Owner to be the Project Manager/Construction Manager.

- UU. Owner's Consultant (OC) Refers to the firm, company or individual designated by the Owner to provide oversight and inspections of the abatement process and issue final clearance with report.
- VV. Painting Contract For purposes of this section, a painting contract is a Contract with the Owner to perform painting on existing facilities where Lead Based Paint, Lead Containing Paint, Presumed Lead Based or Presumed Lead Containing Paint will be disturbed or abated.
- WW. P.E.L. Means permissible exposure limits as defined in Title 8, California Code of Regulations, Section 1532.1.
- XX. Plasticize To cover floors, walls, and equipment with plastic sheeting as specified herein.
- YY. Portable Mechanical Ventilation System A portable exhaust system furnished with HEPA filtration and capable of providing a constant air flow into regulated Work Area from adjacent areas and exhausted outside the regulated area.
- ZZ. Presumed Lead Based Paint Means paint or surface coating affixed to a Component in or on a structure, excluding paint or surface coating affixed to a Component in or on a residential dwelling constructed on or after January 1, 1979, or a school constructed on or after January 1, 1993.
- AAA. Removal Means operations where Lead Based Paint is removed or stripped from structures or substrates including Demolition.
- BBB. Renovation Means the modifying of any existing structure, facility, or portion thereof.
- CCC. Replacement Means Removal of an entire building Component coated with Lead Based Paint and replacing it with a lead free Component.
- DDD. SCAQMD South Coast Air Quality Management District.
- EEE. STLC Means Soluble Threshold Limit Concentration used in the State of California in conjunction with TTLC to determine lead hazardous waste limits. If the STLC result is equal to or exceeds 5 mg/L the waste is deemed to be hazardous.
- FFF. Surfactant A chemical wetting agent added to water.
- GGG. TCLP Means Toxicity Characteristic Leaching Procedure used to determine the federal Resources Conservation Recovery Act (RCRA) lead hazardous waste limits. If the results equal or exceed 5 mg/L the waste is deemed to be hazardous.
- HHH. TTLC Means Total Threshold Limit Concentration used in the State of California in conjunction with STLC to determine lead hazardous waste limits. If the results are equal to or exceeds 1000 mg/kg, the waste is deemed to be hazardous.
- III. Visible Emissions Any emissions from a known or suspected lead-containing material that is visually discernible.

- JJJ. Wet Cleaning The process of eliminating lead contamination from building surfaces and/or objects by cloths, mops, or other utensils dampened with amended water and afterwards being disposed of as hazardous waste.
- KKK. Work Area Means an area where known or Presumed Lead Based Paint is disturbed or Abatement is conducted.
- LLL. X-Ray Fluorescense (XRF) Analyzer Means a direct reading instrument that determines the lead content of the surface coatings in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence.

1.03 POLICIES AND PROCEDURES

- A. The Owner has a zero-tolerance policy for uncontrolled lead releases during Lead Related Construction Work, Lead Containing Paint disturbance, or Abatement activities. A lead release requiring an emergency response is any disturbance resulting in the uncontrolled release of lead containing materials. Upon observation of any visual emissions, immediately stop the Work, vacate the Work Area, and provide written notification to the Owner's Consultant and OAR.
- B. Pre-qualified Abatement Subcontractors are not permitted to subcontract any Abatement Work to a lower tier Subcontractor without the prior written approval of the Owner.
- C. Do not furnish a reduced pressurization and filtration system in violation of, or in infringement upon, any patent.
- D. Owner's Consultant shall provide oversight for Projects that have the potential to disturb lead containing or Lead Based Paint. Prior to the commencement of such Work, provide written notification to the Owner's Consultant and OAR.
- E. The following paragraph regarding impacts to coated surfaces shall be part of the contract:
 - 1. "Renovation, repair or painting work performed on buildings constructed prior to 1978 require special handling and environmental monitoring when coated surfaces including, but not limited to, painted, varnished, and glazed surfaces are impacted. Coated surfaces applied prior to 1978 are assumed to be lead-based. All work shall be performed in compliance with Specification, Section 02 8333, "Lead Abatement and Lead Related Construction Work." XRF testing methodology is not acceptable in determining negative for lead content for Cal/OSHA compliance purposes, except for notification requirements. XRF may be used in determining lead-based paint for compliance with the U.S.E.P.A. Renovator, Repair, and Painting Rule. Disturbance of coated surfaces by contractors will be monitored by qualified City staff or Environmental Consultant sufficient to ensure that proper training and work procedures, cleanup, and waste handling are employed."

1.04 COORDINATION

A. Coordinate the Work of this section directly with the Owner, OAR and/or Owner's Consultant.

1.05 SITE SECURITY

- A. The Work Area is restricted to authorized, trained, and protected personnel. A list of authorized personnel shall be established and posted at the entrance of the Work Area by the Owner's Consultant prior to commencement of the Work.
- B. Report to the Owner's Consultant any unauthorized entry into the Work Area. Following notification, a written report of the incident shall be provided to the Owner's Consultant and OAR.
- C. A logbook shall be maintained at the entrance of the Work Area. Persons entering the Work Area shall record name, company affiliation, time in, and time out for each entry and exit.
- D. Access to the Abatement Work Area shall be through the Decontamination Enclosure System only. Other means of access shall be blocked or locked so as to prevent entry to or exit from the Work Area. Emergency exits shall be operable from inside the Work Area.
- E. Maintain Work Area security during Abatement and/or Lead Related Construction Work. Work Areas and ancillary equipment accessible to non-authorized personnel shall be protected from unauthorized access by constructing a minimum barrier of 3/8 inch CDX plywood supported by 2 by 4 studs, 16 inches on center. An access door shall be provided with hasp and padlock sufficient to prevent unauthorized entry. A key shall be provided to the Owner or OAR and Owner's Consultant. Required barriers within an occupied building shall be furnished with sheathing as required by state and local fire protection regulations.
- F. Remove barriers upon the completion of the Work of this section and unless otherwise specified, repair and/or replace to its original condition, damage resulting from installation, use, and removal of the barriers.

1.06 EMERGENCY PLANNING

- A. Emergency planning and procedures shall be developed, submitted, reviewed, and agreed to by the Owner's Consultant and OAR prior to the commencement of lead-related construction and/or Abatement Work.
- B. Emergency procedures shall be provided in the written languages understood by employees working on the Project and shall be prominently posted at the entrance of the Decontamination Enclosure System. Prior to entering the Work Area, parties must read and sign these procedures to acknowledge receipt and understanding of the Work Area layout, location of emergency exits, and emergency procedures.
- C. Emergency planning shall consider the effects of fire, explosion, toxic atmospheres, electrical hazards, slips, trips and falls, confined spaces, and heat related injury. Develop and provide written procedures and training to employees.
- D. Employees shall be trained in evacuation procedures in the event of workplace emergencies.

- E. In the event of non-life threatening situations requiring medical treatment, injured or otherwise incapacitated employees shall decontaminate following normal procedures with assistance from fellow workers if necessary, before exiting the Work Area.
- F. In the event of life threatening injury or illness requiring immediate medical treatment, worker Decontamination shall be given minimum priority. Provide measures to stabilize the injured worker remove them from the Work Area and secure proper medical treatment.
- G. Telephone numbers of emergency response personnel shall be prominently posted at the entrance of the Decontamination Enclosure System along with the location of the nearest telephone. In addition to the 911 emergency number, post the address and telephone number of the nearest emergency medical services provider.
- H. Provide at least one employee on the Project site at times during progress of the Work that is trained and certified in first aid and cardiopulmonary resuscitation (CPR). This employee shall be identified by name and proof of training shall be provided to the Owner's Consultant prior to the commencement of the Work of this section.
- I. Provide at least one 4A/60BC dry chemical extinguisher in the Decontamination compartment. Workers shall be trained in the proper operation of fire extinguishers.
- J. Emergency exits shall be provided and clearly marked with arrows or other clearly visible markings to permit easy identification from anywhere within the Work Area. Exits shall be secured to prevent access from uncontaminated areas while still permitting emergency egress. Exits shall be properly sealed with polyethylene sheeting, which can be cut to permit emergency egress. Emergency exits may lead through the Decontamination Enclosure System or other alternative exits as required by fire officials.

1.07 LICENSING

A. The Work of this section shall be performed by an entity duly licensed in the State of California in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code, as amended.

1.08 QUALIFICATIONS

- A. Where the scope of the Work includes the painting and/or refinishing of existing surfaces, only safety pre-qualified bidders on the pre-approved bidders list are qualified to be awarded a painting Contract or be listed as a Subcontractor for painting Work.
- B. Before any workers perform Abatement Work or Work of this section where the P.E.L. is exceeded, submit proof of CDPH training and certification. No Work shall be performed until the Owner's Consultant has reviewed and approved CDPH training and certifications.
- C. Workers shall be in personal possession of a wallet CDPH certification card at times while they are performing Abatement Work on the Project site.

D. Workers performing lead Abatement, Lead Related Construction Work, or disturbance of Lead Containing Paint where the exposure level exceeds the P.E.L., shall possess current CDPH certification and at least one CDPH Certified supervisor shall be available as required by Title 17, CCR subsection 36100.

1.09 TRAINING

- A. Lead Related Construction Work shall be performed by personnel with the following training, as applicable:
 - 1. The Lead Related Construction Work, specified herein, shall be performed by individuals trained and qualified in the techniques of lead-related construction, handling, disposal of lead-based and Lead Containing Paint, and the subsequent cleaning of contaminated areas. These individuals must comply with the applicable Environmental Protection Agency (EPA), Renovation, Repair and Painting (RRP) programs lead-related construction course that satisfies the requirements specified in 40 CFR, Part 745, Section 745., and must be capable of and willing to perform the Work of this section.
 - 2. The Lead Related Construction Work, specified herein, shall be performed by a company, partnership, corporation, sole proprietorship or individual doing business, association, or other business entity; a Federal, State, Tribal, or local government agency; or a nonprofit organization, shall satisfy the requirements specified in 40 CFR, Part 745, Section 745.89, as a Lead-Safe Certified Firm.
 - 3. Lead Abatement Work, specified herein, shall be performed by individuals trained and qualified in the techniques of lead abatement and will receive CDPH accredited training and certification, and must be capable of and willing to perform the Work of this section.
 - 2. Training specific to the performance of Lead Related Construction Work shall be provided to employees prior to performing the Work of this section.
 - 3. Training specific to the operation and use of fire extinguishers.

1.10 EXPOSURE ASSESSMENT

- A. Disturbance of Lead Containing Paint, as defined in this Specification, disturbed by tasks not included in Title 8, CCR Section 1532.1, Subsection (d)(2), shall require worker-exposure monitoring upon initiation of the Work. The workers performing these tasks shall be trained in accordance with the Hazard Communications Standard, Section 5194, including but not limited to, the requirements concerning warning signs and labels, Safety Data Sheets (SDS), and employee information and training.
- B. Provide an exposure assessment where the workers are performing Lead Related Construction Work. If historical data, collected within the 12 months prior to the Work performed, indicates worker exposure is below the P.E.L., and the Work being performed closely resembles the process, type of material, control methods, work practices, and environmental conditions, additional exposure assessment is not required.

- C. For Lead Related Construction Work where there is objective data or an exposure assessment demonstrating that the Lead Based Paint, or a specific process, operation or activity other than Abatement involving lead cannot result in employee exposure to lead at or above the P.E.L. during the specific process or handling, employees trained as required by Title 8, CCR Section 1532.1, including the training topics of the Lead-Safe Schools Program, may perform the Lead Related Construction Work.
- D. Where Work being performed indicates an exposure above the Action Level, each employee is required to have current blood lead level and Zinc Protoporphorin testing, medical clearance for negative pressure respirator use, and respirator fit testing.
- E. If there is no objective data or a negative exposure assessment fulfilling the above requirements, Lead Related Construction Work identified as a trigger task by Title 8, CCR 1532.1 shall be performed by workers who have received training as required by Title 8 CCR, Section 1532.1. This training shall, at a minimum, include the training topics of the Lead Safe Schools Program. An exposure assessment is required to be performed upon initiation of Work.
- F. The required exposure assessment shall not exceed 12 months from the date the samples were collected to the date the Lead Related Construction Work or disturbance of Lead Containing Paint is performed.
- G. The submission and review by the Owner's Consultant of the objective data or exposure assessment is required prior to performing Lead Related Construction Work.

1.11 SUBMITTALS

- A. Provide in accordance with Division 01 and this section.
- B. Prior to performing the Work of this section, submit the following procedures to the Owner's Consultant:
 - 1. An abatement plan including, but not limited to:
 - a. A detailed written description of the measures and management procedures, including the containment that will be utilized during Abatement to prevent exposure to lead hazards. Shop Drawings shall indicate the containment locations.
 - b. A detailed written description of the Abatement, including methods of Abatement, locations of rooms and building Component where Abatement is planned.
 - 2. Required air monitoring procedures (Cal/OSHA mandatory and SCAQMD permits for air filtering equipment).
 - 3. Decontamination procedures for personnel, Work Area, and equipment.
 - 4. Procedures for handling and disposing of waste materials, including disposal facility.

- 5. Provide the procedures to be used for capturing debris while disturbing overhead materials.
- 6. Procedures for final Decontamination and cleanup.
- 7. Procedures for dealing with heat stress during Abatement.
- 8. Emergency procedures during Abatement.
- C. Prior to performing Abatement Work of this section, submit the following Shop Drawings to the Owner's Consultant and OAR:
 - 1. Preparation of Work Area.
 - 2. Layout and construction of Decontamination Enclosure System and barriers for isolation of the Work Area described in this Specification and required by applicable regulations.
- D. Prior to performing the Work of this section, submit the following Product Data to the Owner's Consultant and OAR:
 - 1. Product Data relative to personal protective equipment including respiratory protection and protective clothing.
 - 2. Material safety data sheets and technical specifications for proposed materials.
- E. Prior to performing the Work of this section, submit the following notifications to the Owner's Consultant and OAR:
 - 1. Evidence of notification to Cal/OSHA as required by Title 8 CCR, Section 1532.1, where applicable.
 - 2. Notify CDPH no less than five days in advance of Abatement by submitting an Abatement of Lead Hazard Notification, CDPH Form 8551.
- F. Prior to performing the Work of this section, submit the following documentation to the Owner's Consultant and OAR:
 - 1. A list of employees who will participate in the Project, including delineation of experience, training, and assigned responsibilities during the Project.
 - 2. Submit proof satisfactory to the Owner's Consultant that required permits, site location, and arrangements for transport and disposal of lead containing waste has been performed in accordance with Federal, State, and local regulations.
 - 3. Submit proof of training for each worker who will perform Abatement or Lead Related Construction Work.
 - 4. Submit manufacturer's certification that HEPA Vacuums, air filtration units and other local exhaust ventilation equipment conform to ANSI Z9.2, as applicable.

- 5. When HEPA Vacuums are utilized on the Project, provide the maintenance and filter change log for these before they are brought onto the Project site.
- 6. Provide the current SCAQMD permit for each HEPA Vacuum and Portable Mechanical Ventilation System before they are brought onto the Project site.
- 7. Where biological monitoring is required, submit test result documentation verifying employees have completed blood lead level and Zinc Protoporphorin tests in accordance with Title 8 CCR, Section 1532.1.
- 8. Workers are required to submit a signed Code of Conduct form.
- G. Prior to performing the Work of this section, submit the following Samples to the Owner's Consultant and OAR:
 - 1. Submit a Sample of forms to be used in documenting the Work of this section.
- H. Prior to performing the Work of this section, submit the following schedule to the Owner's Consultant and OAR:
 - 1. An intended sequence of Work and construction schedule. Coordinate both the sequence and durations with the Owner.
- I. Prior to performing the Work of this section, submit other required items to the Owner's Consultant.
- J. During the performance of the Work of this section, submit the following documentation to the Owner's Consultant:
 - 1. Submit documentation from a physician certifying that employees who wear a negative pressure respirator are medically cleared to do so without suffering adverse health effects as required by DOSH regulations. The certification shall state that the employee or agent may perform Lead Related Construction Work and wear a negative pressure respirator without restrictions. Provide information to the examining physician about unusual conditions in the workplace environment that may impact the employee's ability to perform Work activities.
 - 2. During the performance of the Work of this section, and before additional supervisors or workers are permitted to perform the Work of this section, submit proof of CDPH training and certification, where applicable. No additional supervisors or workers are permitted upon the Project site until the Owner's Consultant has approved the CDPH training and certifications, when required.
 - 3. Submit weekly job progress reports detailing Abatement and Lead Related Construction Work activities for Projects that will exceed thirty days. Include review of progress with respect to previously established Milestones and schedules, major problems and action taken, injury reports, equipment breakdown, and air and/or wipe sampling results.
 - 4. Within five workdays of transport and disposal, submit copies of transport manifests, disposal receipts, analytical data, and weight certificates for hazardous

waste removed from the Work Area during the Lead Related Construction Work and/or Abatement Work. Weight certificates shall indicate by pounds the net weight of waste disposed of from the Project site as indicated on the associated manifest.

- 5. Submit daily, copies of Abatement Work site entry logbooks with information on worker and visitor access.
- 6. Submit logs on a weekly basis documenting filter changes on respirators, HEPA vacuums, HEPA filtered ventilation units, water filtration units, and other approved engineering controls, as applicable.
- 7. Submit results of air and/or wipe sampling data (as applicable) collected during the course of the Abatement and Lead Related Construction Work including DOSH compliance air monitoring results.
- K. During the performance of the Work of this section, submit other required items.

1.12 PRE-ABATEMENT MEETING

- A. Attend a meeting to be held prior to the commencement of the Work of this section. Attending this meeting shall be representatives of the Owner, OAR and the Owner's Consultant if applicable, and the testing and monitoring personnel who shall actually participate in the testing and monitoring program. Secure the attendance of the individual who will be the Project site competent person for the Abatement Work.
- B. At this meeting provide required submittals except for those to be submitted during progress of the Work. In addition, provide detailed information concerning:
 - 1. Preparation of Work Area and Shop Drawings.
 - 2. Personal protective equipment, including respiratory protection and protective clothing.
 - 3. Employees who will participate in the Project, including delineation of experience, training, and assigned responsibilities during the Work.
 - 4. Decontamination procedures for personnel, Work Area, and equipment.
 - 5. Abatement methods and procedures to be provided.
 - 6. Required air monitoring procedures (pre-Abatement, Cal/OSHA mandatory, and SCAQMD requirement).
 - 7. Procedures for handling and disposing of waste materials, including disposal facility.
 - 8. Procedures for final Decontamination and cleanup.
 - 9. A sequence of Work activities and performance schedule.

- 10. Procedures for dealing with heat stress.
- 11. Emergency procedures.

PART 2 – PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Products: The following products have been specifically approved for use as encapsulants/lock-down or bridging agents for Owner asbestos abatement and asbestos related construction projects and lead abatement and lead abatement related construction projects. Products not approved by the Owner shall not be used.
 - 1. L-B-C Lead Barrier Compound 5400 be Fiberlock Technologies, Inc.; coating encapsulant.

B. Materials:

- 1. Deliver materials in the original sealed packages, containers, or bundles bearing the name of the manufacturer and brand name.
- 2. Store materials, subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient enough to prevent damage or contamination. Replacement materials shall be stored outside of the Work Area until area is cleared for normal occupancy.
- 3. Damaged, deteriorating, or previously used materials shall not be furnished and shall be removed from the Project site and legally disposed of.
- 4. A sufficient supply of disposable mops, rags, and sponges for Work Area Decontamination shall be provided.
- 5. Unless otherwise specified, the Owner will provide water for construction purposes. Connect to existing system as required.
- 6. Products brought onto the Project site shall be accompanied by their respective Material Safety Data Sheet, which shall be maintained on the Project site.
- 7. Plastic, polyethylene sheeting or visqueen shall be a fire retardant type. Provide documentation from the manufacturer verifying compliance with this requirement.
- 8. Polyethylene sheeting furnished for the Decontamination Enclosure System shall be opaque white or black in color and shall be a minimum of 6-mil thick.
- 9. Surfactant (wetting agent) shall be a material that, when tested, demonstrates a surface tension of 29 dynes/cm as tested in its properly mixed concentration, using ASTM method D1331-56-"Surface and Interfacial Tension of Solutions of Surface Active Agents." Where Work Area temperature may cause freezing of the Amended Water solution, the addition of approved antifreeze in a manufacturer recommended amount is permitted.

B. Equipment:

- 1. Disposal bags shall be of 6-mil polyethylene, pre-printed with labels as required by applicable Cal/OSHA and DOT requirements.
- 2. Provide labels as per DOT requirements for disposal containers.
- 3. Provide warning signs as required by Cal/OSHA.
- 4. Disposal containers shall meet requirements of Title 22, CCR.
- 5. Provide a sufficient supply of scaffolds, ladders, lifts, and hand tools, as needed to complete the Work.
- 6. Provide sprayers with pumps capable of providing amended water in sufficient quantity to adequately wet the material to be abated or for Lead Related Construction Work.
- 7. Provide a sufficient supply of HEPA filtered vacuums to maintain a clean environment in compliance with this section.
- 8. When an enclosure requiring negative pressure is specified, a sufficient quantity of air-filtration ventilation units furnished with HEPA filtration and operated in accordance with ANSI Z9.2and EPA guidance documents shall be utilized to provide one workplace air change every 15 minutes and creating a pressure differential of -0.02 inches of water everywhere within the enclosure when compared to the area outside the enclosure. A log documenting the filter change history of each unit shall be required before use, and any unit without this log shall have filters changed and the unit decontaminated.
- 9. When rental equipment is to be used in Abatement areas or to transport lead contaminated waste, a written notification concerning the intended use of the rental equipment shall be provided to the rental agency with a copy submitted to the Owner.
- 10. When performing chemical Removal, provide portable eyewash station(s) that meet ANSI standards and are accessible to workers within 10 seconds.
- 11. Additional safety equipment, as necessary, shall be provided to workers and authorized visitors.
- 12. Equipment delivered to the Project site shall be free of debris suspect of containing lead. No equipment with suspect debris in or on it shall be permitted on Owner properties and/or the Project site.
- 13. When roll-off disposal containers are delivered to a Project site, four wheels of each container shall be moved and rested upon a minimum size sheet of plywood of 4-foot by 4-foot by 3/4 inch.

14. Lighting shall be provided in an amount sufficient to illuminate the Work Area for the purpose of safe visual working conditions and to permit examination of surfaces where Work is performed.

2.02 EMPLOYEE PERSONAL PROTECTIVE EQUIPMENT

A. Respiratory Protection:

- 1. Submit NIOSH approvals for respiratory protective devices utilized on the Project site. Include manufacturer certification of HEPA filtration capabilities for cartridges and filters. Filter cartridges shall be furnished with the NIOSH P-100 designation.
- 2. Provide respiratory protection to employees in compliance with CCR Title 8, Sections 1532.1 and 5144, as determined by the employee exposure assessment.
- 3. In the absence of an exposure assessment, base respiratory protection on the requirements of Title 8, CCR Section 1532.1, specifically subsection (d).
- 4. In addition to P-100 filters, provide the appropriate respirator filter cartridges for exposure to other airborne contaminants generated during the Abatement process.
- 5. Provide authorized visitors with a respirator and cartridges sufficient to protect individuals from exposure to hazardous environments generated during the Abatement activity.

B. Fit Testing:

- 1. Perform fit testing in accordance with Title 8 CCR, Section 5144.
- 2. Submit documentation of respirator fit testing for individuals entering the Work Area.
- 3. Maintain and submit to the Owner a copy of the written respiratory protection program.

C. Personal Protective Clothing and Equipment:

- 1. Provide eye protection to employees sufficient to protect employees from debris during work progress when full-face respirators are not being utilized.
- 2. Provide and require the use of eye protection when employees are working with a material that may splash or fragment, as specified by the Material Safety Data Sheet for a given product, or as required by Title 8, CCR.
- 3. Spectacle kits and eyeglasses must be provided for employees who wear glasses and who must wear full-face piece respirators. Provide respirators that have been tested and approved by the National Institute of Occupational Safety and Health for use in lead-contaminated atmospheres.

- 4. Provide full-body disposable protective clothing, including head, body, and foot coverings to workers and authorized visitors who enter the Work Area, in sizes adequate to accommodate movement without tearing. A new suit shall be provided and donned for each separate entry.
- 5. If washable clothing is to be worn underneath disposable protective clothing, it shall be provided to Abatement workers.
- 6. Provide a clean staging area for workers and others to store street clothes and personal protective equipment.
- 7. Disposal suits shall be collected in an appropriate disposal container at the entrance of the Abatement Work Area.
- 8. Abatement workers are required to wear nonskid footwear sufficient to protect them from workplace hazards. Disposable clothing shall be adequately sealed to the footwear to prevent body contamination.
- 9. Hand protection shall be provided, and workers shall be required to use lotion sufficient quantities to protect the worker when chemicals or other physical hazards exist.
- 10. As required by the Work site and applicable safety regulations, provide head protection and require the use thereof.
- 11. Worker protection equipment shall be ANSI approved.

PART 3 - EXECUTION

3.01 LEAD RELATED CONSTRUCTION WORK

- A. Work Area Preparation and Work Practices:
 - 1. Where exposure monitoring indicates Worker exposure is below the P.E.L., comply with the requirements of this section and the "Monitoring" section of this Specification.
 - 2. Disturbance of lead containing materials shall be performed using wet methods.
 - 3. Work requiring overhead disturbances shall require a means of capturing debris, thus preventing an uncontrolled release on the worker or the surfaces below.
 - 4. For disturbances utilizing local exhaust dust collection devices the equipment shall be designed and furnished with a HEPA filtered vacuum attachment approved by the manufacturer.
 - 5. Where Components are to be removed, loose Lead Based Paint and Lead Containing Paint shall be removed by manual means using wet methods.

- 6. Where a Component is attached and painted onto another surface and the Component is to be removed from the adjoining surface the paint shall be cut with a razor knife to reduce the potential of paint chip debris during Component removal.
- 7. If a Component being removed will be disposed of rather than reinstalled, manually cut the Component into manageable sections for disposal using wet methods or mechanically cut using a manufactured approved HEPA filtered local exhaust dust collector.
- 8. If a Component is to be reused, loose paint or rough edges may require scraping or sanding. Scraping or sanding must be performed manually using wet methods or mechanically with a manufactured approved HEPA filtered local exhaust attachment.
- 9. For solid core surfaces where penetration or welding are required the lead containing material shall be removed from the area impacted using wet methods. Layers of Paint shall be removed before impact to the surface commences.

B. Clean Up Procedures:

- 1. During the entire process of Lead Related Construction Work, clean debris generated using wet methods and/or HEPA Vacuuming.
- 2. At the completion of the Lead Related Construction Work, clean surfaces within the impacted Work Area.
- 3. When HEPA filtered Vacuums are utilized, vacuum from the area of impact to the outer perimeter of the polyethylene sheeting to remove visible debris. If vacuuming cannot remove visible debris, wet wiping will also be required.
- 4. When wet wiping the Work Area, wipe from the area of impact to the outer perimeter of the polyethylene sheeting to remove visible debris.
- 5. Tools and equipment utilized in the Work Area shall be wet wiped to remove visible debris.

3.02 ABATEMENT

A. Work Area Preparation:

- 1. Clean areas to be isolated by HEPA Vacuum prior to installation of polyethylene sheeting.
- 2. Seal the Work Area with a layer of 6 mil thick polyethylene sheeting prior to any Lead Based or Lead Containing Paint Removal or disturbance by covering vents, windows, door openings, and any non-Moveable Objects such as lockers, etcetera.
- 3. Install a minimum of two layers of 6 mil thick polyethylene sheets on floors, fastened by waterproof tape and other means as necessary to secure the sheeting.

4. The covering on windows, exterior doors, and vents shall be installed from the outside to facilitate Work on them from the inside.

B. Decontamination Enclosure System:

- 1. At a minimum a two-stage Decontamination Enclosure System consisting of a compartment for Decontamination and a Clean Room shall be constructed and used.
- 2. Unless otherwise specified, the Decontamination Enclosure System shall be adjacent to the Abatement area.
- 3. Other enclosure methods may be used if submitted and approved by the Owner's Consultant and OAR.

C. Removal and Replacement Substrates with Lead Based Paint:

- 1. Except as noted in the Specifications and Drawings, replace substrate with material of the same or better quality. Substrates include, but are not limited to doors, windows, moldings, casements, mantels, trims, skirting, baseboards, and associated hardware and fasteners.
- 2. Areas adjacent to substrate removal shall be protected from damage. Damages shall be repaired or replaced to original condition.
- 3. Substrates that are removed for replacement shall be wrapped and stored for disposal. Disposal shall be in accordance with the applicable codes and sections of this Specification.
- 4. After removal, the areas disturbed shall be cleaned and a Clearance Inspection performed in accordance with the procedures described in this Specification.

D. Abrasive Removers – Machine Sanders:

- 1. Machine sanders shall be furnished with a HEPA Vacuum system approved by the manufacturer.
- 2. Sanding shall only be performed on flat surfaces that allow the HEPA Vacuum dust collection attachment to come into tight contact with the surface being sanded.
- 3. Remove Lead Based Paint down to the bare substrate surface. If the pigment cannot be removed without damaging the substrate, submit a Request for Clarification to the Owner's Consultant and OAR.
- 4. Protect adjacent surfaces from damage from machine sanding. Repair and/or replace damaged surfaces.
- E. Chemical Removal-On-Site Chemical Removal:

- 1. No chemical Removal shall be performed on interior surfaces unless specifically called for and designed in the Specifications or the Abatement plan of the Project.
- 2. Owner approved chemical removers shall be compatible with and harmless to the substrate. On masonry surfaces chemical removers shall contain anti-stain formulation that inhibits discoloration.
- 3. Chemical Removal Agent Neutralizer: Use chemical Removal agent neutralizers on exterior surfaces only. Neutralizers shall be compatible with and not harmful to the substrate. Neutralizers shall be compatible with the Removal agent that has been applied to the surface substrate.
- 4. Apply chemical Removal agents and neutralizers in accordance with the recommendations of the manufacturer and the following:
 - a. Adhere to health and safety regulations and other Specification section requirements. Stripping agents shall not be allowed to penetrate wood or other fibrous substrates.
 - b. Remove the softened paint by scraping or wire brushing.
 - c. Protect adjacent areas from damage from Removal agent during the course of Work.
- F. Chemical Removal Off-Site Chemical Removal Structures of Historical Significance Only:
 - 1. Remove and transport Lead Based Painted Component in accordance with this Specification. Transport the Component to an off-site location. Remove Lead Based Paint by chemical Removal. Neutralize and clean the Component. Return Component to the Project site free of lead-containing materials and reinstall.
 - 2. Take extreme care in removing component to be taken off-site, to prevent damage. In addition:
 - a. Component shall be marked and identified using an inconspicuous engraving, to insure reinstallation in original location.
 - b. Hardware associated with a component shall be bagged and marked.
 - c. If required, hardware shall be chemically stripped, cleaned, or reconditioned.
 - d. Dispose of hazardous waste generated by the off-site stripping of Lead Based Paint as required by federal, state, and local regulations.
 - e. Do not transport hazardous waste to Owner properties and/or facilities.
 - f. Protect the component and the adjacent areas from which component are removed from damage by the removal and reinstallation procedures.

G. Water Jet Washing:

- 1. The purpose of the Water Jet Washing process is to remove Lead-Based and Lead Containing Paint from exterior masonry substrate.
- 2. If this procedure is selected, submit a Work plan to the Owner's Consultant which includes, but is not limited to, interim controls, paint stabilization, and capture of waste water.
- H. Encapsulation Interior and Exterior Coated Sealer System:
 - 1. Materials: Elastic acrylic coating shall be heavy bodied and warranted by the manufacturer to be compatible with the substrate. Elastic acrylic coating shall be long lasting and resist cracking, peeling, algae, and fungus.
 - 2. Submittal: Submit two Samples, 5 ½-inch by 8-inch of the encapsulation material to the Owner's Consultant and OAR.
 - 3. Encapsulation coatings shall be applied in accordance with the manufacturer's recommendations and the following conditions:
 - a. Remove surface dust and debris by scrubbing with a non-residue detergent solution, and rinsing. Remove loose paint until a sound, intact edge is achieved. Remove and replace loose plaster prior to the coating application. Proper safety procedures and lead dust control method in this Specification must be utilized.
 - b. Apply Encapsulation coatings to the substrate in a continuous coat to seal the surface being coated. The number of coats required and coverage rates shall be in accordance with the manufacturer's recommendations.
 - c. Repair materials that lift and peel after the application of the Encapsulation coating by scraping until a sound surface is obtained. The edges shall be feathered, and a reapplication of an Encapsulation coating shall be applied.
 - d. Remove, or cover as directed, existing fixtures located on surface to be coated, including but not limited to, electrical receptacles, switches, exhaust fans, and hardware.
 - e. Protect adjacent surfaces and existing fixtures from damage by coating system. Damages to adjacent surfaces and existing fixtures due to lack of protection or improperly applied protection shall be repaired and/or replaced.
- I. Encapsulation Interior and Exterior Flexible Wall Covering:
 - 1. Materials: Wall covering shall be a reinforced fiber type that forms a secure bond with the substrate, resistant to peeling and formation of mold. The wall covering system shall form a seal over the substrate to which it is applied and not allow the passage of substrate dust into the environment.

- 2. Submittal: Prior to the start of Work, submit to the Owner's Consultant and OAR for approval, manufacturer's descriptive literature, and two 5 ½-inch by 8-inch Samples of each wall covering system.
- 3. Install Encapsulation covering in accordance with manufacturer's installation instructions and the following provisions:
 - a. Remove foreign material by washing surfaces with a detergent solution. Remove loose plaster, loose paint, and loose wallpaper. Utilize dust control methods described in this Specification.
 - b. Repair larger damaged areas flush with surrounding wall surfaces prior to installation of wall covering system.
- J. Enclosure Procedures Gypsum Wallboard (interior surfaces only), plywood paneling, other enclosures of exterior substrate:
 - 1. Surface preparation: Remove foreign material by wash-down with a non-residue detergent solution. Remove loose plaster, loose paint, and loose wallpaper in accordance with this Specification to stabilize the painted surfaces.
 - 2. Affix warning labels stating surface contains "LEAD-BASED PAINT" to the surface prior to being enclosed. Labels shall be 3-inch by 5-inch and placed four feet apart at approximately five foot high on the surface being enclosed.
 - 3. Install selected enclosure material in accordance with the relevant section of the Specification. Any disturbance to Lead Based Paint in the execution of this section shall comply with the Lead Related Construction Work section of this Specification.

K. Soil Abatement:

- 1. Surface Contamination:
 - a. Remove Lead Contaminated Soil from the locations and to a depth specified in the scope of Work.
 - b. In the absence of a specified depth of soil removal identified in the scope of Work, submit, prior to the bid, a Request for Clarification regarding the quantity of soil to be removed.
 - c. Submit a written soil abatement plan prior to initiation of the Project.
 - d. No soil abatement shall proceed until the Work plan has written approval by the Owner's Consultant.
 - e. Refer to the waste handling and transportation section of this Specification for the handling, characterization, and disposal of waste.
- L. Alternate Procedures:

- 1. If specified procedures cannot be utilized, a request must be made in writing to the Owner's Consultant and OAR establishing details of the problem encountered and recommended alternatives.
- 2. Alternate procedures shall provide equivalent or greater protection than procedures that they replace.
- 3. Prior to implementation, alternative procedures shall be submitted and approved in writing by the Owner's Consultant and OAR.

M. Clean Up Procedures

- 1. During the entire process of the Work of this section, perform continuous cleaning of debris generated using wet methods and/or HEPA filtered vacuuming.
- 2. At the completion of the Work of this section, clean surfaces within the impacted Work Area, including but not limited to, tools, equipment, and polyethylene sheeting to remove visible debris from the Work Area.
- 3. Tools and equipment utilized in the Work Area shall be thoroughly cleaned. Nonelectrical tools and equipment shall be cleaned monthly and before Removal from the Work Area by HEPA vacuuming and washing using a lead specific detergent or other suitable cleaning agent.
- 4. Electrical tools and equipment shall be HEPA vacuumed and cleaned by wet wiping limiting the amount of water used to avoid electrical hazards.
- 5. Remove polyethylene sheeting, except for critical barriers, by folding it into itself beginning with the higher level polyethylene first.
- 6. Following Removal of polyethylene sheeting a final cleaning of surfaces in the Abatement workspace shall be performed by HEPA vacuuming, wet wiping, and a final HEPA vacuuming.
- 7. When HEPA vacuums are utilized, vacuuming shall be performed from the top down and from the area of impact to the outer edge of the polyethylene sheeting.
- 8. Apply no less than one continuous coat of approved paint or primer to abated surfaces, where applicable.
- 9. At the completion of the final clean up, the CDPH certified supervisor shall inspect the Work Area for visible debris. If debris is identified, repeat the final cleaning process.
- 10. Wet wiping, washing, and cleaning required by this section shall include the Removal of visible debris by cleaning with a lead specific detergent or other suitable cleaning agent in clean water followed by a rinsing with clean water and clean rags, following the same sequence of cleaning as the vacuuming.
- 11. Refer to the waste handling and transportation section of this Specification for disposal of waste generated by this process.

3.03 WASTE HANDLING AND TRANSPORTATION

A. Characterization of Waste:

- Until analytical results are available, waste materials (including water containing paint chips) shall be treated as hazardous. Visible paint chips shall be separated from waste water before characterization. Following removal of solids the waste water shall be characterized to determine disposal requirements. The paint chips removed from the waste water may be disposed of as assumed RCRA hazardous waste or characterized to determine disposal requirements.
- 2. Characterize waste streams as follows:
 - a. Collect a representative sample of the waste material.
 - b. For a pile of waste take one sample of a proportionate combination of Component in the pile. If a large quantity of waste is generated no less than four samples may be required.
 - c. For large wood Component, such as windows, doors, etcetera, a representative sample of each Component of similar characteristics, paint history, etcetera, shall be collected and tested. A full depth core sample, not less than one inch diameter, of the Component is to be collected. The core sample shall include the substrate and paint coatings on both sides of the Component, as applicable.
- 3. Analysis for the waste characterization samples shall be performed as follows:
 - a. Waste generated by chemical stripping shall, in addition to the requirements for determining the solid and soluble lead concentrations, shall be tested for corrosiveness and other contaminants, as applicable, resulting from the chemical stripping process.
 - b. Analyze samples for Total Threshold Limit Concentration (TTLC):
 - 1) If results are less than 50 mg/kg (milligrams/kilogram) the waste is not hazardous and shall be disposed as general construction waste.
 - 2) If sample results are 50 mg/kg or greater, the waste shall be tested for Soluble Threshold Limit Concentration (STLC).
 - c. Where waste is required to be tested for STLC the following shall apply:
 - 1) If the STLC result is less than 5 mg/L (milligrams/liter) the material shall be disposed at a Class II waste landfill. Evidence of such results of the STLC testing will be required by the landfill before waste is accepted. No further testing is required.

- 2) If the STLC results are 5 mg/L or greater, the waste is a California regulated waste and the material shall be tested using the federally mandated Toxicity Characterization Leaching Procedure (TCLP).
- d. Where waste is required to be tested by TCLP the following shall apply:
 - 1) If the TCLP is less than 5 mg/L, the waste is a California regulated hazardous solid waste (non-RCRA). This material shall be disposed in a Class I hazardous waste landfill.
 - 2) If the TCLP is equal to or greater than 5 mg/L, the waste is a federally regulated hazardous waste solid (RCRA). The waste shall then be disposed in a Class I hazardous waste landfill.
- e. Personal and commercial wash water with lead contamination shall be handled as follows:
 - 1) Filter the waste water through cheesecloth, or other similar filtering media, to remove the gross debris. Separate the waste streams and characterize these in compliance with this Specification.
 - 2) If the waste water is identified as a RCRA or California regulated hazardous waste (Non-RCRA) by STLC and TCLP, filter the waste water by power pumping it through a 20 micron pore size filter. The filtered water shall be tested as described for waste in this Specification.
 - 3) If test results categorize the filtered water as non-hazardous, it may be disposed of in the sewer system.
 - 4) Wastewater, filtered or otherwise, shall not be discharged in storm drains, gutters or allowed to sheet flow over the surface of the ground.

B. Waste Handling:

- 1. Waste, hazardous and non-hazardous, shall be disposed of at an authorized site in accordance with provisions of this Specification and applicable Federal, State, and local laws.
- 2. Any waste determined to be hazardous, through analytical testing, shall be kept in a secured area or lockable container that is inaccessible to persons other than authorized personnel working on the Project. Hazardous waste containers shall be labeled "Hazardous-Waste Contains Lead" and labeled with the date waste collection commenced.

- 3. Hazardous waste shall not remain on the Project site beyond 90 days of the date it was generated. It shall be removed from the Project site and transported to an approved landfill before the 90 days has elapsed.
- 4. Waste shall not be transported from the work are to the storage container or waste hauler's vehicle while students or staff are present in the path of travel. Where a path of travel cannot be cordoned off the transportation of waste must be completed prior to of after students and staff are not on site.
- 5. Once hazardous waste is removed from the Project site, ensure it is disposed of in an approved landfill within 6 days. The waste shall not be transported to another site for commingling of waste from a source other than the site of original generation. This requirement shall be documented by the proper execution of a Uniform Hazardous Waste Manifest signed by the landfill operator.
- 6. Hazardous and non-hazardous waste shall be kept in different containers and stored in separate locations. Commingling of waste is not permitted.
- 7. As the Work progresses, to prevent exceeding available storage capacity on the Project site, sealed and labeled containers of lead waste shall be removed and transported to the prearranged disposal location.
- 8. Containers used for hazardous waste shall meet the requirements of EPA and DOT for hazardous waste storage and transport. At a minimum, disposal packaging of Lead Based Paint fragments, dust, and debris shall be in 6-mil polyethylene (plastic) bags that are airtight and puncture resistant.
- 9. Any debris or residue observed on containers or surfaces outside of the Work Area resulting from clean up or disposal activities shall immediately be cleaned using HEPA filtered vacuum equipment and/or wet methods as appropriate.
- 10. Materials not contained in bags or other appropriate disposal containers shall not be placed in lead waste storage containers, nor shall storage containers be used for non-lead waste. To avoid damage, packaged waste shall be placed, not thrown, into the storage containers.
- 11. Lead Contaminated Soil shall be transported in plastic lined containers.
- C. Transportation of Non-Hazardous Waste:
 - 1. Receipts from the disposal facility, trip tickets, transportation manifests, weight certificates or other documentation of disposal shall be delivered to the Owner's Consultant within 48 hours of disposal. The waste manifest shall be signed by the generator, the transporter(s), and the disposal site operator each time the responsibility for the waste material is transferred. If a separate hauler is employed, the name, address, and signature of the transporter shall also appear on the manifest.
- D. Transportation of Hazardous Waste:

- 1. Hazardous waste shall be transported by a RCRA/DOT/EPA certified hazardous waste transporter. Provide evidence that the hazardous waste transporter meets the requirements of this Specification.
- 2. The Work of this section includes responsibility for actions of the hazardous waste transporter as it pertains to waste Removal and disposal related to the Work of this Specification.
- 3. Identify the facility to which the waste generated by this Specification will be taken. Evidence shall be provided verifying the facility is licensed/permitted to receive and handle non-hazardous lead containing waste and/or hazardous lead containing waste as applicable.
- 4. Waste disposed as hazardous shall be transported under a Uniform Hazardous Waste Manifest. The generator copy of this manifest shall be submitted to the Owner's Consultant within five days of transport.
- 5. Dump receipts, trip tickets, transportation manifests, weight certificates or other documentation of disposal shall be delivered to the Owner's Consultant within 48 hours of disposal. The Uniform Hazardous Waste Manifest shall be signed by the generator (or designee), the transporter(s), and the disposal site operator each time the responsibility for the waste material is transferred. If a separate hauler is employed, the name, address, U.S.E.P.A. ID number and signature of the transporter shall also appear on the manifest.
- 6. The enclosed cargo area of trucks or containers shall be free of debris and lined with 6-mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extend up the walls. Wall sheeting shall be overlapped and taped into place.
- 7. During transport, drums and other containers shall be placed on level surfaces in the cargo area and packed tightly together to prevent shifting and tipping. Large structural Component shall be secured to prevent shifting and bags placed on top.

3.04 MONITORING

- A. Project Management and Inspection:
 - 1. Owner has the right to perform air, wipe, and visual monitoring at any time.
 - 2. Owner shall proceed in accordance with the terms and conditions of the Contract Documents whenever the Work or protective measures are not in compliance with applicable governmental regulations, Contract requirements, and/or threatens the adjoining environment with lead contamination.
 - 3. Where exposure monitoring indicates exposure is at or above the P.E.L. comply with Title 8, CCR Section 1532.1 (e) through (n).
- B. Employee Personal Air Monitoring:

1. Provide air monitoring as required by Title 8 CCR, Section 1532.1. Results shall be provided within ten working days of sampling. If the intent is to utilize such as exposure assessment documentation, and Work is to commence earlier than ten working days, submit results 24 hours in advance of the start of Work.

C. Clearance Inspection:

- 1. Clearance Inspection for Lead Related Construction Work shall include:
 - a. A visual inspection of the Work Area by the Owner's Consultant prior to occupancy for normal activity.
 - b. Do not remove barriers designating a regulated Work Area until a written release from the Owner's Consultant is provided.
 - c. The Owner's Consultant has the right to collect wipe samples as part of the Clearance Inspection.
- 2. Clearance Inspection for Abatement shall include:
 - a. A visual inspection of the Work Area by the Owner's Consultant prior to collection of environmental samples (dust, wipe, and/or soil samples, as applicable).
 - b. Owner's Consultant shall collect environmental samples.
 - c. Results of samples shall comply with Title 17, CCR before the Work Area is released for normal occupancy.
 - d. Where samples fail to meet regulated clearance levels of Title 17, CCR, clean the Work Area as required for final cleaning in the Clean Up Procedures section of this Specification.
 - e. Following cleaning, the visual inspection and environmental sampling will be repeated as described above. This process shall continue until the clearance level of Title 17, CCR is provided.

3.05 RE-ESTABLISHMENT OF THE WORK AREA AND SYSTEMS

- A. Re-establishment of the Work Area shall only occur following the completion of clean-up procedures and after a Clearance Inspection has been performed and documented to the satisfaction of the Owner's Consultant.
- B. Re-secure Moveable Objects removed from their former positions during area preparation activities.
- C. Relocate Moveable Objects that were removed to temporary locations back to their original positions.
- D. Reestablish HVAC, mechanical and electrical systems to the condition prior to commencement of the Project.

E. Repair areas of damage that occurred as a result of Abatement or Lead Related Construction Work.

3.06 PROJECT COMPLETION DOCUMENTATION

- A. Provide to the Owner's Consultant of the following close-out documentation:
 - 1. Filter change logs for air filtration units, water filtration units and respirators
 - 2. Foreman's daily job reports
 - 3. Employee entry and exit logs for Work Areas
 - 4. Visitor entry and exit logs for Work Area
 - 5. Air sample results for personnel
 - 6. Copies of hazardous and non-hazardous waste manifest
 - 7. Hazardous waste weight tickets
 - 8. Analytical data and chain of custody for waste characterization
 - 9. Signed Daily Personnel Report Forms
- B. Provide Owner's Consultant and OAR with as-built drawings identifying surfaces where Lead Based Paint has been encapsulated or enclosed.

END OF SECTION

Specific Lead Abatement and Related Scope of Work

1.0 GENERAL

Elevated lead-based paint and lead dust was detected on all surfaces and within the James W. Bristow indoor Marksmanship Range and the ventilation system. In addition, elevated lead dust was found on exterior surfaces immediately surrounding the Veteran's Park Recreational Building, located at 6364 Zindell Ave, Commerce, CA 90040. Lead dust, soil, paint and XRF sampling were performed. It is believed that the ventilation system used for the Range during weapons firing and trap cleaning actions are the primary source of lead dust contamination inside and immediately outside of the Range. Refer to Hillmann reports #C3-6528a, #C3-6528b, #C3-416 and C1-4751.

The Firing Range was in operation from approximately 1970 to 2009. It is unknown if the ventilation unit supporting the Range has never been professionally cleaned prior to 2008. Range ventilation system cleaning was conducted in 2008; however, no other professional cleaning has been conducted concerning the remaining interior range areas located at the basement level. The ventilation unit's flow rates were evaluated and retrofitted with HEPA filters on the 10 exhaust ducts servicing the range in 2009. Currently all range firing operations have been halted, the mechanical ventilation system has been shut off and the impacted surrounding areas (basketball courts, golf range and side yard) have been closed off to the public. Lockout/Tag out of the ventilation system will be enforced during all cleaning and construction activities at the range and of the surrounding impacted areas.

The City is requesting that the entire basement level that contains the Firing Range undergo a lead-based paint/dust stabilization conducted by a certified and experienced lead abatement company on all surfaces within the basement level, stairs and elevator shaft along with portions of the site adjacent to the firing range exhaust fan discharge and other locations identified in the Hillamnn reports. This dust will be disturbed due to cleaning activities. Procedures and engineering controls listed below shall be conducted during lead-based paint/dust stabilization. Area air-monitoring will be conducted during the lead-based paint/dust stabilization and confirmatory clearance using wipe testing will be performed by the Certified Lead Inspector/Risk Assessor contracted separately by the City for this project.

Veteran's Park Lead Paint Stabilization and Abatement Specification

Project

2.0 STABILIZATION OF LEAD-BASED PAINTED COMPONENTS AND LEAD DUST MATERIALS ABATEMENT

This Section includes specifications for the removal and stabilization of lead-containing paint and dust from the Firing Range and identified exterior surrounding areas at 6364 Zindell Ave, Commerce, CA 90040.

- 2.1 Scope of Work: Contractor shall refer to Project Report #C3-6528a, #C3-6528b, #C3-416 and C1-4751 for locations of lead-based paint and lead dust. The report is attached in Appendix A. Contractor shall make their own quantity determinations.
 - 2.1.1 All internal ventilation system ducting and related mechanical system components shall be cleaned using wet methods. All exterior (exposed) ducting, unit motor and fan-blade components contain a red-colored lead-based paint; this paint shall be removed and cleaned using wet methods.
 - 2.1.1.1 Remove ductwork and all hangers so materials can be cleaned then disposed of per governing agency requirements. Ductwork that cannot be accessed for removal will be cleaned and then capped at the source and discharge locations that service the basement level.
 - 2.1.1.2 The Mezzanine mechanical rooms M-4 and M-5 exposed HVAC systems and miscellaneous piping are to have the exteriors surfaces cleaned per section 2.1.1.
 - 2.1.1.3 At the Roof mechanical area exposed HVAC systems, elevator relief vent duct enclosure and miscellaneous piping are to have the exteriors surfaces cleaned per section 2.1.1.
 - 2.1.14 The roof access ladder in the Mezzanine mechanical room is to have the surfaces cleaned per section 2.1.1.
 - 2.1.1.5 The Mezzanine Level Mechanical Rooms M-4 and M-5 and Mezzanine Corridor M-1 are to have all surfaces including employee lockers are to have the exteriors surfaces cleaned per section 2.1.1.
 - 2.1.1.6 The elevator shaft and pit are to be cleaned using wet methods. This scope shall include the elevator car's exterior shell entirely.
 - 2.1.1.7 The basement level floor drains are to be cleaned, including the piping system and sump pits. Sump Pit contents are to be hauled-away, tested and disposed of per governing agency regulations.

Veteran's Park Lead Paint Stabilization and Abatement Specification

- 2.1.2 The exterior and interior surfaces of the small concrete building that houses the Range's ventilation system shall be cleaned using wet methods. The concrete trench is to be included in this scope of work that leads into this room from the range.
 - 2.1.2.1 Ventilation fan and flue are to be cleaned then removed and disposed of per governing agency requirements.
 - 2.1.2.2 The exterior of the fan room, steps and side yard are to be cleaned.
 - 2.1.2.3 The CMU property line wall is to be cleaned using wet methods including top of wall.
- 2.1.3 All non-concrete walls and ceilings in the Range are to be removed in their entirety. It is understood that this is a firing range and that stray bullets or bullet fragments may contact the walls and other surfaces during weapons firing.
 - 2.1.3.1 Provide removal of all non-concrete walls and ceilings in the range, this scope includes the acoustic ceiling tile system, plaster ceiling system and tectum fiber panel system, modular office wall system and store front system sound wall for the entire basement level.
 - 2.1.3.2 Provide an alternate to remove the water damaged plaster walls 4'- 0" above finish floor in electrical service room #309 and plumbing pump room #310 only in lieu of full wall demolition.
 - 2.1.3.3 Provide as an alternate to clean rather than demolish the plaster ceilings located in the electrical service room #309 is to be cleaned using wet methods. Any paint on plaster surfaces is to be wet scraped to remove the loose and chipped paint.
 - 2.1.3.3 The exposed concrete floor and wall behind the bullet traps that are subject to bullet impacts in the Range are to be hydro-blasted or bead blasted with a system that contains dust and water. The debris collected shall be disposed of per governing agency requirements.
 - 2.1.3.4 Remove all flooring and rubber base at the basement level, refer to the Asbestos and Lead Survey regarding positive results for mastic.

 Removal methods are to be per governing agency requirements for ACM containing materials.
 - 2.13.5 Provide as an alternate the removal of terrazzo floor and wall covering located in restrooms #307 and #308. Plumbing fixtures are to be removed and disposed of with sanitary sewer connections and water supplies safely capped off.

Veteran's Park Lead Paint Stabilization and Abatement Specification

- 2.1.3.5 All Custodian Closets are to be cleaned, including mop / service sinks using wet methods.
- 2.14 The painted concrete and metal surfaces of the Range are to be wet scraped to remove the loose and chipped paint. The interior concrete floor and exterior concrete surfaces are to be wet scrubbed and wet vacuumed.
 - 2.1.4.1 Provide as an Alternate remove doors and door hardware at all concrete walls so materials can be cleaned then disposed of per governing agency requirements, doors #302, #303, #308 and #309 are to be excluded from this alternative scope of work.
- 2.1.5 After scraping has commenced, a light coating of approved sealant should be applied in order to prevent further peeling. The manufacturer must provide a 20 year warranty (permanent) on the effectiveness of the product. The property owner or tenant must conduct visual monitoring at one and six months after application to be sure the sealant is still intact and a patch test is required prior to application of the approved sealant.
- 2.1.6 All work shall be supervised by persons experienced in lead abatement. During all phases of work, the Contractor shall have at least one supervisory employee per work area (individual building) currently certified by the California Department of Public Health as a Certified Lead Supervisor as specified in CCR Title 17, Section 35008. All work shall be performed by employees currently certified by California Department of Public Health as a Certified Lead Worker as specified in CCR Title 17, Section 35009.
- 2.1.7 Where methods or procedures are specified in this work-plan, they shall constitute minimum measures and shall in no way relieve the Contractor of sole responsibility for the means, methods, techniques, sequences or safety measures in connection with the work.
- 2.1.8 Damages caused during the performance of abatement activities shall be repaired by Contractor (e.g. paint peeled off by barrier tape, nail holes, water damage, broken glass) at no additional expense to the Owner. Contractor is responsible for restoring the work area and auxiliary areas, used in the abatement work, to conditions equal or better than original.
- 2.1.9 It is the Contractor's responsibility to fully understand and comply with the following Specifications. In addition, it is the Contractor's responsibility to ensure that all work is performed in accordance with applicable Federal, State, and Local regulations and the standards of the industry.
- 2.1.10 Provide necessary labor, equipment and material to remove, transport and dispose

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- of lead-containing materials in accordance with all Federal, State, and Local regulations and standards. Work includes submitting required permits, notifications and performing required air monitoring.
- 2.1.11 Owner's Certified Lead Consultant Representative may conduct perimeter and clearance air monitoring for quality assurance/quality control (*QA/QC*) purposes.
- 2.1.12 Abatement shall not proceed until approval has been granted by Owner or Owner's Representative.
- 2.1.13 Contractor shall notify Owner's Certified Lead Consultant Representative immediately if additional lead containing material(s) is encountered during abatement and demolition.

2.2 SUBMITTALS

- 2.2.1 Prepare and submit an abatement Work plan and Health and Safety Plan (HASP) prior to start of work. HASP shall include materials safety data sheets (MSDS) for any chemicals used during lead-containing paint stabilization and lead dust removal. Chemicals shall be favorably reviewed by Owner's Certified Lead Consultant Representative prior to use.
- 2.2.2 Name, address and ID number of the hazardous waste transporter(s), waste transfer route(s) and proposed disposal/destruction facility or facilities prior to start of work. Waste disposal/destruction facility shall be favorably reviewed by Owner's Representative prior to use.
- 2.2.3 Copies of all supervisor and worker certifications associated with California Department of Public Health.
- 2.2.4 Certifications of worker training and certifications for all supervisors and workers in accordance to Federal, State of California and local codes and regulations.
- 2.2.5 Documentation of medical surveillance required in CCR Title 8, Section 1532.1.
- 2.2.6 Copies of all notifications, permits, applications, licenses, waste manifests, certificates of disposal/destruction, Weighmaster Tickets, total quantities and other documents required by Federal, State of California and local codes and regulations. Disposal/destruction documents shall show delivery date, quantity and appropriate signature(s) of transporter and disposal/destruction site(s) favorably reviewed by Owner's Certified Lead Consultant Representative.
- 2.2.7 Copies of daily personal air sample logs and results of laboratory analysis for airborne lead dust.

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- 2.2.8 Daily field records or logs documenting filter changes on respirators, HEPA vacuums, differential pressure air filtration devices and other applicable controls.
- 2.2.9 Records documenting the pressure differential measurements across isolated barriers when operating negative air machines. Measurements shall be taken using a pressure differential monitoring device.

2.3 QUALITY ASSURANCE

2.3.1 Qualifications

- 2.3.1.1 The work shall be completed by a licensed lead abatement contractor. The lead abatement contractor shall have experience in satisfactory completion of at least three projects with similar scope or more within the past five years. The contractor shall have all necessary licenses, registrations and certifications as required in California Code of Regulations (CCR), Division 1, Chapter 8 (Accreditation, Certification and Work Practices in Lead-Related Construction) and other applicable codes.
- 2.3.1.2 All workers shall have at least one year experience in the task they are to perform. The competent person shall have a minimum of three years experience in lead abatement and meet any additional requirements set forth in Title 17 CCR Division 1, Chapter 8 (Accreditation, Certification and Work Practices in Lead-Related Construction) or additional training requirements as required by State laws and regulations.
- 2.3.1.3 The work must be supervised by a competent person. The competent person shall be a State of California Certified Lead Supervisor as defined in Title 17 CCR Division 1, Chapter 8, Section 35008
- 2.3.1.4 All personnel working within the control area shall be under medical surveillance in accordance to the regulations for lead.
- 2.3.1.5 All personnel shall have respirator fit test certification (qualitative/quantitative) for the respirators they intend to use in accordance with CCR Title 8, § 1532.1 (Lead) and CCR Title 8, § 5144 (Respiratory Protection).

2.4 TEMPORARY SERVICES AND UTILITIES

2.4.1 Provide the necessary utility services to perform the work. Contractor may elect to utilize the existing facility water service. However, Contractor is responsible for all coordination and service and use fees. Contractor should be aware that the facility water distribution systems may not be suitable for the Contractor's use.

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2.5 PRODUCT MATERIALS

- 2.5.1 Polyethylene construction sheeting for walls and stationary objects shall have a minimum thickness of 6-mil. Minimum thickness of polyethylene construction film of at least 10-mil shall be used for floors and other uses in widths selected to minimize the frequency of joints.
- 2.5.2 Disposal bags shall be 6-mil thick polyethylene with pre-printed labels as in accordance to EPA and Cal OSHA/OSHA regulations.
- 2.5.3 Drums shall be new U.S. Department of Transportation (US DOT) 17H/55-gallon, open-top, steel drums with polyethylene liners and locking lids and shall be labeled in accordance with EPA and Cal OSHA/OSHA regulations.
- 2.5.4 Applicable signs, warning signs and/or demarcation of work areas shall be placed in accordance to Federal, State of California, and local codes and regulations. Signs shall be printed in both English and Spanish.
- 2.5.5 Primer, paints or other favorably reviewed stabilizers shall adhere well to substrate from which the lead-containing coating has been stripped. Contractor shall not apply new coatings containing more than 500 parts per million of lead by weight.

2.6 EQUIPMENT

- 2.6.1 Select respirators from those certified by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 42 CFR Part 84. Provide personnel engaged in the removal and demolition of lead-containing debris from negative pressure enclosures and visitors with Type C supplied air respirators, continuous flow or pressure demand, operated with either an auxiliary positive pressure self-contained apparatus or HEP A filter [Type 100 (N100, R100, or P100)].
- 2.6.2 All vacuums used shall be equipped with HEPA filter.

3.0 EXECUTION

3.1 NOTIFICATIONS

3.1.1 Prepare, submit and pay for necessary permits and notifications, amendments and/or request for alternate means of compliance to the regulatory agencies including, but not limited to, South Coast Air Quality Management District (SCAQMD), Cal-OSHA and California Department of Public Health (CDPH). Provide timely notification of removal, abatement, hauling and disposition as may be required by such agencies. Contractor shall maintain a copy of all said permits and notifications at the site.

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3.1.2 Submit a copy of all permits, notifications and amendments to the Owner's Representative, as they are issued.

3.2 UTILITIES

- 3.2.1 The Contractor shall provide temporary power, lighting and water to complete the work.
- 3.2.2 Contractor is responsible for proper disposal of wastewater generated from abatement activities. The filtered shower water shall be discharged into a sewer line. Contractor is responsible for any permits that may be required.

3.3 AIR MONITORING

- Personal samples shall be taken as required by the activities and the regulations. The personal air sample test results shall be posted within 24 hours from collection.
- 3.3.2 Contractor shall collect lead air samples on 0.8 µm, 37-millimeter cellulose ester membrane filters in closed-face cassettes. Lead samples shall be analyzed by an accredited laboratory using NIOSH Method 7082 or 7105. Contractor is responsible for regular calibration of the sample pumps.
- 3.3.3 If there is a conflict between the Contractor sample test results and the Owner's Representative's QA/QC sample test results, the sample shall be re-collected by the contractor, repeated if necessary, until the test results are in the same range, as determined by the Owner's Certified Lead Consultant Representative.
- 3.3.4 Contractor is responsible for costs associated with the sampling, re-sampling, analysis, work stoppages due to elevated particulates in air, additional cleaning and resolution of conflicts in test results.
- 3.3.5 Maximum flow rate of collecting air samples shall be 2.5 liters/minute for personal samples and 10.5 liters/minute for inside and outside work area air samples.

3.4 ENCLOSURES

- 3.4.1 Build suitable framing and line with 6-mil polyethylene construction film sealed with tape at lap joints in the plastic for enclosures and decontamination enclosure system rooms.
- 3.4.2 Access between contaminated and uncontaminated rooms of areas shall be through an airlock and access between any two rooms within the decontamination enclosure systems shall be through a curtained doorway.

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- 3.4.3 Decontamination Enclosure: Construct a decontamination enclosure contiguous to each isolation area consisting of three totally enclosed chambers as follows:
- 3.4.4 An equipment/waste loadout decontamination station consisting of a washdown room, holding room and clean room for removal of equipment and materials from work area. Do not allow personnel to enter or exit isolation area through this unit.
 - 3.4.4.1 A shower room with two curtained doorways, one to the equipment room and one to the clean room. The shower shall contain at least one shower with hot and cold or warm water. The Contractor shall provide hot and cold water for showering. Careful attention shall be paid to the shower enclosure to insure against leaking of any kind. Ensure a supply of soap at all times in the shower room. Shower water shall be filtered through a 5 µm-filter system prior to disposal in the waste water system.
 - 3.4.4.2 A clean room with one curtained doorway into the shower and one entrance or exit to non-contaminated areas of the building. The clean room shall have sufficient space for storage of the worker's street clothes, towels and other non-contaminated items.
- 3.4.5 Provide and post, in the Equipment Room and the Clean Room, the decontamination and work procedures to be followed by workers, as described in this Section. Procedures shall be posted in English and Spanish.
- 3.4.6 Workers and authorized visitors shall, upon entering the job site, remove street clothes in the clean change room and don the required PPE. Provide respiratory protection for authorized visitors wishing to enter a negative air enclosure, as needed. Those include, but are not limited to, inspectors from the regulatory agencies and Owner's Certified Lead Consultant Representatives.
- 3.4.7 Workers and authorized visitors shall, each time they leave the work area, remove gross contamination from clothing before leaving the work area, proceed to the equipment room and remove all clothing except respirators. Still wearing the respirator, proceed naked to the showers, clean the outside of the respirator with soap and water while showering, remove the respirator and thoroughly shampoo and wash themselves. Remove filters and wet them and dispose of filters in the container provided for the purpose, and wash and rinse the inside of the respirator.

Following showering and drying, each worker and authorized visitor shall proceed directly to the clean change room and dress in clean clothes at the end of each day's work or before eating, smoking or drinking. Contaminated footwear shall be stored in the equipment room when not in use in the work area. Upon completion of lead materials abatement, dispose of footwear as contaminated waste or clean thoroughly inside and out using soap and water before removing

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from work area or from equipment and access area. Dispose contaminated protective clothing in receptacles for disposal with other lead contaminated material.

- 3.4.8 Work in a mini-enclosure area may be conducted wearing a double suit of protective clothing over street clothes. Decontamination shall be by HEPA vacuuming outer suit completely and removing outer suit in the inner airlock chamber and proceeding to outer airlock to remove inner suit. Waste containers shall be completely HEPA vacuumed and wet wiped clean before removing from the inner airlock. The waste containers shall then be double bagged in the outer airlock and again HEPA vacuumed and wet cleaned before removing from the outer airlock.
- 3.4.9 Workers removing waste containers from the decontamination enclosure shall enter the shower room wearing a respirator and dressed in clean coveralls.
- 3.4.10 Workers shall not eat, drink, smoke or chew gum or tobacco at the work site except in the established clean room.
- 3.4.11 Workers shall be fully protected with appropriate respirators and protective clothing from the time of first disturbance of lead-containing or contaminated materials prior to commencing actual lead-containing materials abatement and until final clean-up is completed.
- 3.4.12 Ensure that barriers and plastic linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery.
- 3.4.13 Visually inspect enclosures at the beginning of each work period. Dispersive smoke methods will be used to test effectiveness of barriers. Repair any damage immediately.
- 3.4.14 Clean external surfaces of contaminated containers and equipment thoroughly by wet cleaning before moving such items into the decontamination enclosure system for final cleaning and removal to uncontaminated areas. Ensure that contaminated equipment does not leave work areas through the decontamination enclosure system without a thorough cleaning and double bagging prior to entering the shower room.

3.5 LEAD STABILIZATION

- 3.5.1 Contractor shall isolate vents and other openings in the vicinity of interior work area, including windows, doors, open ceilings or holes with at least one layer of 6-mil thick polyethylene construction film.
- 3.5.2 Enclosures shall have sufficient 12" x 12" viewing ports made of clear Plexiglass

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to allow persons outside the containment area to view all work areas.

- 3.5.3 Contractor shall pre-clean work area floors using a lead dedicated HEPA vacuum to remove paint chips and lead-containing dust or debris.
- 3.5.4 Contractor shall spray surfaces with amended water, using spray equipment capable of providing a "mist" application to reduce the release of dust and to saturate the material to be removed thoroughly. Spray the material repeatedly during work process to maintain wet condition and to minimize particulate dispersion.
- 3.5.5 Contractor shall continuously place lead-containing paint chips and debris in 6-mil polyethylene bags. Double bagging shall be used for heavier materials. Surrounding areas shall be maintained in a wet condition until lead stabilization is completed.
- 3.5.6 Contractor shall place polyethylene bags containing lead materials in disposal drums at the end of each work day. Drums shall be securely fastened to prevent accidental opening and leakage by tightening bolts on the ring lids.
- 3.5.7 Contractor shall affix onto each disposal drum the appropriate labeling pursuant to Federal, State of California, and local regulations with generator's name and address and other applicable information.
- 3.5.8 Contractor shall scrub all surfaces within the containment with a lead cleaning solution after abating all deteriorated lead-containing paint.
- 3.5.9 Contractor shall HEPA vacuum and wet-wipe all surfaces and objects within the enclosure.
- 3.5.10 Sealed drums and equipment used in the work area shall be included in the cleanup and decontamination procedures. Drums shall be removed from work areas, via the decontamination enclosure system at an appropriate time in the cleaning sequence.
- 3.5.11 Contractor shall apply a coat of paint or primer or other Owner's Certified Lead Consultant Representative favorably reviewed encapsulating agent.

3.6 FINAL CLEARANCE

3.6.1 Contractor shall give notice to Owner's Certified Lead Consultant Representative when work areas are ready for clearance wipe sampling. The Owner's Certified Lead Consultant Representative will collect and test samples in accordance to the following CDPH guidelines below:

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- 3.6.1.1 Floors: 40 µg/ft²
- 3.6.1.2 Interior Window Surfaces: 250 µg/ft²
- 3.6.1.3 Exterior Surfaces: 400 µg/ft²
- 3.6.2 Contractor shall re-clean work areas that do not meet the applicable clearance guidelines. Cleaning shall include, but not limited to, wet wiping all affected work area surfaces and equipment. Re-cleaning and retesting for final clearance shall be performed at no additional cost to Owner or Owner's Certified Lead Consultant Representative.
- 3.6.3 Contractor shall remove polyethylene construction film enclosures following the completion of clean-up procedures and after clearance air and wipe sampling has been performed and documented to the satisfaction of Owner's Certified Lead Consultant Representative.
- 3.6.4 Contractor and Owner's Certified Lead Consultant Representative shall visually inspect the work area for any remaining residues. Evidence of contamination shall be cleaned up to the satisfaction of the Owner's Certified Lead Consultant Representative. ADDITIONAL CLEANING AND TESTING SHALL BE AT NO ADDITIONAL COST TO OWNER OR OWNER'S CERTIFIED LEAD CONSULTANT REPRESENTATIVE.
- 3.6.5 Polyethylene construction film enclosures can be disposed of as construction and demolition debris.

3.7 DISPOSAL LEAD-CONTAINING WASTE

- 3.7.1 Lead-containing debris shall be bagged and placed in sealed drums by the end of each workday. Dispose lead-containing debris as the work progresses to prevent exceeding available storage capacity on site. Provide disposal labels in accordance to applicable codes and regulations.
- 3.7.2 Owner's Certified Lead Consultant Representative will collect samples to profile the waste stream.
- 3.7.3 Transport in a vehicle compartment completely lined with 6-mil polyethylene construction film and dispose of at a permitted disposal site. Submit documentation including name and address of landfill, name of landfill employee authorized to accept lead-containing debris, quantity removed from work site and quantity disposed of at the landfill. Disposal site shall be provided to Owner's Representative and favorably reviewed by Owner's Certified Lead Consultant Representative prior to start of Work.

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Specific Lead Abatement and Related Scope of Work

- 3.7.4 Procedures for hauling and disposal shall comply with applicable Federal, State of California, and local codes and regulations. Workers loading and unloading material shall wear appropriate PPE when handling materials while on-site and at the disposal site.
- 3.7.5 Only undamaged and sealed plastic bags will be disposed of in the landfill that accepts lead-containing waste. If the bags have been broken or damaged, the damaged bags shall be placed in a sealed drum and disposed of.

END OF SECTION

SECTION 13280

ASBESTOS ABATEMENT AND ASBESTOS RELATED DISTURBANCE

PART 1 – GENERAL

1.01 SUMMARY

- A. Provisions of the General and Supplementary Conditions and Division 01 apply to this section.
- B. Section Includes:
 - 1. Abatement of building and/or structure related Asbestos.
 - 2. Removal of building and/or structure related Asbestos.
 - 3. Disturbance of building and/or structure related Asbestos.
 - 4. Attachment A.
- C. Regulatory Requirements shall include, but not be limited to:
 - 1. U.S. Environmental Protection Agency Regulations for Asbestos (Title 40, Code of Federal Regulations, Part 61, Subparts A & B, and Part 763, Subpart E.)
 - 2. Title 8, Article 4, California Code of Regulations Construction Industry Safety Orders, Section 1529 "Asbestos" or current revised California regulations.
 - 3. South Coast Air Quality Management District (SCAQMD) Rule 1403.

1.02 SECTION DEFINITIONS AND ACRONYMS

- A. Abatement Procedures to control fiber release from Asbestos Containing Materials or Asbestos Containing Construction Materials. Includes Removal, Encapsulation, Enclosures, repair, Demolition, and Renovation activities but does not include Asbestos Related Disturbance.
- B. AHERA Asbestos Hazard Emergency Response Act, 40 CFR, Part 763, Subpart E, and subsequent amendments.
- C. Air Filtration and Ventilation System A portable exhaust system, equipped with HEPA filtration, and capable of maintaining a constant air flow into a Regulated Area from adjacent areas and exhausted outside the Regulated Area.
- D. Amended Water Water to which a surfactant (wetting agent) has been added.

- E. ANSI American National Standards Institute
- F. Asbestos Means the asbestoform varieties of chrysotile (Serpentine); crocidolite (Riebecktite); amosite (cummingtonitegrunerite); anthophyllite; tremolite; and actinolite.
- G. Asbestos Containing Construction Material (ACCM) Means any manufactured construction material which contains more than one tenth of one percent (0.1%) Asbestos by weight.
- H. Asbestos Containing Material (ACM) Means any material containing more than one-percent (1%) Asbestos.
- I. Asbestos Containing Waste (Non-hazardous) Non-Friable Asbestos Containing Material including, but not limited to, floor covering, roofing materials and cementitious materials requiring disposal.
- J. Asbestos Containing Waste (Hazardous) Friable Asbestos Containing Materials and Asbestos contaminated objects and debris requiring disposal.
- K. Asbestos Related Disturbance is the drilling, coring, removal or similar disturbance of ACCM or ACM not to exceed three (3) square feet in any one opening and not to disturb 100 square feet or greater cumulatively on any one project (contract).
- L. ASTM American Society for Testing and Materials
- M. Building ID Number or Code A alphanumeric identification code assigned to each building on a Owner site, also referred to as the insurance code, ID number or similar terms.
- N. Bulk Samples Samples of building or other materials collected for analysis to determine the presence and quantities of Asbestos.
- O. Class I, II, III, and IV asbestos work has the meaning as defined in California Code of Regulations Title 8, Section 1529.
- P. Clean Room An uncontaminated area or room, which is a part of the worker Decontamination Enclosure System with provisions for storage of worker's street clothes and clean protective equipment.
- Q. Competent Person Has the same meaning as defined in the California Code of Regulations Title 8, as it relates to, "Competent Person."
- R. Controlled Disturbance An activity by which a contractor disturbs an asbestos containing material or an asbestos containing construction material using the work practices allowed for in this specification and in compliance with regulatory limitations.

- S. 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 exiting or temporarily framed doorway, securing each along the top of the 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. Other effective designs may be submitted for review.
- T. Decontamination The process of eliminating Asbestos contamination from building surfaces, objects, and property, by cloths, mops, or other utensils dampened with water and disposed of afterwards as Asbestos contaminated waste.
- U. Decontamination Enclosure System Means an enclosed area, which is adjacent and connected to the Regulated Area, consisting of an Equipment Room, Shower Room, and Clean Room for the Decontamination of workers, materials, and equipment contaminated with Asbestos.
- V. Demolition The wrecking or taking out of any load supporting structural member of a facility together with any related handling operations.
- W. DOSH Division of Occupational Safety & Health or Cal/OSHA
- X. DOT Department of Transportation
- Y. DTSC Department of Toxic Substances Control
- Z. Encapsulating Material A liquid material applied to Asbestos Containing Materials which controls the possible release of Asbestos fibers from the material either by creating a membrane over the surface (bridging agent) or by penetrating into the material and binding its components together (penetrating Encapsulating Material).
- AA. Encapsulation The application of an Encapsulating Material to Asbestos Containing Materials to prevent the release of Asbestos fibers into the air.
- BB. Enclosure The construction or application of an airtight, impermeable, permanent barrier around Asbestos Containing Material to control the release of Asbestos fibers into the air.
- CC. Equipment Room A room within the worker Decontamination Enclosure System with provisions for storage of used clothing and equipment and for controlled transfer of materials and equipment into and out of the regulated area.
- DD. Facility Component Means any part of a facility including equipment.
- EE. Fixed Object A piece of equipment, furniture, or improvement in the Work area, which

cannot be removed from the Work area.

- FF. Friable Asbestos Asbestos Containing Material which, when dry, can be crumbled, pulverized or reduced to a powder by hand pressure or as defined by current regulations.
- GG. Glove Bag Technique A method with limited applications for removing small amounts of Asbestos Containing Material from short piping runs, valves, joints, elbows, and other non-planar surfaces in a Work area. The glove bag assembly is a manufactured or fabricated device consisting of a glove bag (typically constructed of 6 mil transparent polyethylene or polyvinyl chloride plastic), two inward projecting long sleeves gloves, an internal tool pouch, and labeled for Asbestos waste. The glove bag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all Asbestos fibers released during the process. All workers who are permitted to perform the Glove Bag Technique shall be thoroughly trained, experienced, and skilled in this method.
- HH. Hazardous Waste Means Friable Asbestos generated and prepared for waste disposal.

 Does not include non-friable material or materials containing one-percent or less of Asbestos as determined by PLM and/or the point counting method.
- II. HEPA Filter Means a filtering system capable of trapping and retaining at least 99.97% of all mono-dispersed particles 0.3 microns in diameter or larger. For respirators this shall include NIOSH rated P-100 cartridges only.
- JJ. HEPA Vacuum A vacuum system furnished with HEPA filtration.
- KK. High Volume Vacuum A vacuum system with the capacity to collect material through a four (4) inch diameter hose a minimum distance of 150 feet. This system shall be furnished with HEPA Filter at the air exhaust port and water applicators within the hopper.
- LL. HVAC Heating, Ventilation, and Air Conditioning System.
- MM. Location Code Refers to a unique numeric code assigned by the Owner to each of its Project sites.
- NN. Lockdown Coat A material applied to surfaces where Asbestos has been completely removed. The manufacturer shall determine the concentration of this material.
- OO. Member A component part of a structure complete in itself.
- PP. Movable Object A portable piece of equipment or furniture in the Work area, which can be removed from the Work area.
- QQ. NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)

- RR. NIOSH National Institute for Occupational Safety and Health
- SS. Outside Air Air outside of buildings and structures.
- TT. Owner's Authorized Representative (OAR) Refers to the firm, company or individual designated by the Owner to b work.
- UU. Owner's Consultant (OC) Refers to the firm, company or individual designated by the Owner to oversee the abatement work.
- VV. PCM Phase Contrast Microscopy as it relates to clearance air, personnel exposure assessment, and ambient air monitoring. This procedure must follow the NIOSH Method 7400, Asbestos Fibers by PCM.
- WW. PLM Polarized Light Microscopy used for bulk sample analysis with dispersion staining for the determination and quantifying of Asbestos in Bulk Samples building materials.
- XX. Regulated Area Designated rooms, spaces or areas of the Project in which asbestos Abatement actions are to be performed or which may become contaminated as a result of Abatement activities. A contained Work area is a Work area, which has been sealed and furnished with a Decontamination Enclosure System. A non-contained Work area is an isolated or controlled access Work area, which has not been sealed or furnished with a Decontamination Enclosure System.
- YY. Removal Means all operations where all ACM and/or PACM is removed or stripped from structures or substrates including Demolition.
- ZZ. Renovation Means the modifying of any existing structure, facility, or portion thereof.
- AAA. SCAQMD South Coast Air Quality Management District
- BBB. Shower Room A room between the Clean Room and the Equipment Room in the worker Decontamination Enclosure System furnished with hot and cold running water controllable at the tap, and suitably arranged for complete showering during Decontamination.
- CCC. Staging Area Areas near the Waste Transfer Airlock where containerized Asbestos waste is temporarily placed prior to permanent removal from the Work area.
- DDD. Surfactant A chemical wetting agent added to water.
- EEE. TEM Transmission Electron Microscopy as defined for Asbestos clearance air monitoring within AHERA. This procedure must follow the NIOSH Method 7402, Asbestos Fibers by TEM.
- FFF. TSI Thermal System Insulation as defined in AHERA.

- GGG. USEPA or EPA United States Environmental Protection Agency
- HHH. Visible Emissions Any emissions from a known or suspected Asbestos Containing Material that is visually discernible.
- III. Waste Transfer Airlock A Decontamination system provided for transferring containerized waste from inside to outside of the Work area.

1.03 POLICIES AND PROCEDURES

- A. The Owner has a zero tolerance policy for uncontrolled Asbestos releases during construction or Abatement Work. An Asbestos release requiring an emergency response is any uncontrolled release of Asbestos Containing Construction Materials. The Owner shall be immediately notified of all such uncontrolled releases.
- B. Pre-qualified Asbestos Abatement Subcontractors are not permitted to subcontract any Abatement work to a lower tier Subcontractor without the prior written approval of the Owner.
- C. Where ACM is damaged or disturbed, except during Controlled Disturbance or Abatement, all Work in that room shall cease, the room be vacated immediately, the Owner's Consultant and OAR notified of the disturbance with corrective action provided as required by the Owner's Consultant.

1.04 ROLES AND RESPONSIBILITIES

- A. Roles and Functions:
 - 1. Coordinate the Work of this section directly with the Owner, OAR and/or Owner's Consultant.
 - 2. All Work under this section shall be performed in strict accordance with all applicable Federal, State, and Local regulations, standards, and codes governing asbestos Abatement and any other Work performed in conjunction with the Asbestos Abatement Work.
 - 3. The most recent edition of any relevant regulation, standard, document, or code is in effect. Where conflict among the requirements or with this Specification exists, the most stringent requirement shall be provided.

1.05 SITE SECURITY

A. The Work area shall be restricted to authorized, trained, and protected personnel. A list of authorized personnel shall be established by the Owner's Consultant prior to commencement of the Work and posted at the entrance of the Regulated Area.

- B. Report to the Owner's Consultant any unauthorized entry into the Regulated Area. Following notification, a written report of the incident shall be provided to the Owner's Consultant and OAR.
- C. A logbook shall be maintained at the entrance of the Regulated Area. All persons entering the Regulated area shall record their name, company affiliation, time in, and time out for each entry and exit.
- D. Access to the contained area shall be through the worker Decontamination Enclosure System or other room established when worker Decontamination Enclosure System is not required. All other means of access shall be blocked or locked to prevent entry to or exit from the Work area. The only exceptions are the waste pass-out airlock, which shall be sealed except during the Removal of containerized Asbestos waste from the Work area, and emergency exits in case of fire or accident. Emergency exits shall be operable from inside the Work area, however they shall be sealed with polyethylene sheeting and tape.
- E. Maintain Regulated Area security during Abatement Work. All Regulated Areas and ancillary equipment accessible to non-authorized personnel shall be protected from unauthorized access by constructing a minimum barrier of 3/8 inch CDX plywood supported by 2" x 4" studs, 16 inches on center. Height shall be as required to safely access Regulated Area. An access door shall be provided with hasp and padlock sufficient to prevent unauthorized entry. A key shall be provided to the Owner, OAR and Owner's Consultant. Required barriers within an occupied building shall be furnished with sheathing as required by state and local fire protection regulations.
- F. The protective barrier for a High Volume Vacuum shall be a minimum of eight (8) feet in height. Barriers for these systems may be constructed of chain link type fencing instead of the specified barriers. Such fencing, if provided, shall be covered with an opaque covering resistant to environmental conditions. This barrier system shall be maintained at all times while the enclosed equipment is on the Project site.
- G. Unless otherwise specified, remove all barriers upon completion of the Work of this section. Repair and/or replace to original condition, all damage resulting from installation, use, and removal of the barriers.

1.06 EMERGENCY PLANNING

- A. Emergency planning and procedures shall be developed, submitted, reviewed, and agreed to by the Owner prior to the commencement of Abatement Work.
- B. Emergency procedures shall be provided in the written languages understood by all employees working on the Project and shall be prominently posted at the entrance of the Decontamination Enclosure System. Prior to entering the Work area, all parties must read and sign these procedures to acknowledge receipt and understanding of the Work site layout, location of emergency exits, and emergency procedures.

- C. Emergency planning shall consider the effects of fire, explosion, toxic atmospheres, electrical hazards, slips, trips and falls, confined spaces, and heat related injury. Develop and provide written procedures and training to all employees.
- D. Employees shall be trained in evacuation procedures in the event of workplace emergencies.
- E. In the event of non-life threatening situations requiring medical treatment, injured or otherwise incapacitated employees shall decontaminate following normal procedures with assistance from fellow workers if necessary, before exiting the Work area.
- F. In the event of life threatening injury or illness requiring immediate medical treatment, worker Decontamination shall be given minimum priority. Provide all measures to stabilize the injured worker, remove them from the Work area and secure proper medical treatment.
- G. Telephone numbers of all emergency response personnel shall be prominently posted at the entrance of the Decontamination Enclosure System along with the location of the nearest telephone. In addition to the 911 emergency number, post the address and telephone number of the nearest emergency medical services provider.
- H. Provide at least one (1) employee on the Project site at all times during progress of Abatement work that is trained and certified in first aid and cardiopulmonary resuscitation (CPR). This employee shall be identified by name and proof of training shall be provided to the Owner's Consultant prior to the commencement of the Work of this section.
- I. Provide at least one (1) 4A/60BC dry chemical extinguisher in the Equipment Room and one (1) at each corner of contained areas in excess of 1,000 square feet. All workers shall be trained in the proper operation of fire extinguishers.
- J. Emergency exits shall be provided and clearly marked with arrows or other clearly visible markings to permit easy identification from anywhere within the Work area. Exits shall be secured to prevent access from uncontaminated areas while still permitting emergency egress. Exits shall be properly sealed with polyethylene sheeting, which can be cut to permit emergency egress. Emergency exits may lead through the worker Decontamination Enclosure, the waste removal airlock or other alternative exits as required by fire officials.

1.07 LICENSING

A. The Work of this section shall be performed by an entity duly licensed in the State of California in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code, as amended. The Abatement work of this section shall be performed by an entity holding a license with an "ABS" Asbestos Certification as issued by the Contractors State License Board.

B. The entity performing the Work of this section, other than Asbestos Related Disturbance involving less than 100 square feet, shall be registered with the Department of Industrial Relations in accordance with the provisions of Section 6501.5 of the California Labor Code.

1.08 ASBESTOS RELATED REQUIREMENTS

A. Qualifications:

- 1. Comply with the provisions of the California Labor Code, Division 5, Part 1, as it pertains to safety in employment and the applicable provisions of Title 8, Chapter 4, Subchapters 1 through 21, California Code of Regulations (CCR) as it pertains to Occupational Safety and Health, and Subchapter 7, Section 5208 Article 4, and Section 1529, Asbestos regulations.
- 2. Where Electrical Work is required in a Regulated Area this work shall be performed as required in Division 16 and personnel who enter a Contained and Regulated Class I and II Asbestos work area are required to possess a current EPA certification as an Asbestos worker. Personnel who enter a Class III Asbestos Related Disturbance work area shall require personnel trained in accordance with AHERA Operations and Maintenance training requirements.

B. Abatement Activities:

- 1. The Asbestos Abatement work shall be performed by persons who comply with all applicable Federal, State, and local regulations including AHERA certified training.
- 2. Supply all labor, materials, services, insurance, permits, and equipment necessary to perform the Work in accordance with all applicable Federal, State, and Local regulations and this Specification.
- 3. For Class I asbestos work, collect pre-Abatement air samples. Results shall be submitted prior to commencement of the Work of this section. Include location of Samples, name of air sampling professional, equipment, and methods utilized for sampling and analysis.
- 4. Submit weekly job progress reports detailing Abatement activities for Projects with schedules that exceed thirty days of Abatement work. Include review of progress with respect to previously established Milestones and schedules, major problems and action taken, injury reports, equipment breakdown, and air sampling results.
- 5. Within five (5) workdays of transport and/or disposal, submit copies of all transport manifests, disposal receipts, and weight certificates for all Asbestos

waste removed from the Work area during the Abatement process. Weight certificates shall indicate in pounds the net weight of waste disposed from the Project site as indicated on the manifest.

- 6. Submit copies on a daily basis of the Work site entry logbooks.
- 7. Submit logs on a weekly basis documenting filter changes on respirators, HEPA Vacuums, HEPA Filtered ventilation units, water filtration units, and other approved engineering controls.
- 8. Submit results of materials testing conducted during Asbestos Abatement work for purposes of utilization during such activities. (i.e., depth test, substitution materials, etc.)
- 9. Where Decontamination Enclosure System is required, post at the entrance a list containing the names, addresses, and telephone numbers of the entity performing the Work of this section, designated Competent Person, the Owner and/or Owner's Consultant, the testing laboratory and any other personnel who may be required to access the Work area or perform services during the Abatement Work.
- 10. For employee review, post at the entry of the Work area a copy of the scope of Work, special conditions, the current standard Specifications, and the applicable prevailing wage.

C. Asbestos Related Disturbance:

- 1. The Asbestos Related Disturbance Work shall be performed by persons who comply with all applicable Federal, State, and local regulations including AHERA certified training.
- 2. Within ten (10) days of analysis, submit results of air sampling data collected for Cal/OSHA compliance air monitoring during the course of the Asbestos Related Disturbance (Class III asbestos work). If this data is used to discontinue use of employee protective equipment then the data shall be provided before discontinuing use of protective equipment.
- 3. Within five (5) workdays of transport and/or disposal of Asbestos Containing Waste, submit copies of all transport manifests and/or disposal receipts.

1.09 SUBMITTALS

- A. Provide in accordance with Division 01 and this section.
- B. Prior to commencement of the Asbestos Abatement work of this section, submit the following notices, documentation, Shop Drawings, and Product Data:

- 1. For Projects involving Asbestos Containing Materials 100 square feet or more, provide a typed written notification in accordance with Rule 1403 of SCAQMD and 40 CFR Part 61.146 of Subpart M to the SCAQMD, and to and in accordance with the Division of Occupational Safety and Health prior to start of the Work. For Projects within the geographical limits of Los Angeles City, provide an additional copy of the SCAQMD notice to the Los Angeles City Fire Department, marked "COURTESY COPY."
- 2. Submit to the Owner, satisfactory proof the required permits, site location, and arrangements for transport and disposal of Asbestos Containing Waste materials have been completed in accordance with California Health and Safety Code, Section 25143.7. Obtain and submit a copy of handling procedures and a list of protective equipment utilized for Asbestos disposal at the landfill.
- 3. Submit to the Owner satisfactory documentation that all employees, including foremen, supervisors, and any other company personnel or agents who may be exposed to airborne Asbestos fibers or who may be responsible for any aspects of Asbestos Abatement work or Asbestos Related Disturbance have received adequate training that includes, at a minimum, information as described within this section and as required by AHERA.
- 4. Prior to commencement of Abatement Work, all personnel required to construct and enter the Work area or handle containerized Asbestos Containing Materials shall have received adequate training, in accordance with the requirements of this Specification and by 40 CFR, Part 763, Subpart E (AHERA) and Title 8, Section 1529, of the California Code of Regulations applies.
- 5. Special Project site training for equipment and procedures unique to this Project site shall be provided as required.
- 6. Training in emergency response and evacuation procedures shall be provided to all personnel performing Asbestos Abatement work of this section.
- 7. Submit documentation from a physician certifying that all employees are medically monitored and are physically capable of working while wearing the required respiratory protection without suffering adverse health effects as required by California D.O.S.H regulations. Where such documentation is required, the certification shall state that the employee or agent is approved to work with Asbestos and wear a respiratory protection without restrictions. Provide information to the examining physician about unusual conditions in the workplace environment that may impact on the employee's ability to perform Abatement Work activities.
- 8. Submit Shop Drawings for layout and construction of Decontamination Enclosure Systems and barriers for isolation of the contained Asbestos

- Abatement work area as detailed in this Specification and required by applicable regulations.
- 9. When used, submit manufacturer's certification that HEPA Vacuums, air filtration units, and other local exhaust ventilation equipment complies with ANSI Z9.2-79.
- 10. Submit Product Data verifying that all air filtration devices (i.e., air filtration units and vacuums) for use on this project have been registered or certified, as applicable, in compliance with the SCAQMD Rules.
- 11. If rental equipment is to be furnished in Abatement Work areas or to transport Asbestos contaminated waste, written notification concerning the intended use of the rental equipment shall be provided to the rental agency with a copy submitted to the Owner.
- 12. Document NIOSH approvals for all respiratory protective devices furnished as required by the Work. Include manufacturer certification of HEPA filtration capabilities for all cartridges and filters.
- 13. Submit documentation of respirator fit testing for all employees and agents entering the Abatement work area or areas where respiratory protection is required. This fit testing shall be performed in accordance with DOSH regulations.
- 14. Submit a Sample of all forms to be used in documenting required items to be submitted and/or reviewed.
- C. Provide all other required submittals specified as part of the Work of this section.

1.10 PRE-ABATEMENT MEETING

- A. Attend a meeting to be held prior to the commencement of Abatement Work. Attending this meeting shall be representatives of the Owner, OAR, the Owner's Consultant if applicable, and the testing/monitoring personnel who shall actually participate in the testing/monitoring program. Secure the attendance of the individual who will be the Project site Competent Person for the Abatement Work.
- B. Included in the general preconstruction meeting will be a discussion of requirements and submittals for Asbestos Related Disturbance, where such applies.
- C. At this meeting provide all required submittals except for those to be submitted during progress of the Work. In addition, provide detailed information concerning:
 - 1. Preparation of Work area and Shop Drawings. (Abatement Only)
 - 2. Personal protective equipment, including respiratory protection and protective

- clothing. (Abatement, and Asbestos Related Disturbance if required)
- 3. Employees who will participate in the Project, including delineation of experience, training, and assigned responsibilities during the Work. (Abatement and Asbestos Related Disturbance)
- 4. Decontamination procedures for personnel, Work area, and equipment. (Abatement and Asbestos Related Disturbance)
- 5. Abatement methods and procedures to be provided. (Abatement Only)
- 6. Required air monitoring procedures (pre-Abatement and SCAQMD requirement [Abatement Only], and Cal/OSHA mandatory [Abatement and Asbestos Related Disturbance]).
- 7. Procedures for handling and disposing of waste materials, including disposal facility. (Abatement and Asbestos Related Disturbance)
- 8. Procedures for final Decontamination and cleanup. (Abatement Only)
- 9. A sequence of Work activities and performance schedule. (Abatement Only)
- 10. Procedures for dealing with heat stress. (Abatement Only)
- 11. Emergency procedures. (Abatement Only)

1.11 CLOSE OUT DOCUMENTATION

- A. Provide the following close out documentation:
 - 1. Filter change logs for all air filtration units, water filtration units and respirators. (Abatement Only)
 - 2. Foreman's daily job reports. (Abatement Only)
 - 3. Employee entry/exit logs for all containment. (Abatement Only)
 - 4. Visitor entry/exit logs for all containment. (Abatement Only)
 - 5. Manometer printout reports for all applicable containment. (Abatement Only)
 - 6. Air sample results for personnel (Abatement and Asbestos Related Disturbance).
 - 7. Air Samples for Abatement Work areas and air filtration units. (Abatement Only)
 - 8. Copies of all hazardous and non-Hazardous Waste manifests. (Abatement and Asbestos Related Disturbance)
 - 9. All Hazardous Waste weight tickets. (Abatement Only)
 - 10. All signed Daily Personnel Report Forms. (Abatement Only)
 - 11. Signed code of conduct form from each employee working on a Project. (Abatement Only)
 - 12. Signed asbestos Abatement Project Personnel Logs. (Abatement Only)
- B. Receipt of the last workday attendance log and the daily personal monitoring results shall be submitted within (2) two days upon completion of the Abatement Work of this section.

PART 2 – PRODUCTS

- 2.01 Materials and Equipment:
 - A. Materials

1. General:

- a. Deliver all materials in the original sealed packages, containers, or bundles bearing the name of the manufacturer and brand name.
- b. Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient enough to prevent damage or contamination. Replacement materials shall be stored outside of the Abatement Work area until area is cleared for normal occupancy.
- c. Damaged, deteriorating or previously used materials shall not be furnished and shall be removed from the Project site and legally disposed of.
- d. A sufficient supply of disposable mops, rags, and sponges for Abatement Work area Decontamination shall be provided.
- e. Unless otherwise specified, the Owner will provide water and power for construction purposes. Connect to existing system as required.

2. Asbestos Related:

- a. All plastic, polyethylene sheeting or visqueen shall be a fire retardant type. Provide documentation from the manufacturer verifying compliance with this requirement.
- b. Where a contained work area is required for Abatement Work, a minimum of two layers of 4-mil polyethylene sheeting shall be installed for walls. For floors and all other installations, polyethylene sheeting of at least 6-mil thickness shall be furnished in sufficient widths to minimize the frequency of joints.
- c. Method of attaching polyethylene sheeting shall be reviewed prior to installation and/or commencement of Abatement Work. Method of attaching polyethylene sheeting shall not cause damage to equipment, finish surfaces, or other property.
- d. Polyethylene sheeting furnished for the Decontamination Enclosure System shall be opaque white or black in color and shall be a minimum of 6-mil thick.
- e. Disposal bags shall be of 6-mil polyethylene, with the outer bag pre-printed with labels as required by SCAQMD and applicable Cal/OSHA and DOT requirements at a minimum.
- f. Apply labels as per SCAQMD, Cal/OSHA, and DOT requirements for disposal containers.

- g. Provide warning signs as required by CAL/OSHA.
- h. Surfactant (wetting agent) shall be a material that, when tested, demonstrates a surface tension of 29 dynes/cm as tested in its properly mixed concentration, using ASTM method D1331-56-"Surface and Interfacial Tension of Solutions of Surface Active Agents." Where Work area temperature may cause freezing of the Amended Water solution, the addition of an approved antifreeze in a manufacturer recommended amount is permitted.

B. Equipment

1. General:

- a. All equipment delivered to the Project site shall be free of all Asbestos and/or fibrous debris. No equipment with Asbestos and/or fibrous debris in or on it is permitted on Owner properties.
- b. Provide sufficient lighting to illuminate the Work area for safe visual working conditions and to clearly examine all surfaces.
- c. Provide a sufficient supply of scaffolds, ladders, lifts, and hand tools that meet all applicable Federal, State, and local regulations.
- d. Provide non-metallic dustpans, squeegees, and shovels for cleanup.

2. Asbestos Related:

- a. A sufficient quantity of air filtration ventilation units furnished with HEPA filtration and operated in accordance with ANSI Z9.2-79 and EPA guidance documents shall be furnished to provide one workplace air change every 15 minutes creating -0.02 column inches of water pressure differential everywhere within the contained area when compared to the pressure outside the area. For small Enclosures and glove bags, a HEPA Filtered vacuum system may be furnished to provide the pressure differential. A log documenting the filter change history of each unit is required before use. Any unit without this log shall have all filters changed and the unit decontaminated.
- b. Provide a printable manometer for determining and recording the pressure differential within the isolated Work area as compared with the ambient environment. A printed record is required for the duration of the Project. The manometer shall operate 24 hours per day with a printed differential reading not to exceed fifteen (15) minute intervals.

- c. High volume vacuum equipment shall be provided during all soil Removal operations unless otherwise specified.
- d. Provide sprayers with pumps in a quantity capable of providing Amended Water in sufficient quantities to adequately wet materials during Asbestos Abatement activities. Provide spray bottles or adequate equipment necessary to keep materials impacted by Asbestos Related Disturbance adequately wet.
- e. Non-skid footwear shall be worn by all Abatement workers. Disposable clothing shall be adequately sealed to the footwear to prevent body contamination.
- f. Provide other required safety equipment to all workers and authorized visitors.
- g. When roll-off disposal containers are delivered to a Project site, all four (4) wheels of each container shall be moved and rested upon a sheet of plywood no smaller than 4' X 4' X 3/4" minimum.

2.02 EMPLOYEE PERSONAL PROTECTIVE EQUIPMENT

A. Respiratory Protection:

- 1. Where respirators are required these shall be provided for protection from particulate contaminants as required by the National Institute of Occupational Safety and Health.
- 2. The respirators provided shall furnish a protection factor as required by CCR Title 8, Section 1529 for the fiber concentration in the work area. When powered air purifying respirators are provided, a sufficient supply of charged replacement batteries, filters, and a flow test meter shall be provided in the Clean Room area. Air purifying respirators with dual HEPA Filters may be provided during Work area preparation activities.
- 3. Provide spectacle kits and eyeglasses for employees who wear glasses and must wear full-face respirators.

B. Fit Testing:

- 1. Workers must perform positive and negative air pressure fit tests each time a respirator is donned, whenever the respirator design so permits. Powered air purifying respirators shall be tested for adequate flow as specified by the manufacturer.
- 2. Workers shall be undergo a qualitative fit test in accordance with procedures

detailed in the D.O.S.H. requirements for all respirators provided to comply with the requirements of this Project. An appropriately administered quantitative fit test may be substituted for the qualitative fit test.

- 3. Where respirators are required, documentation of adequate respirator fit must be provided to the Owner's Consultant.
- 4. No one wearing a beard shall be permitted to don a respirator and enter the Work area.
- 5. Where respirators are required, a minimum of two additional respirators of each type and training on their donning and use must be provided at the Work site for authorized visitors required to enter the Work area.

C. Protective Clothing:

- 1. Where protective clothing is required, full body disposable protective clothing, including head, body, and foot coverings, shall be provided to all workers and authorized visitors in sizes adequate to accommodate movement without tearing.
- 2. Disposable clothing including head, foot, and full body protection shall be provided in sufficient quantities and adequate sizes for all workers and authorized visitors.
- 3. A new suit shall be donned upon each entry to the Abatement Work area or area where the permissible exposure level will be exceeded.
- 4. Hard hats, protective eye wear, gloves, rubber boots and/or other footwear shall be provided as required for workers and authorized visitors. Safety shoes may be required and shall be provided.

PART 3 - EXECUTION

3.01 ABATEMENT PROCEDURES AND WORK AREA PREPARATION

A. Work Area Preparation

- 1. For Class I and II asbestos work, shut down and lock out all heating, cooling and air conditioning system (HVAC) components that are located in, supply, or pass through the Work area. Seal all intakes and exhaust vents in the Work area with tape and 6-mil polyethylene. Seal all seams in any system components that pass through the Work area.
- 2. Provide and post signs at all locations and approaches to the Regulated Area. The signs shall comply with Cal/OSHA regulations.
- 3. In conjunction with the Owner, shut down and lock out/tag out electric power to all

Class I and II asbestos work areas. Provide equipment for temporary power with ground fault interrupters and lighting sources. Temporary power sources and equipment shall comply with all applicable electrical code requirements and Cal/OSHA requirements for temporary electrical systems. The Owner shall perform all electrical connections of electrical cable and equipment provided as part of the Work of this section to existing Owner systems. The Owner shall pay for the costs of electric power consumed during performance of the Work of this section, unless otherwise noted.

- 4. For Class I and II asbestos work, clean and seal off all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights, and any other openings between the Abatement Work area and areas outside of the Abatement Work area with 6-mil polyethylene sheeting and tape prior to proceeding with required cleaning.
- 5. Clean all Movable Objects within the Abatement Work area with a HEPA Filtered vacuum and wet cleaning methods. After cleaning, these objects shall be removed from the Abatement work area and carefully stored in a location designated by the Owner.
- 6. Clean all Fixed Objects in the Abatement Work area with a HEPA Filtered vacuums and wet cleaning methods. Careful attention shall be given to machinery behind grills or gratings where access may be difficult but contamination is present. Cleaning of walls, floors, and ceilings behind fixed items is required. After cleaning, enclose Fixed Objects in 6-mil polyethylene sheeting and seal securely in place with durable tape.
- 7. Clean all surfaces in the Abatement Work area with a HEPA Filtered vacuums and wet cleaning methods. Do not utilize any methods, such as dry sweeping or vacuuming, with equipment not furnished with HEPA Filters thereby creating airborne dust and particulates. Do not disturb Asbestos Containing Materials during this cleaning phase.
- 8. For Class I and II asbestos work, floors shall be covered with two layers of 6-mil (minimum) polyethylene sheeting. Additional layers of sheeting may be furnished as drop cloths for cleanup of bulk materials.
- 9. Polyethylene sheeting shall be sized and installed to minimize seams. If the floor area to be covered requires seaming, seams on successive layers of polyethylene sheeting shall be staggered a minimum of six feet between each seam to reduce the potential for water penetration into the existing flooring. Do not install seams at the junction between a wall and floor.
- 10. Polyethylene sheeting installed on a floor shall extend at least 12 inches up the sidewalls of the Abatement Work area.

- 11. Polyethylene sheeting shall be installed so as to prevent slippage between successive layers of installed material.
- 12. For Class I and II asbestos work, walls shall be covered with two (2) layers of 4-mil minimum thickness polyethylene sheeting.
- 13. Polyethylene sheeting installed on a wall shall overlap floor sheeting by at least 12 inches beyond the wall/floor joint to provide a seal against water damage.
- 14. Polyethylene sheeting installed on a wall shall be adequately fastened to prevent it from falling away from the walls. Provide additional support/attachment when air filtration ventilation systems are provided.
- 15. Provide one (1) layer of 3-mil maximum, polyethylene sheeting (non-fire retardant type) for isolation of fire sprinkler devices. Installed taping shall not impede the normal function of the fire sprinkler device. Approved wire sprinkler guards shall be furnished in conjunction with isolation.
- 16. Where required, install and operate air filtration equipment to provide one air change in the Abatement Work area every 15 minutes. Openings made in the Enclosure System to accommodate these units shall be made airtight with durable tape and/or caulking as needed. If more than one unit is installed, they shall be turned on one at a time, checking the integrity of all barriers after each unit is started. Insure that adequate power supply is available to satisfy the requirements of the air filtration units. Exhaust from these units shall be directed to the outside of the building whenever feasible. They shall not be exhausted into occupied areas of the buildings. Exhaust duct shall be extended from the Abatement Work area to the outside as required. Careful installation and daily inspections shall be performed to verify the exhaust ducts do not discharge into any areas of the building.
- 17. Once the Enclosure system is constructed and reinforced with air filtration units in operation as required, test the Enclosure for leakage utilizing smoke tubes. Repair, replace or reconstruct as required.
- 18. Following completion of the construction of all polyethylene barriers and Decontamination Enclosure System, operate the air filtration units overnight to insure the barriers will remain intact and secured to walls and fixtures before beginning actual Abatement Work.
- 19. Commencement of the Work of this section shall not occur until:
 - a. The entire containment system has been constructed and inspected by Owner's Consultant in accordance with the required Shop Drawings.
 - b. Air filtration units are functioning within the requirements of this section.

- c. Air filtration units are functioning within the requirements of this section.
- d. All pre-Abatement submittals, notifications, postings, and permits have been provided and reviewed by the Owner's Consultant.
- e. All equipment for Abatement, Decontamination, and disposal are on the Project site.
- f. All worker training, respirator fit testing, and medical surveillance has been provided and reviewed by the Owner's Consultant.
- g. A Notice to Proceed is transmitted by the Owner.

3.02 ASBESTOS RELATED DISTURBANCE WORK PRACTICES

- A. For Class III work, shut off air handling equipment to rooms work will occur in.
- B. Provide and post signs at the entrance to the work area affected. The signs shall comply with Cal/OSHA regulations.
- C. For Class III work clean the area immediately under the location to be disturbed.
- D. For Class III work move any moveable furniture or objects from immediately beneath the area to be disturbed.
- E. Provide an enclosure around the area of disturbance. This may include, but is not limited to:
 - 1. Mini-enclosure where not more than two persons may occupy for the purpose cutting holes up to three (3) square feet in walls or ceilings.
 - 2. For drilling, coring, sawing or similar disturbance, an enclosure shall be placed over the area of disturbance of sufficient size to cover that area and contain the tools used. This can include drilling with a shroud, through a wet sponge, through a plastic enclosure, or similar designs which will ensure control of Asbestos fibers and other dust. Drilling or coring with the use of a vacuum collection device shall be equipped with a HEPA filtered vacuum.
- F. All Class III work performed without a HEPA vacuum collection device shall have all surfaces of disturbance adequately wet to control fiber release.
- G. Clean by wet method the surfaces disturbed, the enclosure device and/or materials used, and any tools used during the disturbance operation.

H. Clean up by wet method and/or HEPA vacuum any debris that may have escaped outside the enclosure required by this section.

3.03 DECONTAMINATION ENCLOSURE SYSTEM FOR ABATEMENT WORK

- A. Decontamination Enclosure Systems shall be provided at all locations where workers will enter or exit the Abatement Work area of Class I and II asbestos work prior to any other set up. Only one system at a single location for each Regulated Area is required. At least one individual shall be stationed at the entrance of each system at all times Abatement Work is in progress.
- B. These systems may consist of existing rooms outside of the Abatement Work area, if the layout permits, and that can be enclosed in polyethylene sheeting, and are accessible from the Abatement Work area. If this intended layout is not feasible, given existing site conditions, Enclosure systems may be constructed out of metal, wood, or plastic support as required.
- C. Decontamination Enclosure Systems constructed at the Project site shall be furnished with 6-mil opaque white or black polyethylene sheeting or other approved materials for privacy. Detailed descriptions of portable, prefabricated units, if furnished, shall be submitted for review. Shop Drawings must include floor plan with dimensions, materials, size, thickness, plumbing, and electrical utilities.
- D. Decontamination Enclosure System shall consist of at least a Clean Room, a Shower Room, and an equipment room, each separated from the other, from the Abatement Work area and from the non-Work area by "Z-flaps" at a minimum. The system shall be furnished with, at a minimum, two (2) layers of 6-mil polyethylene sheeting on the floors, walls, and ceiling.
- E. Clean room shall be of adequate size to accommodate the Abatement crew. Clean work clothes, clean disposable clothing, replacement filters for respirators, disposable towels, and other necessary items shall be provided for in adequate supply adjacent to the Clean Room. A location for posting notices shall also be provided adjacent to this area. When required, a lockable door shall be furnished to control access into the Clean Room from outside the Abatement Work area. Comfort lighting, heat, and electricity shall be provided as required. The Clean Room shall not be used for storage of tools, equipment, materials, or as office space.
- F. Shower room shall contain one or more showers as required to adequately accommodate workers. Each showerhead shall be supplied with hot and cold water adjustable at the tap. The shower Enclosure shall be constructed to ensure against any kind of leakage. Provide an adequate supply of soap, shampoo, and disposable towels, available at all times. Shower water shall be drained, collected, and progressively filtered through a system achieving a maximum particle size of 1.0 microns.
- G. The Equipment Room shall be used for storage of equipment and tools at the end of a

shift. These shall have been cleaned using a HEPA Filtered vacuum and wet cleaning methods. A container lined with a labeled 6-mil polyethylene bag for collection of disposable clothing shall be located in this room. Reusable footwear shall be stored in this area after being cleaned.

3.04 WASTE CONTAINER REMOVAL AIRLOCK AND EMERGENCY EXITS

- A. The waste container pass-out airlock shall be constructed away from the Decontamination Enclosure System. This airlock shall be in a location that provides direct access from Abatement Work area to the outside of the building if possible.
- B. This system shall consist of an airlock, container Staging Area, and another airlock providing access to outside Abatement Work area.
- C. The waste container airlock shall be constructed in similar fashion with similar materials as the Decontamination Enclosure System.
- D. This airlock system shall not be used to enter or exit the Abatement Work area.

3.05 ALTERNATIVE PROCEDURES

A. Soil Removal

- 1. All required Asbestos Abatement shall be performed prior to soil Removal.
- 2. If soil Removal is specified, all debris within or upon the soil shall be considered part of the soil and shall be removed as a contaminated waste. Debris includes, but is not limited to, fabric, paper, and other fibrous or porous materials.
- 3. It is not the intention of this section to require the Removal of large rocks, abandoned non-Asbestos-containing pipe, lumber, and similar debris. If these conditions are encountered, clean and encapsulate these materials instead of removing them as a contaminated waste, provided Asbestos contamination is not ingrained within and/or affixed to them. Any such materials remaining shall be stacked to one side to allow for access to the soil below for removal purposes.
- 4. Unless otherwise specified, soil shall be removed with a High Volume Vacuum system. Soil shall be removed to the hard pan unless otherwise specified or required.
- 5. After soil Removal has been completed, the Owner's Consultant shall inspect the Work. Approval of the Removal Work is required prior to lock down and Encapsulation.
- 6. Soil requires Encapsulation following Asbestos Removal, including but not limited to, High Volume Vacuum removal. Apply a continuous even coat of encapsulating

material at the rate of no more than fifty (50) square feet per gallon. All other structural surfaces shall receive an evenly applied coat of lock down material.

B. Other:

- 1. All High Volume Vacuum systems shall be provided with an Enclosure constructed at the waste discharge port. This Enclosure shall be of sufficient size to accommodate the workers and disposal containers necessary for the Project. The Enclosure shall be constructed of one (1) layer, 6-mil minimum, of polyethylene sheeting. An air filtration unit shall be furnished during operation of the High Volume Vacuum.
- 2. Where pipe insulation is to be removed in a crawl space and/or attic space a single layer of 6-mil polyethylene sheeting with a minimum width of four (4) feet shall be placed centered under the Removal surfaces.
- 3. If specified procedures cannot be furnished, a written request shall be provided to the Owner outlining details of the problem encountered and recommended alternative solutions.
- 4. Alternative procedures shall provide equivalent or greater protection than the specified and/or required procedures.
- 5. Any alternative procedure requires the written approval of the Owner prior to implementation.

3.06 WORKPLACE ENTRY AND EXIT PROCEDURES

- A. Before entering the Regulated Area all personnel shall read and be familiar with all posted regulations, personal protection requirements, and emergency procedures. A signature sheet shall be posted for signatory acknowledgement these have been reviewed and understood by all personnel prior to entry.
- B. All workers and other authorized personnel shall enter the Abatement Work area through the Decontamination Enclosure System or other room required when Decontamination Enclosure System is not required.
- C. All personnel who enter or exit the Regulated Area shall sign the entry and exit log located adjacent to the Clean Room.
- D. All personnel shall proceed first to the Clean Room, don respirator, and washable and/or disposable clothing.
- E. General construction area equipment including, but not limited to, hard hats, eye protection, and gloves shall also be provided as required. Clean respirator and cartridges, and protective clothing shall be provided and utilized by each person for each separate

entry into the Regulated Area.

- F. Before leaving the Regulated Area for Class I and II asbestos work all personnel shall remove gross contamination from the outside of respirators and protective clothing by vacuuming and/or wet wiping methods. Each person shall clean protective footwear just prior to entering the Equipment Room.
 - 1. Personnel shall proceed to Equipment Room where they remove all protective equipment except respirators. Deposit disposable clothing into appropriately labeled containers.
 - 2. Still wearing respirator, personnel shall proceed to the shower area, clean the outside of the respirators and the exposed face area under running water prior to removal of respirator then shower and shampoo to remove residual Asbestos contamination. Various types of respirators will require slight modification of these procedures. A powered air purifying respirator face piece will have to be disconnected from the filter/power pack assembly when such is not waterproof, upon entering the shower. A dual cartridge respirator may be worn into the shower and cartridges shall be replaced for each new entry into the Work area.
 - 3. After showering and drying off, proceed to the Clean Room and don clean clothing.
- G. At no time shall any personnel exit an Abatement Work area into a space occupied by staff or students without being completely dressed. Any violation of this requirement will result in the permanent removal of the person from the Project site.

3.07 REMOVAL PROCEDURES

- A. Brushes furnished for removing loose Asbestos Containing Material during detail cleaning of substrate shall be furnished with nylon or fiber bristles. Metal or wire brushes are not permitted. Brushes used during this process shall be disposed as contaminated waste when use of the brush for this work is completed.
- B. A sufficient supply of HEPA Filtered vacuum systems shall be provided during cleanup of Abatement Work. Brush attachments are not permitted for use with vacuum systems.
- C. All barriers constructed to isolate the Regulated Area from other areas shall be inspected at least three times per shift; prior to the start of Abatement activities; half way into the shift; and following the completion of the Abatement activities at the end of the shift. Inspect and document observations in the daily Project log.
- D. Damage and defects in the Enclosure system shall be repaired immediately upon discovery.
- E. At any time during Abatement Work, following barrier installation, if visible debris is observed outside of the Regulated Area or damage occurs to the barriers, stop Work

immediately. Repairs shall be performed to the barriers and debris/residue shall be cleaned up with appropriate HEPA Vacuuming and wet wiping methods. These incidents shall be recorded in the daily Project log.

F. If air samples collected outside of the Work area during Abatement Work indicate airborne fiber concentrations greater than 0.01 f/cc or the pre-measured background levels (whichever is lower) Work shall stop immediately. An inspection and repair of barriers shall be performed as required. Surface cleaning with HEPA Vacuums and wet wiping methods of areas outside of the Work area may be required by the Owner. Findings, observations, and corrective actions shall be documented in the daily Project log.

3.08 ENCAPSULATION AND BRIDGING AGENTS

- A. Clean and isolate the Work area in accordance with "Work Area Preparation" of this Section.
- B. Repair damaged and missing areas of existing materials with non-Asbestos containing substitutes. Material shall adhere adequately to existing surfaces and provide an adequate base for application of Encapsulating Material. Filler material shall be installed in accordance with manufacturers recommended specifications.
- C. Remove loose or hanging Asbestos Containing Materials in accordance with the requirements of "Removal Procedures" in this Section.
- D. All lockdown and Encapsulating Material, and bridging agents shall be reviewed by the Owner's Consultant and OAR prior to the commencement of the Work of this section.
- E. Encapsulating Material shall be sprayed applied with airless spray equipment. Nozzle pressure shall be adjustable within a range of 400 to 1500 PSI.
- F. Lock down coat shall be spray applied with low pressure providing a continuous even coat.
- G. Bridging agents shall be a palm or brush grade.
- H. All colorless lock down materials, Encapsulating Material, and bridging agents shall be furnished with a compatible color additive. A different color shall be furnished for each separate coat of applied material.
- I. Install penetrating type Encapsulating Material to penetrate existing sprayed applied Asbestos Containing Materials to a depth as required.
- J. During installation of the penetrating type Encapsulating Material, remove selected random core samples of the Asbestos Containing Materials in the presence of the Owner's Consultant to verify depth of penetration.

K. Lock down coating and Encapsulating Material for installation on hot water, steam, or any other high temperature equipment shall be manufactured and recommended for installation on high temperature systems.

3.09 CLEAN UP PROCEDURES

- A. Asbestos Clean Up Procedures:
 - 1. Unless decontaminated daily, reusable footwear and kneepads shall be stored in the Equipment Room when not in the Work area. Upon completion of Abatement Work, these shall be disposed of as Asbestos contaminated waste or may be decontaminated at the completion of Abatement Work.
 - 2. Remove and containerize all visible accumulations of Asbestos Containing Material and Asbestos contaminated debris with rubber dustpans and rubber squeegees. Do not use metal shovels to pick up or move accumulated waste. Special care shall be taken to minimize damage to flooring materials.
 - 3. Remove all containerized waste from the Abatement Work area and the waste container airlock.
 - 4. Wet wipe all surfaces in the Regulated Area with clean rags, mops, and sponges as appropriate.
 - 5. After cleaning remove the top layer of polyethylene sheeting from walls and floors.
 - 6. Clean the second layer of polyethylene sheeting by wet wipe and HEPA Vacuuming. Windows, doors, HVAC system vents, and all other critical seals shall remain sealed until the Abatement Work area passes final clearance. The air filtration units shall remain in continuous operation and the Decontamination Enclosure System shall remain in place and be utilized.
 - 7. Decontaminate all tools and equipment and remove at the appropriate time in the cleaning process.
 - 8. Provide notification to the Owner at least one (1) day in advance when Abatement Work will be completed and ready for final visual inspection. If, upon inspection, Abatement Work is not completed or the area does not pass final visual inspection, finish or correct the Abatement Work as required before notifying the Owner. Subsequent inspections shall commence not later than one (1) day following notice.
 - 9. The Owner's Consultant shall inspect the Work area for visible residue. If residue is observed, it shall be deemed to contain Asbestos and the cleaning process shall be repeated. The lock down coat shall be applied only after inspection by the Owner's Consultant and during project work day hours only.

- 10. The second layer of isolation shall only be removed after the Owner's Consultant inspects the lock down coat or installed Encapsulation, but in no case prior to overnight drying of lock down coat or Encapsulation.
- 11. Following completion of air clearance monitoring the remaining barriers shall be removed and properly disposed of. A final visual inspection by the Owner's Consultant shall be performed to verify that no contamination remains in the Abatement Work area. Unsatisfactory conditions may require additional cleaning and air monitoring.

3.10 WASTE HANDLING AND TRANSPORTATION

A. Asbestos Waste Handling

- 1. As the Work progresses, to prevent exceeding available storage capacity on the Project site, sealed and labeled containers of Asbestos Containing Waste shall be removed and transported to the prearranged disposal location.
- 2. Waste disposal shall occur at an authorized site in accordance with regulatory requirements of NESHAP and applicable State and Local regulations.
- 3. Once the drums, bags, and/or wrapped components have been removed from the Work area, they shall be loaded into an enclosed truck for transportation.
- 4. Waste shall not be transported from the work are to the storage container or waste hauler's vehicle while students or staff are present in the path of travel. Where a path of travel cannot be cordoned off the movement of waste must be completed prior to or after the presence on site of students and staff.
- 5. Personnel loading Asbestos waste shall be protected with disposable clothing and at a minimum half-face, air purifying, dual cartridge respirators furnished with HEPA Filters.

3.11 TRANSPORTATION OF NON HAZARDOUS WASTE

- A. All waste shall be containerized, labeled, and transported in accordance with federal, state, and local regulations.
- B. All waste shall be transported under cover a non-Hazardous Waste manifest.
- C. All containers shall be enclosed at all times during transportation.

3.12 TRANSPORTATION OF HAZARDOUS WASTE

A. All dump receipts; trip tickets, transportation manifests, weight certificates or other documentation of disposal shall be delivered to the Owner's Consultant within 48 hours

of disposal. As the material and responsibility for the material changes hands, the generator or designee, the transporter(s), and the Disposal Site Operator shall sign the Uniform Hazardous Waste Manifest. If a separate waste hauler is employed, the name, address, U.S.E.P.A. ID number, and signature of the transporter shall also be affixed onto the manifest.

- B. The enclosed cargo area of trucks or containers shall be free of debris and lined with 6 mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extend up the sidewalls. Wall sheeting shall be overlapped and taped into place.
- C. Drums shall be placed on level surfaces in the cargo area and packed tightly together to prevent shifting and tipping. Large structural components shall be secured to prevent shifting, with bags placed on top.
- D. All access openings on large metal containers, which are used for storing or transporting Asbestos waste, shall have doors and tops that can be closed and locked. Materials not properly bagged shall not be placed in these containers nor shall these containers be used for non-Asbestos waste or nonhazardous asbestos waste. Bags shall be placed, not thrown, into these containers to avoid damage.

3.13 MONITORING

- A. Abatement Project Management and Inspection:
 - 1. Owner has the right to perform air and performance monitoring at any time.
 - 2. The Owner has unlimited access to the regulated and surrounding areas at all times during progress of the Work, including, but not limited to, use of ladders, scaffolds, and other equipment required to gain access to the Work surfaces.
- B. Work Area Monitoring:
 - 1. Visual inspections and air testing may be performed at any time during the progress of the Abatement Work. Provide corrective measures as required to maintain the Work area in compliance with this Specification and all regulatory requirements.
- C. Contractor's Employee Personal Air Monitoring:
 - 1. Provide air monitoring as required California Code of Regulations, Title 8, Section 1529. Results shall be provided to the Owner's Consultant within ten (10) working days of sampling. Negative Exposure Assessments utilizing prior project monitoring require submittal of applicable data for approval before work proceeds.
- D. Clearance Air Monitoring:

- 1. Following the completion of Abatement Work and clean up operations, lock down coat application, and visual inspection by the Owner, clearance air monitoring shall be performed by the Owner's Consultant.
- 2. The Owner's Consultant shall arrange for sampling of the air in the Abatement Work area for airborne fiber concentrations. Unauthorized interference or tampering with air sampling equipment may result in termination of the Contract and/or removal of the Abatement Contractor from the List of Prequalified Abatement Contractors.
- 3. If air-sampling results are within the limits of 40 CFR, Part 763, Subpart E (AHERA), the Abatement Work area shall be released for occupancy.
- 4. Areas failing clearance monitoring shall be cleaned as required in sub-section 3.08, CLEAN UP PROCEDURES, and tested until satisfactory levels are provided in accordance with this Specification where required.

3.14 RE-ESTABLISHMENT OF THE WORK AREA AND SYSTEMS

- A. Reestablishment of the Work area shall only occur following the completion of final inspection and clearance air monitoring.
- B. All critical barriers shall be removed at this time.
- C. Accompanied by the Owner's Consultant, visually inspect the Abatement Work area for any remaining visible residue. Evidence of contamination will require additional cleaning requirements.
- D. Install and secure Moveable Objects.
- E. Relocate Moveable Objects that were removed to temporary locations back to their original positions.
- F. Reestablish HVAC, mechanical, and electrical systems to the condition prior to commencement of the Work of this section.
- G. Repair all areas of damage deemed to be a result of the Abatement Work.
- H. Restore the Work area and auxiliary areas utilized during the Abatement to conditions equal to or better than original. Any damage caused during the performance of Abatement Work, including, but not limited to, damage caused by tape, adhesive, staples, nails, water, Encapsulating Material, or any other material shall be repaired as required.
- I. Prior to occupancy of a space following clearance monitoring, all HVAC systems filters associated with the Work area shall be removed and disposed of as Asbestos waste. Decontaminate filter assembly and surrounding area with HEPA Vacuums and wet

cleaning methods.

END OF SECTION



VETERANS PARK RECREATIONAL CENTER "NON-PATRON ACESS" INTERIOR AREAS



Gallery Storage, Range Storage, Mechanical/Employee Locker Room, HVAC Access Room, Racquetball Seating and Elevator Top

> Veteran's Park – Recreational Center 6364 Zindell Ave Commerce, CA 90040

> > 9 April, 2010

Prepared for: Mr. Danilo Batson 2535 Commerce Way Commerce, CA 90040

Prepared by: Barry Sasse

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Project Number C1-4751

VETERANS PARK RECREATIONAL CENTER "NON-PATRON ACESS" INTERIOR AREAS

PROJECT NUMBER:

C1-4751

SUBJECT PROPERTY:

Veteran's Park Recreational Center

6364 Zindell Ave

Commerce, CA 90040

DATE OF SITE ASSESSMENTS:

9 April, 2010

ASSESSMENT PERSONNEL:

BARRY A. SASSE, REA, CLIA

REGIONAL DIRECTOR

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SECTION 1 – EXECUTIVE SUMMARY

1.1 General/Background

Hillmann Environmental Group, LLC, was authorized by Mr. Danilo Batson of Commerce CA. City Hall to conduct Lead Dust Sampling of the "Non-Patron Access" areas within the Veteran's Park Recreational Center (Gallery Storage, Range Storage, Mechanical/Employee Locker Room, HVAC Access Room, Racquetball Seating and the Elevator Top. Barry Sasse of the Hillmann Group conducted the lead dust wipe sampling (Clearance testing) and ensured site security and proper set-up. These tasks took place at 6364 Zindell Ave, Commerce CA. The clean-up was performed due to the discovery of lead dust contamination in the aforementioned areas as a result of "non-routine" lead mining operations and continuous weapons firing within the James Bristow Marksmanship Range.

Hillmann's work was conducted in accordance with OSHA, EPA and HUD protocols as well as accepted industry standards. Hillmann's site investigator ensured proper containment and site set-up for cleaning in each area. The investigator also performed a visual inspection of all areas and Lead "Clearance" Testing via wipe sampling after all clean-up work had been completed.

1.2 Sampling Strategy/Findings

- GALLERY STORAGE: Four (4) dust wipe samples were collected and analyzed for lead content. The locations, dates and sample results of each sample are provided for your review in Section 3, and a Laboratory hard copy is attached to this report.
- RANGE STORAGE: Nine (9) dust wipe samples were collected and analyzed for lead content. The locations, dates and sample results of each sample are provided for your review in Section 3, and a Laboratory hard copy is attached to this report.
- MECHANICAL/EMPLOYEE LOCKER ROOM: Two (2) dust wipe samples were collected and analyzed for lead content. The locations, dates and sample results of each sample are provided for your review in Section 3, and a Laboratory hard copy is attached to this report.
- HVAC ACCESS ROOM: Five (5) dust wipe samples were collected and analyzed for lead content. The locations, dates and sample results of each sample are provided for your review in Section 3, and a Laboratory hard copy is attached to this report.
- RACQUETBALL SEATING: Four (4) dust wipe samples were collected and analyzed for lead content. The locations, dates and sample results of each sample are provided for your review in Section 3, and a Laboratory hard copy is attached to this report.
- ELEVATOR TOP: One (1) dust wipe sample was collected and analyzed for lead content. The location, date and sample results sample are provided for your review in Section 3, and a Laboratory hard copy is attached to this report.

- READY ROOM (ELISI'S OFFICE & RANGE STAFF OFFICE): Seven (7) additional dust wipe samples were collected and analyzed for lead content. The locations, dates and sample results of each sample are provided for your review in Section 3, and a Laboratory hard copy is attached to this report.
- The Environmental Protection Agency (EPA) recommends that indoor floor surfaces contaminated with lead do not exceed 40µg/ft² and Interior Window Sills/Horizontal Surfaces do not exceed 250µg/ft². It is critical to point out that wipe result levels vary due to wind patterns, patron foot-traffic patterns, housekeeping cleaning patterns, elevator use, and the historic use of an unfiltered firing range exhaust system.
- The American Conference of Governmental Industrial Hygienists (ACGIH) has established what is called "Biological Exposure Indices (BEIs)." BEIs are combined exposures to chemicals via ingestion, inhalation, contact and injection and can lead to a greater combined exposure and effect on the internal organs. Blood, urine and exhaled air analysis are the common biological testing methods used. Based on the survey findings, there is a potential for combined exposures (BEI) as explained above. Hillmann recommends the continued biological monitoring on all workers who perform work in the James W. Bristow Marksmanship Range. The Center for Disease Control "CDC" recommends that adults not exceed 25ug/dl in blood and OSHA recommends that workers do not exceed a level of 40ug/dl in blood.
- IAW the South Coast Air Quality Management District (SCAQMD) Rule 1420 "Emissions Standards for Lead;" no person who owns or operates a lead-processing facility shall discharge into the atmosphere emissions which cause ambient concentrations of lead to exceed 1.5 microgram per cubic meter (1.5 ug/m³), averaged over 30 days, beyond the property line of a facility; or, fugitive lead dust emissions that exceed Ringelmann 0.5, or 10 percent opacity, for more than three minutes aggregate in any 60-minute period.

SECTION 2 - INTRODUCTION

2.1 General.

Hillmann Environmental Group, LLC, was authorized by Mr. Danilo Batson of Commerce CA. City Hall to conduct Lead Dust Sampling of the "Non-Patron Access" areas within the Veteran's Park Recreational Center (Gallery Storage, Range Storage, Mechanical/Employee Locker Room, HVAC Access Room, Racquetball Seating and the Elevator Top). Barry Sasse of the Hillmann Group conducted the lead dust wipe sampling (Clearance testing) and ensured site security and proper set-up. These tasks took place at 6364 Zindell Ave, Commerce CA. The clean-up was performed due to the discovery of lead dust contamination in the aforementioned areas as a result of "non-routine" lead mining operations and continuous weapons firing within the James Bristow Marksmanship Range.

Hillmann's work was conducted in accordance with OSHA, EPA and HUD protocols as well as accepted industry standards. Hillmann's site investigator ensured proper containment and site set-up for cleaning in each area. The investigator also performed a visual inspection of all areas and Lead "Clearance" Testing via wipe sampling after all clean-up work had been completed.

The survey was performed by a Mr. Barry Sasse, a California Certified Lead Inspector/Risk Assessor (CLIA) and a Department of Toxic Substances Control Registered Environmental Assessor (REA) experienced in industrial hygiene methods and practices, with a degree in Occupational Safety and Health. The survey was performed in accordance with the Environmental Protection Agency (EPA) and National Institute for Occupational Safety and Health (NIOSH) sampling techniques. Samples were analyzed at an appropriately experienced and/or accredited laboratory (see results). These samples, representative of a narrow time frame, are for screening purposes only and are not intended to represent definitive exposure levels. Wipe results can vary due to wind patterns, patron foot-traffic patterns, housekeeping cleaning patterns, elevator use, the historic use of an unfiltered firing range exhaust system and the past usage of the weapons firing and poor lead mining operations.

2.2 Occupational Breakdown

The personnel structure at Veterans Park and James W. Bristow Marksmanship Range consists of Range Officials, Housekeeping personnel and Parks & Rec employees; of which all groups perform separate functions. The <u>Range Officials</u> supervise firing range customers who fire weapons at the range and they provide supplies, limited shooting equipment and hearing protection, set-up targets and ensure range mechanical equipment is functioning properly. Most Range Officials are also trained and fit-tested with half-faced respirators. NOTE: The Range has been closed since September 2009.

Housekeeping Personnel perform cleaning functions throughout the entire facility and at other City of Commerce Facilities. Typical tasks include the cleaning of bathrooms, emptying of trash, sweeping, mopping, and vacuuming of floors and dusting of furniture and horizontal surfaces in common areas. Housekeeping personnel also perform the "down-range" wet-mopping of the firing range 1-2 times per week, or when needed. Most Housekeeping personnel are trained and

fit-tested with half-faced respirators. The Firing Range is located on the bottom floor (3 stories below grade) of the Recreational Center. The task of cleaning "down-range" takes anywhere from 30-45 minutes; the remainder of the day, workers perform the other functions as mentioned above. NOTE: The Range has been closed since September 2009.

<u>Parks & Rec Employees</u> provide administrative support and supervise group activities for local children and adults. They do not access the Firing Range.

<u>Patrons</u> have access to all Park areas accept the Firing Range (unless authorized), the gated Alleyway and all Mechanical Buildings.

2.3 Sampling Parameters and Methodology.

Hillmann selected sampling parameters based on consultations with the client, the laboratories performing the analysis, our in-house experts and EPA & HUD protocols. The chosen parameters were lead wipes and the inspection was a general screening to identify if potential hazards exist.

The Hillmann Inspector employed sampling schemes that were representative of patron and employee usage, patron and employee access, and environmental and weather patterns. Sampling parameters were also based on the typical airborne hazards associated with firing ranges.

A total of 38 dust wipe (surface) samples (including blanks) were collected using "Ghost Wipes covering an area of particular dimension (12" x 12" or other) depending on surface space and construction in accordance HUD Method SW846-7420 ASTM at 10µg/wipe. The Method quantifies the total amount of particles collected on each Ghost Wipe TM based on a calculated area - as found upon each wiped surface.

SECTION 3 - LEAD RESULTS

3.1 Lead Dust Wipe Sample Results

LOCATION	DATE	SAMPLE#	RESULTS	EPA STD
Mechanical/Employee Locker Room: Top of Lockers	5 March	1	410 μg/ft²	250 μg/ft ²
Racquetball Viewing (Seating) area – cement FLOOR	5 March	2	<10 μg/ft²	40 μg/ft²
Top of Stairwell - at entryway FLOOR	5 March	3	<10 μg/ft²	40 μg/ft²
Range Storage - Exterior Window Ledge	5 March	4	85 μg/ft²	250 μg/ft ²
Gym Entrance FLOOR	5 March	5	<10 μg/ft²	40 μg/ft ²
BLANK	5 March	6	<10 μg/ft²	presence
Mechanical/Employee Locker Room: Top of Lockers	25 March	1	24 μg/ft²	250 μg/ft²
Mechanical/Employee Locker Room: FLOOR	25 March	2	20 μg/ft²	40 μg/ft²
Racquetball Seating: Carpet FLOOR	25 March	3	12 μg/ft²	40 μg/ft²
Range Storage: Top of Green File Cabinet	25 March	4	2600 μg/ft ²	250 μg/ft ²
Range Storage: Large Wooden Target Shelves (slot #11/12)	25 March	5	1400 μg/ft²	250 μg/ft²
HVAC Access Room: Top of HVAC ductwork supporting Lobby ventilation	25 March	6	510 μg/ft²	250 μg/ft²
Racquetball Seating: Bleachers – 2 nd Row	26 March	1	<10 μg/ft²	250 μg/ft ²
Racquetball Seating: Cement FLOOR	26 March	2	<10 μg/ft²	40 μg/ft ²
HVAC Access Room: Entry FLOOR	26 March	3	19 μg/ft²	40 μg/ft²
HVAC Access Room: Back Area FLOOR	26 March	4	<10 μg/ft²	40 μg/ft ²
Gallery Storage: Entry FLOOR	20.16			
Gallery Storage: Back Area FLOOR	30 March	1	<10 μg/ft²	40 μg/ft ²
Gallery Storage: White Pedestal	30 March	2	13 μg/ft²	40 μg/ft ²
Gallery Storage: Plastic Toy Box	30 March	3	<14 μg/ft²	250 μg/ft ²
Cantery Storage. Flastic Toy Box	30 March	4	<10 μg/ft²	250 μg/ft ²
Range Storage: Large Wooden Target Shelves (slot #11/12)	2 April	1	160 μg/ft²	250 μg/ft²
Range Storage: FLOOR center	2 April	2	110 μg/ft²	40 μg/ft²
Range Storage: Cardboard Target Box	2 April	3	<10µg/ft²	250 μg/ft ²
HVAC Access Room: #2 Circuit Panel Box	2 April	4	240 μg/ft²	250 μg/ft ²
Elevator Top - Cement	2 April	5	16 μg/ft²	250 μg/ft ²
BLANK	2 April	6	<10 μg/ft²	presence
HVAC Access Room: Water Heater Top	2 April	7	40 μg/ft²	250 μg/ft ²
Range Storage: FLOOR center	7 April	1	76 μg/ft²	40 μg/ft²

LOCATION	DATE	SAMPLE#	RESULTS	EPA STD
Elsie's Office: Composite of 8 Picture Frames	9 April	1	800 μg/ft²	250 μg/ft ²
Elsie's Office: Composite of 10 Picture Frames	9 April	2	1,100 µg/ft²	250 μg/ft²
Elsie's Office: FLOOR	9 April	3	350 μg/ft ²	40 μg/ft ²
Ready Room: Wooden Target Shelf Top Right Corner slot	9 April	4	10,000 μg/ft ²	250 μg/ft ²
Ready Room: Combined Trophy surfaces	9 April	5	2,400 μg/ft ²	250 μg/ft²
Staff Office: Bookshelf	9 April	6	150 μg/ft²	250 μg/ft ²
Staff Office: File Cabinet top	9 April	7	88 μg/ft²	250 μg/ft ²
Range Storage: FLOOR center	9 April	8	19 μg/ft²	40 μg/ft ²
Range Storage: FLOOR rear	9 April	9	15 μg/ft²	40 μg/ft ²
BLANK	9 April	10	<10 μg/ft²	presence

SECTION 4 - DISCUSSION

4.1 Lead

Lead is a cumulative and persistent toxic substance that poses a serious health risk. A rigorous housekeeping program and adherence to basic personal hygiene practices will minimize employee exposure to lead. In addition, these two elements of the worker protection program will help to prevent taking lead-contaminated dust out of the worksite and home to the workers' families, thus ensuring that the duration of lead exposure does not extend beyond the workshift and providing added protection to employees and their families.

4.2 General Observations:

While on site, Hillmann observed patron and employee activities, and observed park and facility conditions. Hillmann provided a sampling and strategy description to Mr. Batson prior to the survey.

Previous Hillmann Lead survey reports have been written. Please review the chronological report data dating back to July 2008 through the present, to further understand the basis of this report.

SECTION 5 - CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions:

Based on thorough cleaning and lead dust wipe Clearance results, the previous elevated levels of lead dust in the Gallery Storage, Range Storage, Mechanical/Employee Locker Room, HVAC Access Room and Racquetball Seating areas are now all below the EPA/HUD and CA Title 17 Lead standards for Interior Horizontal Surfaces and Floors.

Samples collected on 9 April 2010 in the Ready Room and in the Senior Range Officials' office were found to be at 3-4 times above the recommended standard.

5.2 Recommendations:

Routine clean-up actions should be continued in all areas of the Recreational Center to prevent dust build up. The current daily Custodial Services as provided by the Commerce employees will help to keep any dust levels from building-up in all the public/general building areas where patrons and employees congregate. In the other "non-patron" areas - at a minimum, quarterly cleaning of these areas should be performed. It is advised that lead dust monitoring of the various surfaces throughout the park and recreational building be performed routinely (every 3-6 months) to ensure lead dust levels remain below the federal and state standards.

The Range and Ready Room areas should be off-limits to all Commerce employees and untrained/un-certified lead professionals. It is recommended that these areas and items are cleaned by lead contractors immediately prior to reoccupying or use.

Hillmann will provide project oversight during any future remediation, cleaning and demolition actions as performed by contractors.

6.0 APPENDICES

List of Abbreviations

References

Appendix A Appendix B Appendix C Sample Results

Appendix E
Appendix F Site Photos

DHS Form 8552

Licenses and Certifications

APPENDIX A LIST OF ABBREVIATIONS

AC/hr

Air Changes per Hour

ACGIH

American Conference of Governmental Industrial Hygienists

AHA

American Industrial Hygiene Association

AL

Action Level

ASHRAE

American Society of Heating, Refrigeration and Air-Conditioning Engineers

BEI

Biological Exposure Indices

CDC

Centers for Disease Control

EPA

Environmental Protection Agency

NAAQS

National Ambient Air Quality Standard

NIOSH

National Institute for Occupational Safety and Health

OSHA

Occupational Safety and Health Administration

CFU/m³

Colony forming units per cubic meter of air

F/cc

Fibrous dust per cubic centimeter of air

Fpm

Feet per Minute

HVAC

Heating, Ventilation & Air-Conditioning

mg/m³

Milligrams per cubic meter of air

 $\mu g/m^3$

micrograms per cubic meter of air

PEL

Permissible exposure level (this is the enforceable standard)

pCi/L

Picocuries per liter of air

ppb

parts per billion

ppm

Parts per million

TLV

Threshold Limit Value

TWA

Time Weighted Average

APPENDIX B REFERENCES

- 1. American Conference of Governmental Industrial Hygienists, Guidelines for The Assessment Of Bioaerosols In The Indoor Environmental, Cincinnati, Ohio 1989.
- 2. Molhave, L., B. Bach, and O. F. Pederson, Human Reactions During Exposures to Low Concentrations of Organic Gases and Vapors Known as Normal Indoor Air Pollutants, in: Proc, of the 3rd Int. Conf. on Indoor Air Quality and Climate, Vol. 3:461-466, Stockholm.
- 3. Molhave, L., Volatile Organic Compounds as Indoor Air Pollutants, in Indoor Air and Human Health; R. B. Gammage and S. V. Kaye (eds.), Lewis Publishers.
- 4. Plog, B. A., Benjamin, G. S., and Kerwin, M. A.; Fundamentals of Industrial Hygiene, Fourth Edition; National Safety Council; 1996.
- 5. McDermott, Henry J.; Handbook of Ventilation for Contaminant Control, Second Edition; Butterworth Publishers; 1985.
- 6. Committee on Industrial Ventilation; Industrial Ventilation 24nd; Edition; "A Manual of Recommended Practice"; American Conference of Governmental Industrial Hygienists, Inc.; 2001.
- 7. ANSI/ASHRAE; Thermal Environmental Conditions for Human Occupancy 55-2004; ASHRAE; 2004.
- 8. ANSI/ASHRAE; Ventilation for Acceptable Indoor Air Quality, 62-1989; ASHRAE; 1990.

APPENDIX C SAMPLE RESULTS

SAMPLE IDENTIFICATION FORM



Environmental Consulting & Lab Services 4510 E. Pacific Coast Hwy., Suite 420, Long Beach, CA 90804 (562) 986-5000 Fax (562) 986-5003 331002433

CLIENT: (1+	y of Connece			3-5-10
LOCATION:	MARKE		JOB NO.:	
E-MAIL TO: B	suffer Hillown groupson		ANALYSI	S: ASTM
Sample # Lab # / (Lab use)	Sample Location	Type:	Area	Lab Results:
LW:31	Above locker frent. foor	Wipe	144.02	
linol	Raquet Ball Kewing and		144.112	
120:5	Top sturbell of Entryley		144112	
LW-25	Storage virous sill		95,72	
Lw.36	Flore in Front of 6 ym	Y	1442	
	Blance			

SAMPLED BY:	CHAIN OF CUSTODY TRANSPORTED BY:	RECEIVED BY:	ANALYZED BY:
Print India tonge		misavelm	re
Sign		318	10 1:40e
Page of /			opusier



10772 Noel St., Los Alamitos, CA 30720

Attn: Barry Sasse

Hillmann Environmental Group, LLC

4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

(562) 986-5003

Phone: (562) 986-5000

Project: City of Commerce

Fax:

Customer ID:

32HILL65

Customer PO: Received:

03/05/10 1:40 PM

LA Testing Order: 331002433

LA Testing Proj:

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	3/5/2010	144 in²	10 µg/ft²	410 μg/ft²	Above Locker	Maint Poom
Client So	imple LW-01				Collected:	
0002	3/5/2010	144 in²	10 µg/ft²	<10 μg/ft²		3/5/2010
Client So	imple LW-02		io hgm	~ 10 µg/it-	Raquet Bali VI	ewing Area
0003					Collected:	3/5/2010
	3/5/2010	144 in²	10 μ g/ft ²	<10 µg/ft²	Top Stairwell	2 Entry Way
Client Sa	mple LW-03				Collected:	3/5/2010
0004	3/5/2010	95 in²	15 µg/ft²	95 valet		
Client Sa	mple LW-04		10 pg/1t	85 μg/ft*	Storage Windo	w Sa
					Collected:	3/5/2010
0005	3/5/2010	144 in²	10 µg/ft²	<10 µg/ft²	Floor in Front o	f Gym
Client Sa	mple LW-05				Collected:	3/5/2010
0006	3/5/2010	0 in²	40			3/3/2010
Cliant Ca.	mple LW-06		10 μg/wipe	<10 µg/wipe	Blank	
Citent Sal	mpte LVV-00				Collected:	3/5/2010

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approved by EMSL. EMSL bears no responsibility for sample collection activities.

* alight modifications to methods applied

Samples analyzed by LA Testing 10772 Noel St., Los AlamitosCA AlHA-LAP, LLC ELLAP 101850, CA ELAP 1408



Lead (Pb) Chain of Custody LA Testing Order Number (Leb Use Only):

331003407

LA TESTING 10/72 NOEL STREET LOS ALARTOS (A 90720 PPONE (801) 755-1794 FAX: (714) 825-4944

Street: USIDE DE	CH 4380		LA Testing-B If Bill to is Differe	ut nom th	structions in Con	Ministrate (**
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Telephone #: 562	-756 1294	0.12	Fax#:		1		
Project Name/Number:	21-47-2		Emall Address: 6505	sea,	Hillman	19	ma AL
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Soil	SW846-7420		ICP-AES	0	ing/L (ppm	1)	
	SW848-7421		Flame Atomic Absorption Graphite Furnace AA	40	ng/kg (ppn	1)	
	SW86-60108 or	C	ICP-AES	1 03	mg/kg (ppn	n)	
Wastewater	SM3111B or	SM3111B or		La Contract	ng/kg (ppm		LJ_
	SW846-7000B/74 EPA 200.9	20	Flame Atomic Absorption		mg/L (ppm		
	SW846-8010B or	C	Graphita Furnace AA ICP-AES	0.00	3 mg/L (ppr	n)	
Drinking Water	EPA 200.9			-	ic/kg (ppm)		
Other:	L-1/2009		Graphite Furnace AA		3 mg/L (ppm)	
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Name of Sampler:		Signat	ure of Sampler:				100
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V						1	



10772 Noel St., Los Alamitos, CA 90720

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Attn: Barry Sasse

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4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

Fax: (562) 986-5003

Phone: (562) 986-5000

Project: C1-47

Customer ID:

32HILL65

Customer PO: Received:

03/25/10 12:20 PM

LA Testing Order: 331003407

LA Testing Proj:

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	3/25/2010	144 in²	10 μg/ft²	24 µg/ft²	Locker Room	Top of Lockers
Client S	ample 1			1 100 11	Collected:	
0002	3/25/2010	144 in²	40			3/25/2010
Client S	amata 2		10 μg/ft²	20 μg/ft²	Locker Room	Floor
					Collected:	3/25/2010
0003	3/25/2010	144 in²	10 μg/ft²	12 µg/ft²	Raquet Ball S	eating Carpet
Client S.	ample 3			70	Collected:	
0004	3/25/2010	144 in²	200 70			3/25/2010
		177 111	200 μg/ft²	2600 μg/ft²	Small Arms S Cabinet	torage Room Green
Client Sc	ımple 4				Collected:	3/25/2010
0005	3/25/2010	96 in*	150 µg/ft²	1400 μg/ft²	Smalls Arms	Storage Wooden
Client Sa					Collected:	3/25/2010
0006	3/25/2010	72 in²	20 µg/ft²	510 μg/ft²	Upstairs Vent Room System Lobby	
Client Sa	mpie o		<u> </u>		Collected:	3/25/2010

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The CC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing 10772 Noel St., Los AlamitosCA AlHA-LAP, LLC ELLAP 101650, CA ELAP 1406



BULLIAN BURGO

11986 34

Lead (Pb) Chain of Custody LA Testing Order Number (Lab Use Only): 331003467

LA TESTINO 10772 NOEL STREET LOS ALAMITOS CA 90720 PHONE (800) 755-1784 FAX: (714) 626-4944

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	mg/cm² 	SW848-7000B/74 or AOAC 974.0		Flame Atomic Absorption	0.01%	
Air		NIOSH 7082		Flame Atomic Absorption	4 µg/filter	
		NIOSH 7105		Graphite Furnace AA	0.03 µg/filter	
		NIOSH 7300 modi	fied	ICP-AES	0.5 µg/filter	
F 7550	ASTA	SW846-7000B/74	20	Flame Atomic Absorption	10 μg/wipe	L.
"if no box is ch	scked, non-ASTM Wipe is assumed	SW846-6010B or	C	ICP-AES	0.5 µg/wipe	
TCLP		SW846-1311/7420/SM	3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	
0 11		SW846-6010B or	C	ICP-AES	0.1 mg/L (ppm)	
Soil		SW846-7420		Fiame Atomic Absorption	40 mg/kg (ppm)	7
		SW846-7421		Graphite Furnace AA	0.3 mg/kg (ppm)	
***		SW86-6010B or (;	ICP-AES	1 mg/kg (ppm)	75
Wastewater	r	SM3111B or SW846-7000B/742	20	Flame Atomic Absorption	0.4 mg/L (ppm)	
		EPA 200.9		Graphite Furnace AA	0.003 mg/L (ppm)	
Drinking Wa		SW846-6010B or C		ICP-AES	1 mg/kg (ppm)	
Dillikning 44	RIGI	EPA 200.9		Graphite Furnace AA	0.003 mg/L (ppm)	
Other:			Prese	rvation Method (Water):		
Name of Sa	mpler					
Sample #	Local	lion	Signat	ure of Sampler:		
/	1			Volume/Area	Date/Time S	ampled
2	Hacquetball Section -	Bleacher Top		15" X15"	26 MW	10:00
_d	110 -	cement Hoor		12"×12"		10:05
_ ک	Storage Boom (POOF)	OPACESS) - Entr	Y 1	12×12"		0:20
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10772 Noel St., Los Alamitos, CA 90720

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Attn: Barry Sasse

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4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

Fax: (562) 986-5003

Project: C1-47

Phone: (562) 986-5000

LA Testing Proj:

Customer ID:

Customer PO:

LA Testing Order: 331003467

Received:

32HILL65

03/26/10 10:50 AM

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	3/26/2010	144 in²	10 µg/ft³	<10 µg/ft²	Parquethall S	eating Bleacher Top
Client St	ample 1			- io banc	Collected:	3/26/2010
0002	3/26/2010	144 in²	10 μg/ft²	<10 µg/ft²	Racquetball S	eating Cement Floor
Client Sa	imple 2				Collected:	3/26/2010
0003	3/26/2010	144 in²	10 μg/ft²	19 µg/ft²	Storage Room Entry Floor	(Roof Top Access)
Client Sa	imple 3				Collected:	3/26/2010
0004	3/26/2010	144 in²	10 µg/ft²	<10 µg/ft²		(Roof Top Access)
Client Sa	mple 4				Collected:	3/26/2010

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approved by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing 10772 Noel St., Los AlamitosCA AlHA-LAP, LLC ELLAP 101850, CA ELAP 1408



Lead (Pb) Chain of Custody LA Testing Order Number (Lab Use Only):

331003662

LA TESTING 10772 NOEL STREET LOS ALAMITOS, CA 90720 PHONE. (800) 755-1794 FAX: (714) 828-4944

			= (0.44)		
Company: Fillson (5)	140	LA Testing-Bill to: Same Different If Bill to la Different note instructions in Comments**			
Street: 4515 PCH # 2	(50)	Third Party Billing requires			
City: Long Beach	State/Province: CA	Zip/Postal Code: 90%		sard barry	
Report To (Name): Sarry Sas.		Fex#:			
Telephone #: 562 - 756	1294	Email Address: LSass	echillar nago	. A (car	
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Please Provide Results: Fax Fax	nali Purchase Order	U.8, S	tate Samples Taken:		
	maround Time (TAT) Optio	ns* - Please Check			
3 Hours 6 Hours 24 H		3 Days 4 Days	5 Days	10 Days	
Matrix	accordance with LA Testing's Term				
Chips mg/cm²	Method SW848-7000B/7420	Instrument	Reporting Limit	Check	
☐ % by wt.	or AOAC 974.02	Flame Atomic Absorption	0.01%		
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter		
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter		
	NIOSH 7300 modified	. ICP-AES	0.5 µg/filter		
Wipe* MASTM	SW846-7000B/7420	Flame Atomic Absorption	10 µg/wipe	No.	
"If no box is checked, non-ASTM Wipe is assumed	SW846-6010B or C	ICP-AES	0.5 µg/wipe		
TCLP	SW848-1311/7420/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)		
Soil	SW848-6010B or C	ICP-AES	0.1 mg/L (ppm)		
50H	SW846-7420	Flame Atomic Absorption	40 mg/kg (ppm)		
	SW846-7421 SW86-8010B or C	Graphite Furnace AA ICP-AES	0.3 mg/kg (ppm)		
Wastewater	SM3111B or		1 mg/kg (ppm)	ne ne	
	SW846-7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	. 🗆	
	EPA 200.9 SW846-6010B or C	Graphite Furnace AA ICP-AES	0.003 mg/L (ppm)		
Drinking Water			1 mg/kg (ppm)		
	EPA 200.9	Graphite Furnace AA	0.003 mg/i. (ppm)		
Other:	Prese	rvation Method (Weter)			
Name of Sampler: Sarry 803	SE CLIA Signal	ture of Sampler		7 2	
Sample # Local	tion	Volume/Area	Date/Time St	mpled	
Ochlery Strage	- MOOR ENTRY	19,X15	" 30 Man -	050	
2 Gelleny Strigge		12"×12"		055	
S Gallbry Storas	e - White pedesded	10"×10"		100	
Y Gullery Sprus	Le - Slavera ROX	17"×17"	1 - 1	105	
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				1	



10772 Noel St., Los Alamitos, CA 90720

Phone: (714) 828-4999 Fax: (714) 828-4944 Email: losalemitosian@latesting.com

Attn: Barry Sasse

Hillmann Environmental Group, LLC

4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

(562) 986-5003 Fax:

Project: 4751

Phone: (562) 986-5000

LA Testing Proj:

Customer ID:

Customer PO:

LA Testing Order: 331003662

Received:

32HILL65

03/30/10 2:30 PM

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	3/31/2010	144 in ^a	10 µg/ft²	<10 µg/ft²	Gallery storag	o. floor aning
Client S					Collected:	3/30/2010
0002	3/31/2010	144 in²	10 μg/ft²	13 µg/ft²	Gallery storage	e- floor back
Client S	ample 2				Collected:	3/30/2010
0003	3/31/2010	100 in²	14 μg/ft²	<14 µg/ft²	Gallery storage	e- white pedestal
Client Sc	imple 3				Collected:	3/30/2010
0004	3/31/2010	144 in²	10 μg/ft²	<10 µg/ft²	Gallery storage	
Client So	imple 4				Collected:	3/30/2010

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approvel by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing 10772 Noel St., Los AlamitosCA AlHA-LAP, LLC ELLAP 101850, CA ELAP 1406



Lead (Pb) Chain of Custody LA Testing Order Number (Lab Use Only):

331003802

LA TESTING 10772 NOSE STREET LOS ALAMANS CA 90720 PHONE (800) 755-1794 FAX (7:4) 828-4944

Company: Hell Many		LA Testing-Bill to: Same Different If Bill to is Different note instructions in Comments**			
Street:		Third Party Billing require	s written authorization from	third party	
City:	Stabu/Province:	Zip/Postal Code:	Country:		
Report To (Name):		Fax #:		EFE N	
Telephone #:		Email Address: 45 ml	Com William of a	DOM:	
Project Name/Number:	4/45 /				
Please Provide Results: Fax E	mail Purchase (Order: U.S.	State Samples Taken:		
Tu	maround time (IAT)	Options' - Please Check			
☐ 6 Hours ☐ 24 h		3 Days 4 Days	☐ 5 Days ☐	10 Days	
Analysis completed by Matrix		s Terms and Conditions located in the			
	Method	Instrument	Reporting Limit	Chec	
☐ % by wt.	SW846-7000B/7420 or ACAC 974 02	Flame Atomic Absorption	0.01%		
Air	NIOSH 7082	Fiame Atomic Absorption	4 µg/filter		
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter		
	NIOSH 7300 modified	ICP-AES	0.5 µg/filter		
Wipe* E ASTM	SW848-7000B/7420	Flame Atomic Absorption	10 µg/wipe	501	
If no box is checked, non-ASTM Wipe to sesumed	SW848-5010B or C	ICP-AES	0.5 µg/wipe		
IGL?	SW846-1311/7420/SM 31		0.4 mg/L (ppm)		
	SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)		
Soli	SW848-7420	Flame Atomic Absorption	40 mg/kg (ppm)		
	SW849-7421	Graphite Furnace AA	0.3 mg/kg (ppm)		
	SW86-8010B or C SM3111B or	ICP-AE8	1 mg/kg (ppm)		
Nastewater	SW848-7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)		
	EPA 200 9	Graphite Furnace AA	0.003 mg/L (ppm)		
Drinking Water	SW846-6010B or C	ICP-AES	1 mg/kg (ppm)		
	EPA 200 9	Graphite Furnace AA	0.003 mg/L (ppm)		
Other:		reservation Method (Wate	n):		
lame of Sampler:	8	Ignature of Sampler:			
Sample # Loca	tion A // Association	Volume/Area	Date/Time 8	ampled	
1 Bound Shot	E Kinney	34×10"	2000	cral	
2 Floor IR	Luce throng	120 4120		CON	
3 Tanget Box	10	ه در ال ۱۹۶۰ ا		57 PA	
y Jane I comit	had 1 700	21 - 124	3.0 of	2010	
E clember our		4 3 36 7 3	96 10	5 166 E	
6	ent Top	Market Carlo Congression Constraints		100	
lent Sample #'s			11	710	
		Har 10 Time:	mplem:		
elinquished (Client):	Date:	1111			
ceived (Lab): AND CANDO	MM@ate:	4 7 0 Time:	9:15	OR_	
V			Dr.)	
				A.	

7 - Roof Storage wolf Heafer 12° x12" ZAPR/8:50



10772 Noel St., Los Alamitos, CA 90720

Phone: (714) 628-4959 Fax: (714) 828-4944 Fmail: (csalamiteslab@latesling.com

Attn: Barry Sasse

Hillmann Environmental Group, LLC

4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

(562) 986-5003

Phone: (562) 986-5000

Project: C1-4751

Customer ID:

32HILL65

Customer PO; Received:

04/02/10 9:15 AM

LA Testing Order: 331003802

LA Testing Proj:

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lah ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	4/2/2010	90 in*	48 µg/ît²	160 µg/ft ^a	Brown Shelf I	Range Storage
Client S	ample 1		•		Callected:	
0002	4/2/2010	144 lm²	4062	440 100		4/2/2010
Client Si	mmnla 2		10 µg/it²	110 µg/ft ⁴	Floor Range 8	Storage
0003					Collected:	4/2/2010
	4/2/2010	144 in²	10 µg <i>ft</i> ;ª	<10 μg/ft ^a	Target Box Ra	nge Storage
Client St	unple 3				Collected:	4/2/2010
0004	4/2/2010	36 in²	40 µg/ft³	74D wells		
Client Sa	unnie 4		40 hBur-	240 µg/ft³		anel Top Storage
0005					Collected:	4/2/2010
	4/2/2010	144 in²	10 μg/fi²	16 µg/ft ^e	Elevator Ceme	nt Top
Client Sa	mpie 5		•		Collasted:	4/2/2010
0006	4/2/2010	O îm²	10 ustrian	di Dumbala a		422010
Client Sa	mule fi		10 µg/wipe	<10 µg/wipe	Blank	
0007					Collected:	4/2/2010
	4/2/2010	144 in²	10 μg/f ^e	40 μg/ft²	Roof Storage V	Valer Heater
Client Sa.	mple 7				Callected:	4/2/2010

Wichael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The CC data associated with these sample results included in this aspost meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, ments in this report are set blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples snalyzed by LA Testing 10772 Noel St., Los Alamitos CA AHA-LAP, LLC ELLAP 101650, CA ELAP 1406



Lead (Pb) Chain of Custody LA Testing Order Number (Lab Use Only):

331003982

LA TESTING 16772 NOGL STREET LOS A MILTOS: CA 90720 PHONE: (800) 755-1794 FAX: (714) 829-4944

	704/	LA Testing-Bill FBI is a Different	to: Starne Differente in Comments	ext		
Street 945/0 E.	Rit #280	Third Party Billing requires written a shortcation from that part				
City: Lang Beach	State/Province; C1.	Zip/Postal Code: 908	04 Country: 4	(4		
	asse	Fax #:				
Telephone #: 562 156	1294	Email Address: 6500 X	a Lillmannanu	2.10		
Project Name/Number: 01-475						
Pisase Provide Results: Fax X E		r: U.S. S	taje Samples Taken:			
	Imeround Time (AT) Opti	ons' - Please Check				
3 Hours 24		3 Days 4 Days	5 Days	10 Day		
Mark	h ecoordisacs with LA Testing's Ten					
Chips mg/cm²	SW846-70308/7420	Instrument	Reporting Limit	Chec		
☐ % by wt.	or AOAC 974.02	Flame Atomic Absorption	0.01%			
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter			
	NIOSH 7105	Graphite Furnace AA	0.03 ug/filter			
	NIOSH 7300 modified	ICP-AES	0.5 µg/filter			
Vipe* SASTM	SW846-7000B/7420	Flams Atomic Absorption	10 µg/wipe	20		
f no box is checked, non-ASTM Wipe in assumed	SW846-6010B or C	ICP-AES	0.5 µg/wipe			
CLP	SW848-1311/7420/SM 3111B	Fizme Atomic Absorption	0.4 mg/L (ppm)			
	SW846-8010B or C	ICP-AE8	0.1 ma/L (ppm)			
oli	SW846-7420	Flama Atomic Absorption	40 mg/kg (ppm)			
	SW846-7421 SW86-6010B or C	Graphite Furnace AA	0.3 mg/kg (ppm)			
/actowater	SM3111B or	ICP-AES	1 mg/kg (ppm)			
A CONTRACTOR OF THE CONTRACTOR	SW846-7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)			
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)			
rinking Water	SW846-6010B or C	ICP-AES	1 mg/kg (ppm)			
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)			
ther:	Press	ivation Method (Water)				
ime of Sampler:	Signa	ture of Sampler:				
lample 2 Loc	illon	Volume/Area	Date/Time Sa	mpled		
# Stor of Kano	1 storage	12" X 12"	7 ADR 9:	.45		
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			1 92072 1 1 1	14150		
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ent Sample #'s						
Improbable of College	((0)-, 17	Total # of Sar	nploti;			
	1-04	Soul 10 Time:	10:0			
		1 m /1 / m	the second secon	C14 C 17 C 1		
poived (Lab): Office Action (L	VVVCDate: 4	17 10 Time:	0 35			



10772 Noel St., Los Alamitos, CA 90720

Phone: (714) 828-4999 Fax: (714) 828-4944 Email: losalamitoslab@latesting.com

Attn: Barry Sasse

Hillmann Environmental Group, LLC

4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

Fax: (562) 986-5003

Phone: (562) 986-5000

Project: C1-4751

Customer ID:

32HILL65

Customer PO: Received:

04/07/10 10:35 AM

LA Testing Order: 331003982

LA Testing Proj:

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	4/7/2010	144 in²	10 μg/ft ^a	76 µg/ft ^a	Floor of Range	Storage
Client Sa	mple #1				Collected:	4/7/2010

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approved by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing 10772 Noel St., Los AlamitosCA AlHA-LAP, LLC ELLAP 101650, CA ELAP 1406



Lead (Pb) Chain of Custody LA Testing Order Number (Lab Use Only):

#331004098

LA MESIA. 10772 Not CHEE! Lus Al vistoe, da 30/20 Pirone, (80 ii 705-170) FAX, (114) 528-4844

	#331004	8601	PHONE, (8014)	35-12ml
Company: Hillmann 6			1 AX. (7 14) S	28-4944
Street: 4510 5 0011	Dup	LA Testing-Bill	to: Same Differer	nt
City / City	740180	Distabli	note instructions in Comments**	r
Report To (Name):	State/Province: CA-	Zip/Postal Code: 908	s written authorization from t	hird party
	6.552	Fax#:	Country:	
	294			
Project Name/Number:	C1-4759	Email Address: ASC.5.	Se Phillienis	142,00
Please Provide Results: Fax 🖾 E	mail Purchase Orde			
Tu	rnaround Time (TAT) Ont	U.S. S	itate Samples Taken:	
☐ 3 Hours ☐ 6 Hours ☑ 24 I	dours 48 Hours	Cue - Liesse Cueck		
Matrix	accordance with LA Testing's Ter	ms and Conditions (and distinct	5 Days	10 Days
Chips mg/cm²	Method	Instrument	Price Guide	
% by wt.	SW846-7000B/7420		Reporting Limit	Check
Air	or AOAC 974.02	Flame Atomic Absorption	0.01%	
	NIOSH 7082	Flame Atomic Absorption		
	NIOSH 7105		4 µg/filter	
347	NIOSH 7300 modified	Graphite Furnace AA	0.03 μg/filter	
Wipe*	SW846-7000B/7420	. ICP-AES	0.5 µg/filter	
"If no box is checked, non-ASTM Wine is		Flame Atomic Absorption	10 μg/wipe	
TCLP	SW846-6010B or C	ICP-AES	0.5 µg/wipe	井
	SW846-1311/7420/SM 3111B	Flame Atomic Absorption		
Soil	SW846-6010B or C	ICP-AES	0.4 mg/L (ppm) 0.1 mg/L (ppm)	
	SW846-7420 SW846-7421	Flame Atomic Absorption	40 mg/kg (ppm)	4
100	SW86-6010B or C	Graphite Furnace AA	0.3 mg/kg (ppm)	-
Wastewater	SM3111B or	ICP-AES	1 mg/kg (ppm)	┾┽╾┦
1	SW846-7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	
P) = (-)	EPA 200.9 SW846-6010B or C	Graphite Furnace AA	0.003 == (hhill)	
Drinking Water		ICP-AES	0.003 mg/L (ppm) 1 mg/kg (ppm)	
Other:	EPA 200.9	Graphite Furnace AA		
	Prago		0.003 mg/L (ppm)	
Name of Sampler: Burry Scs		vation Method (Water):		
I ocati	Signat	ure of Sampler:		
22 Else's office = 8		Volume/Area	Database	
1)	Picture trames +	vel= 17" × 3"	Date/Time Samp	bel
H 3	O pictur brams +	10	11:10/9 AP	0
13 1. E	loor	12 x 4"	11115 1910	
4 Tamot Shill	1904	12" X12"	11 21 1 14	
12 Jagos shelf	LOP Right bin	121 X10"	11.20 940	e
1 Trophy's		1.10	111.30 9 44	
Client Sample # Staff Office	peixe SMIF 7	X4"	0	
Client Sample #'s	2 326.1	17" 417"	1103 1940	
Relinguished (O)		Total	111:40 19 101	ורי
	P Date: 9 100	Total # of Samp	es: 7	\dashv
Received (Lab):	1	201 O Time:	17175	-
dimension:	Date: 4910	Time:	16:60	_
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				7
Minimum and a sub-				1
****	1 20 00	K		

Staff office

Page of Epages BBS

1-81 File Cobinet 12"x12" 11"



10772 Noel St., Los Alamitos, CA 90720

Phone: (714) 828-4999 Fax: (714) 828-4944 Email: losslamitosieb@latesting.com

Attn: Barry Sasse

Hillmann Environmental Group, LLC

4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

Fax:

(562) 986-5003

Phone: (562) 986-5000

Project: C1-4759

LA Testing Proj:

Customer ID:

Customer PO:

LA Testing Order:

Received:

32HILL65

331004098

04/09/10 12:25 PM

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	4/9/2010	36 in²	40 μg/ft²	800 µg/ft²	Elsie's Office	=8 picture frames
Client S	ample 1			, ,	Collected:	4/9/2010
0002	4/9/2010	48 in²	30 µg/ft²	1100 μg/ft²		10 picture frames
Client Se	ample 2			1100 pg.	Collected:	4/9/2010
0003	4/9/2010	144 in²	10 µg/ft²	350 μg/ft²	Elsie's Office	Floor
Client Sc	ımple 3				Collected:	4/9/2010
0004	4/9/2010	120 in²	600 µg/ft²	10000 μg/ft²	Target Shelf,	
Client Sa	mple 4				Collected:	4/9/2010
0005	4/9/2010	16 in²	90 µg/ft²	2400 µg/ft²	Trophy's	
Client Sa	mple 5			, 0	Collected:	4/9/2010
0006	4/9/2010	144 in²	10 µg/ft²	150 μg/ft²	Staff Office (b	
Client Sa	mple 6				Collected:	4/9/2010
0007	4/9/2010	144 in²	10 μg/ft²	88 µg/ft²	Staff Office (Fi	
Client Sa	mple 7			pg-1.	Collected:	4/9/2010

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approved by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing 10772 Noel St., Los AlamitosCA AlHA-LAP, LLC ELLAP 101650, CA ELAP 1406

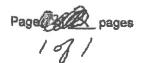


Lead (Pb) Chain of Custody LA Testing Order Number (Lab Use Only):

#331004094

LA Tentino 10772 Nort. Stope: 1 on Admitos: CA 90750 Pront. (600) 755-1794 FAX: (714) 328-4844

						FAX. 17 10 J S	N On as Southern		
Company: 6/1/Mann 600 LA Testing-Bill to: Same Different If Bill to is Different note instructions in Comments**									
Street: 4	Street: 4510 E. R.H. # 280				Third Party Billing requires written authorization from third party				
City: / O									
Report To (N	Name): Barry 5	4550		Fax #:		/			
Telephone #		794			drame L. SixSCC	e Kllmanneso			
Project Nam		759		-mail mail	urcas. Myeby.	10 Hannagio	Cope Cor-		
Please Provi		mail Purchase	Order		11.6.64	ate Samples Taken:			
		rnaround Time (TAT)		et - Ples	ee Check	ate Sampies Taken:			
3 Hours		iours 48 Hours		Days	4 Days	5 Days	10 Days		
	*Analysis completed in	accordance with LA Testin			itions located in the	Price Guide	J TO Days		
	Watrix	Method			strument	Reporting Limit	Check		
	mg/cm ^a	SW846-7000B/74	20	Elama 4	Marrie Abnomiles				
Air	% by wt.	or AOAC 974.02			Atomic Absorption	0.01%			
^"		NIOSH 7082			tomic Absorption	4 µg/filter			
		NIOSH 7105			ite Furnace AA	0.03 µg/filter			
		NIOSH 7300 modifi	ied		ICP-AES	0.5 µg/filter			
	ASTM non ASTM	SW846-7000B/742	20	Flame A	tomic Absorption	10 μg/wipe	(3)		
"If no box is che	cked, non-ASTM Wipe is assumed	SW846-6010B or	С		ICP-AES	0.5 µg/wipe			
TCLP		SW846-1311/7420/SM		Flame Atomic Absorption		0.4 mg/L (ppm)			
Cell		SW846-6010B or 1	C		ICP-AES	0.1 mg/L (ppm)			
Soil		SW846-7420			tomic Absorption	40 mg/kg (ppm)			
		SW846-7421 SW86-6010B or 0			Ite Furnace AA	0.3 mg/kg (ppm)			
Wastewater			SM3111B or			1 mg/kg (ppm)			
Wastewater		SW846-7000B/7420		Flame Atomic Absorption		0.4 mg/L (ppm)			
		EPA 200.9 SW846-6010B or C			te Furnace AA	0.003 mg/L (ppm)			
Drinking Wa	iter	SV846-6010B of C		ICP-AES		1 mg/kg (ppm)			
		EPA 200.9		Graphi	te Furnace AA	0.003 mg/L (ppm)			
Other:	1		Prese	rvation N	lethod (Water)				
Name of Sar	mpler: Durny S	esse		ture of S					
Sample #	Loc	ation			olume/Area	Date/Time S	ampled		
_8	KANDE STURARDO	5 LURR		12"5	(12"	11:50 /	9408		
9	11 11	MUPR BRE	15	12	×12"	11501	1 400		
10	1/2 /an/2	Parell		Blac	1/6	17:01/0	7 Ans		
	13			1) (0.	7	12.4/	1428		
			1						
Client Samp	le #'s 8 - 10		—		Total # of Sar	nples: 2			
Relinquished	d (Client): Barris	Date:	9 1	200	Time:	12:25			
	Received (Lab):			lio	Time:	1225			
Comments:		۷			, , , , , , , , , , , , , , , , , , , ,	1 6 miles (Francis)			



Parts Stacker



10772 Noel St., Los Alamitos, CA 90720

Phone: (714) 828-4559 Fax: (714) 828-4844 Email: lovalamitoslab@latesticq.com

Attn: Barry Sasse

Hillmann Environmental Group, LLC

4510 E. Pacific Coast Hwy

Suite 280

Long Beach, CA 90804

Fax: (562) 986-5003

Phone: (562) 986-5000

Project: C1-4759

Customer ID: 32HILL65

Customer PO:

Received:

04/09/10 12:25 PM

LA Testing Order: 331004094

LA Testing Proj:

Test Report: Lead in Dust by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	Area Sampled	RDL	Lead Concentration	Notes	
0001	4/9/2010	144 in²	10 μg/ft²	19 µg/ft²	Range Storage	e, Floor Cntr
Client Sa	mple 8				Collected:	4/9/2010
0002	4/9/2010	144 in²	10 µg/ft²	15 µg/ft²	Range Storage	e. Floor Back
Client Sa	mple 9			, ,	Collected:	4/9/2010
0003	4/9/2010	O in ²	10 μg/wipe	<10 µg/wipe	Blank	
Client Sa	mple 10			10 1	Collected:	4/9/2010

Michael Chapman, Laboratory Manager or other approved signatory

Mickel Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approved by EMSL EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing 10772 Noel St., Los AlamitosCA AlHA-LAP, LLC ELLAP 101650, CA ELAP 1406

APPENDIX D SITE PHOTOS

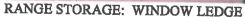


RACQUETBALL ENTRY



RACQUETBALL SEATING AREA







STAIRCASE - STEP GOING TO LEVEL 2



HVAC ACCESS ROOM: ENTRY



HVAC ACCESS ROOM: BACK ROOM





HVAC ACCESS ROOM: LOBBY HVAC UNIT HVAC ACCESS ROOM: CICUIT PANEL BOXES



MECHANICAL/EMPLOYEE LOCKERS



MECH/EMPLOYEE ROOM: LOCKER TOP



ELEVATOR TOP



GALLERY STORAGE ROOM: ENTRY



GALLERY STORAGE ROOM: BACK AREA







RANGE STORAGE: WOODEN TAGET SHELF

RANGE STORAGE: FLOOR



RANGE STORAGE: FILE CABINET

APPENDIX E DHS FORM 8552

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead	Hazard Evaluation 12 Apri	II, 2010		
Section 2 — Type of Lead	Hazard Evaluation (Check	one hov orbit		
✓ Lead Inspection	* ***	earance inspection	Other (on a sife it	
	0	astrance mapection	Other (specify)	
Section 3 — Structure Wh	ere Lead Hazard Evaluation	Was Conducted		
Address [number, street, apartr	ment (if applicable)]	City	County	Zip Code
6364 Zindell Avenue		Commerce	Los Angeles	90040
Construction date (year)	Type of structure		Children living in struc	700 10
or sunctine	Multi-unit building	School or daycare	Program	
1961	Single family dwelling	Other	_ Don't Know	No
Section 4 — Owner of Stru	cture (if business/agency, i	list contact person)		
Vame			Telephone number	
City of Commerce			323-722-4805	
Address [number, street, apartm	ent (if applicable)]	City	State	Zip Code
2535 Commerce Way		Commerce	CA	90040
ection 5 — Results of Lea	d Hazard Evaluation (check	k ali that apply)		
No lead-based paint detected No lead hazards detected ection 6 — Individual Con	Lead-contaminated dust			based paint detected Other
ame			Telephone number	
Barry Sasse - Hillma	nn Group		(562) 986-5000	
ddress [number, street, apartme	ent (if applicable)]	City	State	Zip Code
510 E. Pacific Coast	Highway, Ste. #280	Long Beach	CA	90804
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APPENDIX E LICENSES & CERTIFICATIONS

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State of Calls California Environmental Protection Agency Department of Taxic Supetances Control REGISTERED ENVIRONMENTAL ASSESSOR essued to: Barry Annual Explicat N: 6/30/2010

NATEC International

1100 Technology Circle, #A, Anaheim, CA 714/678-2750 (Fax) 714/678-2757 92905

This Card Acknowledges That Barry Basse

Holds Training Certification For Asb. Mgmnt, Plan. Refresher

(Valid for 12 months)

12/11/09 Training Date

AMPR121109004N Alan D. Dages Training Director

NATEC International

1100 Technology Circle, #A, Anahelm, CA 714/678-2750 (Fex) 714/678-2757 92905

This Card Admowledges That **Barry Sasse**

Holds Training Certification For Asb. Bldg. Insp. Refresher

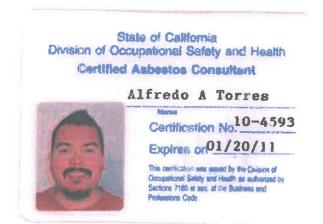
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12/11/09 Training Date

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Alan D. Dages Training Director

Alfredo Torres California DOSH Certified Asbestos Consultant (CAC) #10-4593 California DPH Certified Lead Inspector Assessor (CLIA) #17424







PRELIMINARY AIR & SURFACE LEAD SAMPLING

VETERAN'S PARK COMMUNITY CENTER BUILDING 6364 ZINDELL AVENUE COMMERCE, CA 90040

Prepared For:

City of Commerce Swinerton Management & Consulting, Inc. 865 South Figueroa Street, Suite 3000 Los Angeles, CA 90017

Hillmann Project Number: C3-6416

December 11, 2015



December 11, 2015

Mr. Paul Banuelos Swinerton Management & Consulting, Inc. 865 South Figueroa Street, Suite 3000 Los Angeles, CA 90017

RE: Preliminary Air & Surface Lead Sampling

6364 Zindell Avenue Commerce, CA 90040

Hillmann Project Number: C3-6416

Dear Mr. Paul Banuelos:

Hillmann Consulting, LLC, is pleased to provide the results of our Preliminary Air & Surface Lead Sampling Inspection of the above referenced property. The survey was performed in accordance with Environmental Protection Agency/ASTM recommended procedures.

This report is for the exclusive use of the entities named on the front cover, and no other party shall have any right to rely on any service provided by Hillmann Consulting, LLC, without prior written consent.

We appreciate the opportunity to provide environmental consulting services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact the Project Manager at 714-634-9500.

Very Truly Yours,

Hillmann Consulting, LLC

Ryan Sokolovsky Project Manager Ryan Terwilliger, CLIA # 22479

Sr. Project Manager

In filling

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1.0 EXECUTIVE SUMMARY

1.1 General

On November 19 and 20, 2015 Hillmann Consulting, LLC (Hillmann) conducted air and surface sampling for lead of the property located at 6364 Zindell Avenue, City of Commerce, California. This service was performed at the request of Mr. Paul Banuelos, Project Manager for the City of Commerce, and Swinerton Management & Consulting.

The air and surface lead sampling survey was performed in general accordance with the Scope of Work as prepared by Hillmann and accepted by the City of Commerce. Site survey work included lead Surface sampling in the following areas:

- Both basement access stairs at all levels and landings
- Elevator cab and all stops in front of elevator doors (3' 0")
- Shooting range exhaust fan & vent stack outside air opening (above roof)
- Air intake vents for all HVAC equipment
- In front of four (4) doors at glass wall that lead into shooting range

And lead air sampling in the following areas:

- Outside of the shooting range at basement level
- All other levels inside community center building

Additionally, air and surface samples were performed in areas identified by the technician as having the potential for lead in the dust that and that are commonly used by employees and patrons. The air and surface lead sampling survey was performed by Mr. Ryan Sokolovsky, a California Department of Public Health Certified Sampling Technician (#27237) under the direction of Mr. Ryan Terwilliger, a Department of Health Certified Lead Inspector/Risk Assessor (#22479).

1.2 Sampling Strategy/Findings

- Seventy-one (71) air samples were analyzed for lead. The samples were considered "area" samples. Measured lead levels in the subject spaces were all below the limit of detection (either $<17 \mu g/m^3$ or $<4.0 \mu g/filter$) and below the Action Level (30 $\mu g/m^3$) and Permissible Exposure Level (50 $\mu g/m^3$) set by OSHA.
- Seventy-nine (79) surface samples were analyzed for lead. The samples were taken off various surfaces including bare concrete, floor tile, brick, laminate flooring, and metal. All samples were taken off surfaces that were flat and specifically laid out in the above mentioned and agreed upon scope of work. While on-site, Hillmann utilized professional judgement in choosing locations of additional surface samples to help meet the client's needs. Measure lead levels in the subject areas ranged from below the limit of detection <10 μg/ft² 38,000 μg/ft². The Environmental Protection Agency (EPA) considers interior floor

surfaces with levels of lead equal to or above 40 μ g/ft² to be contaminated with lead.

1.3 Observations

On November 19 and November 20, 2015, Hillmann was on-site at the Veteran's Park Community Center Building at 6:00 AM and met with Mike, the facilities manager at the Property. Mike escorted Hillmann throughout the building in order to provide access to areas behind locked doors and employee only areas.

The ground floor of the building is identified as Level 1 and includes a lobby, offices, kitchen, restrooms, janitor's closet, recreation room, dance studio, and a kindergarten room totaling approximately 4,000 SF. A mezzanine level above the ground floor includes a handball gallery, storage room, and mechanical equipment room totaling approximately 5,800 SF. The central staircase drops down a half level to sub-Level 2, identified as the gymnasium level that includes a basketball gym, two racquetball courts, and a storage room. The next sub-floor a half-level down, sub-level 3, includes an exercise room, storage room, locker rooms, restrooms, a janitor's closet, and a large hallway. Together, the 2nd and 3rd sub-levels total approximately 17,450 SF. The last and final level, a full floor below the 3rd, is the basement level occupied by the former James W. Bristow Marksmanship Range. The basement totals approximately 10,925 SF and includes a firing range, observation tower, lobby, kitchen, restrooms, sewage pump room, locker room, a gunsmith work area, storage rooms, and offices.

Hillmann noted that the building elevator does not access the basement level and requires a special key. The two staircases to the gun range, the Marksmanship Staircase, and the emergency staircase were both locked and access was restricted.

On November 19, 2015, Hillmann met with Mr. Paul Banuelos who was able to provide building blue prints and HVAC plans. Mr. Banuelos also informed Hillmann that the gun range has been out of service for approximately seven years. The only personnel that access the basement level are the facilities manager who provides access for the elevator repair man and the sewage pump technician. Additionally it was reported to Hillmann that all individuals who enter the gun range don appropriate PPE before entering the basement level.

2.0 Introduction

2.1 General

On November 19 and 20, 2015 Hillmann Consulting, LLC (Hillmann) conducted air and surface sampling for lead on the property located at 6364 Zindell Avenue, City of Commerce, California. This service was performed at the request of Mr. Paul Banuelos, Project Manager for the City of Commerce, and Swinerton Management & Consulting.

Hillmann's site investigator performed a visual inspection for conditions that could negatively impact indoor air quality and impact employee health and safety.

The inspection and sampling were performed by a trained technician using Environmental Protection Agency (EPA) and CAL/OSHA sampling techniques. Samples were analyzed at LA Testing in Garden Grove, CA, a certified NVLAP Laboratory # 200232-0. These samples, representative of a narrow time frame, are for screening purposes only and are not intended to represent definitive exposure levels.

2.2 Sampling Parameters and Methodology

Hillmann selected the sampling parameters based on consultations with the client, the laboratories performing the analysis, and our in-house experts. The chosen parameters were lead and the inspection was a general screening to identify if potential hazards exist, and at what levels if they do.

The industrial hygienist employed a sampling scheme that is representative of the entire subject space. Sampling parameters were based on the typical airborne hazards associated with firing ranges.

2.2.1 Lead Air Sampling

Lead samples were collected by drawing air through a 0.8 micron mixed cellulose ester filter utilizing Gillian "GilAir5 Tri-Mode Air Samplers" in accordance with NIOSH method 7082, using 0.8 Micron cellulose ester filters and pulling at a flow rate of 4 L/min. Samples were sent to an appropriately accredited laboratory to be analyzed by an accredited laboratory analyzed the filter in accordance with NIOSH method 7082. The Method 7082 analysis quantifies the total amount of airborne particles in each filter sample. Limits of detection for this method vary with the volume of air sampled.

2.2.2 Lead Surface Sampling

Surface samples were collected using "Ghost Wipes TM" covering an area of 12 square inches in accordance with EPA Method 6010B. The Method 6010B quantifies the total amount of particles collected on the Ghost Wipe as found upon each surface.

The California Department of Public Health under Title 17 has set in place a definition of lead-contaminated dust which is regulated by the following quantities:

- Interior floors 40 μg/ft²
- Interior horizontal surfaces 250 μg/ft²
- Exterior floors and exterior horizontal surfaces 400 μg/ft²

3.0 RESULTS

3.1 Lead Air Sample Results

Sample Number	Date	Location	Volume	Results	Action Level* / PEL
A-1	11/19/2015	1st Floor entrance/lobby	240 L	< 17 μg/m ³	30 μg/m ³ - 50 μg/m ³
A-2	11/19/2015	1st Floor Northeast Office	240 L	$< 17 \mu\text{g/m}$	30 μg/m ³ - 50 μg/m ³
A-3	11/19/2015	1st Floor rec Room	240 L	$< 17 \mu \text{g/m}^{3}$	30 μg/m ³ - 50 μg/m ³
A-4	11/19/2015	1st Floor Dance Studio	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-5	11/19/2015	1st Floor Hallway	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-6	11/19/2015	1st Floor Kindergarten	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-7	11/19/2015	1st Floor Men's Restroom	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-8	11/19/2015	Mezzanine HVAC/Mechanical Room	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-9	11/19/2015	Mezzanine Racquetball Seating	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-10	11/19/2015	2nd Floor Racquetball Room	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-11	11/19/2015	2nd Floor Basketball Court Center	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-12	11/19/2015	2nd Floor Basketball Bleachers	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-13	11/19/2015	2nd Floor Basketball Stairwell	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-14	11/19/2015	2nd Floor Hallway	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-15	11/19/2015	2nd Floor Racquetball Room #2	240 L	< 17 μg/m ³	30 μg/m³ - 50 μg/m³
A-16	11/19/2015	2nd Floor Elevator Cab	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-17	11/19/2015	2nd Floor Gym Entrance	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-18	11/19/2015	2nd Floor Storage Room	240 L	< 17 μg/m³	30 μg/m³ - 50 μg/m³
A-19	11/19/2015	3rd Floor Storage Room	240 L	$< 17 \ \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-20	11/19/2015	3rd Floor Gym	240 L	$< 17 \mu g/m^3$	$30 \mu g/m^3 - 50 \mu g/m^3$
A-21_	11/19/2015	3rd Floor West Hallway	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-22	11/19/2015	3rd Floor Women's Restroom	240 L	$< 17 \mu g/m^{3}$	30 μg/m ³ - 50 μg/m ³
A-23	11/19/2015	3rd Floor North Hallway	240 L	$\leq 17 \; \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-24	11/19/2015	3rd Floor Men's Restroom	320 L	$< 13 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-25	11/19/2015	Exterior East	240 L	$< 17 \ \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-26	11/19/2015	4th Floor Gunsmith/Locker	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-27	11/19/2015	4th Floor Range master	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-28	11/19/2015	4th Floor Center Lobby	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-29	11/19/2015	4th Floor Marksmanship Stairs Top	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-30	11/19/2015	4th Floor Marksmanship Stairs Bottom	240 L	< 17 μg/m ³	30 μg/m³ - 50 μg/m³
A-31	11/19/2015	4th Floor Emergency Exit Stairs Top	240 L	$< 17 \ \mu g/m^{3}$	$30 \mu g/m^3 - 50 \mu g/m^3$
A-32	11/19/2015	4th Floor Emergency Exit Stairs Bottom	240 L	< 17 μg/m³	30 μg/m³ - 50 μg/m³
A-33	11/19/2015	Exterior North	N/A	<4.0 µg/filter	30 μg/m³ - 50 μg/m³

Sample					Action Level* /
Number	Date	Location	Volume	Results	PEL
A-34	11/19/2015	Exterior South	N/A	<4.0 µg/filter	30 u.a/m³ 50 u.a/m³
11-54_	11/15/2015	Exterior South	1N/A	4.0 γ	30 μg/m³ - 50 μg/m³
A-35	11/19/2015	Exterior West	N/A	μg/filter	30 μg/m³ - 50 μg/m³
A-36	11/20/2015	4th Floor Elevator Landing	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-37	11/20/2015	4th Floor Main Floor	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³
A-38	11/20/2015	4th Floor Middle behind Master	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-39	11/20/2015	4th Floor Marksman Stairs Top	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-40	11/20/2015	4th Floor Marksman Stairs Bottom	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
		4th Floor Emergency Exit Stairs			
A-41	11/20/2015	Bottom	240 L	$< 17 \mu g/m^3$	$30 \mu g/m^3 - 50 \mu g/m^3$
A-42	11/20/2015	4th Floor Emergency Exit Stairs Top	240 L	$< 17 \mu g/m^3$	$30 \mu g/m^3 - 50 \mu g/m^3$
A-43	11/20/2015	4th Floor Gunsmith/Locker	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-44	11/20/2015	1st Floor Lobby	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-45	11/20/2015	1st Floor Hallway	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-46	11/20/2015	1st Floor Rec Room	240 L	$< 17 \ \mu g/m^{3}$	$30 \mu g/m^3 - 50 \mu g/m^3$
<u>A</u> -47	11/20/2015	1st Floor Dance Studio	240 L	$< 17 \mu g/m^{3}$	$30 \mu g/m^3 - 50 \mu g/m^3$
<u>A</u> -48	11/20/2015	1st Floor Men's Restroom	240 L	$\leq 17 \; \mu \text{g/m}^{3}$	30 μg/m³ - 50 μg/m³
A-49	11/20/2015	Mezzanine HVAC/Mechanical Room	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-50	11/20/2015	1st Floor Northeast Office	240 L	$< 17 \ \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
<u>A</u> -51	11/20/2015	1st Floor Kindergarten	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-52	11/20/2015	Mezzanine Racquetball Seating	240 L	$< 17 \ \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-53	11/20/2015	2nd Floor Storage Room	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-54	11/20/2015	2nd Floor Basketball Court Center	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-55	11/20/2015	2nd Floor Gym Entrance	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-56	11/20/2015	2nd Floor Gym Stairwell	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-57	11/20/2015	2nd Floor Basketball Bleachers	240 L	$< 17 \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-58	11/20/2015	2nd Floor Racquetball Room	240 L	$< 17 \mu g/m^{3}$	30 μg/m ³ - 50 μg/m ³
A-59	11/20/2015	2nd Floor Racquetball Room #2	240 L	$< 17 \ \mu g/m^{3}$	30 μg/m³ - 50 μg/m³
A-60	11/20/2015	2nd Floor Elevator Cab	240 L	< 17 μg/m³	30 μg/m ³ - 50 μg/m ³
A-61	11/20/2015	2nd Floor Hallway	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-62	11/20/2015	3rd Floor Marksman Stairs	240 L	< 17 μg/m³	30 μg/m³ - 50 μg/m³
A-63	11/20/2015	3rd Floor Storage Room	240 L	< 17 μg/m ³	30 μg/m³ - 50 μg/m³
A-64	11/20/2015	3rd Floor Men's Restroom	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-65	11/20/2015	3rd Floor Gym	240 L	< 17 μg/m ³	30 μg/m³ - 50 μg/m³
A-66	11/20/2015	3rd Floor Women's Restroom	240 L	< 17 μg/m ³	30 μg/m³ - 50 μg/m³
A-67	11/20/2015	3rd Floor Stairs End Hallway	240 L	< 17 μg/m ³	30 μg/m³ - 50 μg/m³
A-68	11/20/2015	Exterior North	240 L	$< 17 \mu g/m^3$	30 μg/m³ - 50 μg/m³
A-69	11/20/2015	Exterior South	240 L	< 17 μg/m ³	30 μg/m ³ - 50 μg/m ³

Sample Number	Date	Location	Volume	Results	Action Level* / PEL
A-70	11/20/2015	Exterior East	240 L	$< 17 \ \mu g/m^{3}$	30 μg/m ³ - 50 μg/m ³
A-71	11/20/2015	Exterior West	240 L	$< 17 \mu g/m^3$	30 μg/m ³ - 50 μg/m ³

^{*} Note 1: The Action Level (AL) of a chemical is usually set at one-half of the PEL and is a warning sign to experts that measured levels are at a level of concern to where further sampling should be conducted. The AL for Lead is $30 \, \mu \text{g/m}^3$.

3.2 Lead Surface Sample Results

Sample Number	Date	Location	Area	Results	Standard*
S-1	11/19/2015	Elevator cab	144 in ²	22 μg/ft²	40 μg/ft²
S-2	11/19/2015	1st floor elevator landing	144 in ²	< 10 μg/ft²	40 μg/ft²
S-3	11/19/2015	2nd floor sub level elevator landing	144 in²	< 10 μg/ft²	40 μg/ft²
S-4	11/19/2015	3rd floor sub level elevator landing	144 in ²	< 10 μg/ft ²	40 μg/ft²
S-5	11/19/2015	Basement floor elevator landing	144 in ²	180 μg/ft²	40 μg/ft²
S-6	11/19/2015	Roof vent lower vent, northeast	144 in ²	34 μg/ft²	400 μg/ft²
S-7	11/19/2015	Roof vent north (large 1)	144 in ²	29 μg/ft²	400 μg/ft²
S-8	11/19/2015	Roof vent north (large 2)	144 in ²	< 10 μg/ft²	400 μg/ft²
S-9	11/19/2015	Roof vent north (large 3)	144 in²	< 10 μg/ft²	400 μg/ft²
S-10	11/19/2015	Elevator vent large	144 in²	92 μg/ft²	400 μg/ft²
S-11	11/19/2015	Roof vent north (small)	144 in ²	40 μg/ft²	400 μg/ft²
S-12	11/19/2015	Roof vent northeast (small)	144 in ²	32 μg/ft²	400 μg/ft²
S-13	11/19/2015	Roof vent east (small)	144 in ²	200 μg/ft²	400 μg/ft²
S-14	11/19/2015	Roof vent east (large)	144 in²	< 10 μg/ft²	400 μg/ft²
S-15	11/19/2015	Roof vent east (small 2)	144 in²	17 μg/ft²	400 μg/ft²
S-16	11/19/2015	3rd floor sub level stairwell	144 in²	< 10 μg/ft²	40 μg/ft²
S-17	11/19/2015	3rd floor sub level base of stairs	144 in ²	40 μg/ft ²	40 μg/ft²
S-18	11/19/2015	2nd floor sub level landing	144 in ²	< 10 μg/ft²	40 μg/ft²
S-19	11/19/2015	2nd floor sub level gym entrance	144 in²	$< 10 \mu g/ft^2$	40 μg/ft²
S-20	11/19/2015	1st floor gym entrance	144 in²	< 10 μg/ft²	40 μg/ft²
S-21	11/19/2015	1st floor up to landing	144 in²	$< 10 \mu g/ft^2$	40 μg/ft²
S-22	11/19/2015	1st floor mezzanine walkway loft walkway	144 in ²	260 μg/ft ²	40 μg/ft²
S-23	11/19/2015	1st floor loft to roof	144 in ²	< 10 μg/ft²	40 μg/ft²
S-24	11/19/2015	Basement marksmanship top of stair tread at landing	144 in²	260 μg/ft²	40 μg/ft²
S-25	11/19/2015	Basement marksmanship bottom stairs	144 in²	670 μg/ft ²	40 μg/ft²
S-26	11/19/2015	Emergency staircase landing top	144 in²	390 μg/ft ²	40 μg/ft²
S-27	11/19/2015	Emergency staircase landing	144 in²	390 μg/ft ²	40 μg/ft²

Sample					
Number	Date	Location	Area	Results	Standard*
S-28	11/19/2015	Emergency staircase bottom	144 in ²	650 μg/ft ²	40 μg/ft²
S-29	11/19/2015	Range door north 1	144 in ²	3600 μg/ft ²	40 μg/ft²
S-30	11/19/2015	Range door sill north 2	144 in²	640 μg/ft ²	40 μg/ft²
S-31	11/19/2015	Range door south 1	144 in²	400 μg/ft ²	40 μg/ft²
S-32	11/19/2015	Range door south 2	144 in ²	2700 μg/ft ²	40 μg/ft²
S-33	11/19/2015	Range intake vent north	144 in ²	48 μg/ft ²	40 μg/ft²
S-34	11/19/2015	Elevator maintenance room	144 in ²	140 μg/ft ²	40 μg/ft²
		HVAC north vent 1 inside range on			
S-35	11/19/2015	ceiling	144 in ²	110 μg/ft²	250 μg/ft²
S-36	11/19/2015	HVAC north vent 2	144 in ²	120 μg/ft²	250 μg/ft²
S-37	11/19/2015	HVAC center vent	144 in ²	59 μg/ft²	250 μg/ft²
S-38	11/19/2015	HVAC southwest outside range on ceiling	144 in ²	20~/42	250/02
S-39	11/19/2015	1st exterior front entrance	T	28 μg/ft²	250 μg/ft²
S-40	11/19/2015	1st exterior basketball court entrance	144 in ²	$< 10 \mu g/ft^2$	400 μg/ft²
S-40	11/20/2015		144 in ²	18 μg/ft²	400 μg/ft²
S-41 S-42	11/20/2015	Range lobby	144 in ²	640 μg/ft²	40 μg/ft²
S-42 S-43	11/20/2015	Gunsmith	144 in ²	49 μg/ft ²	40 μg/ft²
		Elevator equipment room entrance	144 in ²	240 μg/ft²	40 μg/ft²
S-44	11/20/2015	Range HVAC vent bay 1	144 in ²	79 μg/ft²	40 μg/ft²
S-45	11/20/2015	Range HVAC vent interior bay 1	144 in ²	92 μg/ft²	40 μg/ft²
S-46	11/20/2015	Range vent (interior) bay 19	144 in ²	110 μg/ft²	40 μg/ft²
S-47	11/20/2015	Exterior side HVAC vent #1	144 in²	2900 μg/ft ²	40 μg/ft²
S-48	11/20/2015	North range door 1 interior	144 in ²	7500 μg/ft ²	40 μg/ft²
S-49	11/20/2015	Middle range door 2 interior	144 in ²	3900 μg/ft ²	40 μg/ft²
S-50	11/20/2015	South range door interior	144 in ²	5100 μg/ft ²	40 μg/ft²
S-51	11/20/2015	Men's restroom entrance at sill	144 in ²	360 μg/ft ²	40 μg/ft²
S-52	11/20/2015	Outside gunsmith supplies	144 in²	610 μg/ft ²	40 μg/ft²
S-53	11/20/2015	Middle range door interior	144 in ²	3500 μg/ft ²	40 μg/ft²
S-54	11/20/2015	Exterior west side fire exit	144 in²	96 μg/ft²	400 μg/ft²
S-55	11/20/2015	Range vent exterior range master door	144 in ²	220 μg/ft²	400 μg/ft²
S-56	11/20/2015	Range vent top of structure	144 in ²	250 μg/ft ²	400 μg/ft²
S-57	11/20/2015	Exterior ranget	144 1 2	15000	400 /02
	11/20/2015 11/20/2015	Exterior range vent on pipe	144 in ²	μg/ft²	400 μg/ft²
S-58		North door by kindergarten exterior 1	144 in ²	17 μg/ft²	400 μg/ft²
S-59	11/20/2015	North door by kindergarten exterior 2	144 in ²	25 μg/ft²	400 μg/ft²
S-60	11/20/2015	Dance studio exterior door	144 in ²	< 10 μg/ft²	400 μg/ft²
S-61	11/20/2015	Office exterior door	144 in ²	20 μg/ft²	400 μg/ft²
S-62	11/20/2015	Range vent exterior stack floor	144 in²	38000 μg/ft²	40 μg/ft²

Sample					
Number	Date	Location	Area	Results	Standard*
				13000	
S-63	11/20/2015	Range vent middle stack	144 in ²	μg/ft²	40 μg/ft²
S-64	11/20/2015	3rd floor sub level janitor closet	144 in²	21 μg/ft²	40 μg/ft²
S-65	11/20/2015	1st floor janitor closet	144 in ²	18 μg/ft²	40 μg/ft²
S-66	11/20/2015	3rd floor sub level kindergarten staircase	144 in²	< 10 μg/ft²	40 μg/ft²
S-67	11/20/2015	2nd floor sub level kindergarten staircase	144 in²	< 10 μg/ft²	40 μg/ft²
S-68	11/20/2015	1st floor kindergarten staircase	144 in²	< 10 μg/ft²	40 μg/ft²
S-69	11/20/2015	NW roof vent CO 1	144 in ²	170 μg/ft²	400 μg/ft²
S-70	11/20/2015	NW roof vent CO 2	144 in ²	100 μg/ft²	400 μg/ft ²
S-71	11/20/2015	NW Roof CO 3	144 in ²	960 μg/ft ²	400 μg/ft²
S-72	11/20/2015	North roof vent CO 1	144 in²	120 μg/ft²	400 μg/ft²
S-73	11/20/2015	North roof vent CO 2	144 in²	240 μg/ft²	400 μg/ft²
S-74	11/20/2015	North roof vent CO 3	144 in²	97 μg/ft²	400 μg/ft²
S-75	11/20/2015	North roof vent CO 4	144 in ²	130 μg/ft²	400 μg/ft²
S-76	11/20/2015	North roof vent CO 5	144 in ²	300 μg/ft²	400 μg/ft²
S-77	11/20/2015	Roof vent sewage vent	144 in²	110 μg/ft²	400 μg/ft²
S-78	11/20/2015	Roof top stairs landing	144 in²	3400 μg/ft ²	40 μg/ft²
S-79	11/20/2015	Elevator roof mechanical floor	144 in²	470 μg/ft ²	40 μg/ft²

^{*} Note 1: The Environmental Protection Agency (EPA) recommends that surfaces and/or objects contaminated with lead do not exceed 40 μ g/ft² for interior floors and 400 μ g/ft² for exterior horizontal surfaces.

3.3 Findings

Seventy-one (71) air samples were analyzed for lead. The samples were considered "area" samples. Measured lead levels in the subject spaces were all below the limit of detection (either <17 $\mu g/m^3$ or <4.0 $\mu g/filter$) and below the Action Level (30 $\mu g/m^3$) and Permissible Exposure Level (50 $\mu g/m^3$) set by OSHA

Seventy-nine (79) surface samples were analyzed for lead. The samples were taken off of various surfaces within the building and around the immediate exterior. All samples were taken off of surfaces that employees and patrons commonly use during their day to day activities. Measured lead levels in the subject areas ranged from below the limit of detection $<10 \,\mu g/ft^2 - 38,000 \,\mu g/ft^2$. The Environmental Protection Agency (EPA) considers interior floor surfaces with levels of lead greater than or equal to $40 \,\mu g/ft^2$ to be contaminated with lead.

3.3 References

The EPA requires we distribute the booklet *Renovate Right* with all lead screening reports and a copy is attached to this report. This booklet can also be downloaded from http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf.

Additional reference materials can be found on the EPA's Lead website at: http://www.epa.gov/lead/pubs/leadinfo.htm#resources

A copy of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing can be downloaded from http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm

A copy of EPA's Lead Debris memo of July 31, 2000 can be found at http://www.epa.gov/oppt/lead/pubs/hhwmemo-july00fnl.pdf.

4.0 Discussion

While on-site, Hillman performed air and surface sampling, reviewed building plans, and observed facility work conditions.

4.1 Lead

"Lead is a cumulative and persistent toxic substance that poses a serious health risk. A rigorous housekeeping program and adherence to basic personal hygiene practices will minimize employee exposure to lead. In addition, these two elements of the worker protection program will help to prevent taking lead-contaminated dust out of the firing range and home to the workers' families, thus ensuring that the duration of lead exposure does not extend beyond the workplace and providing added protection to employees and their families."

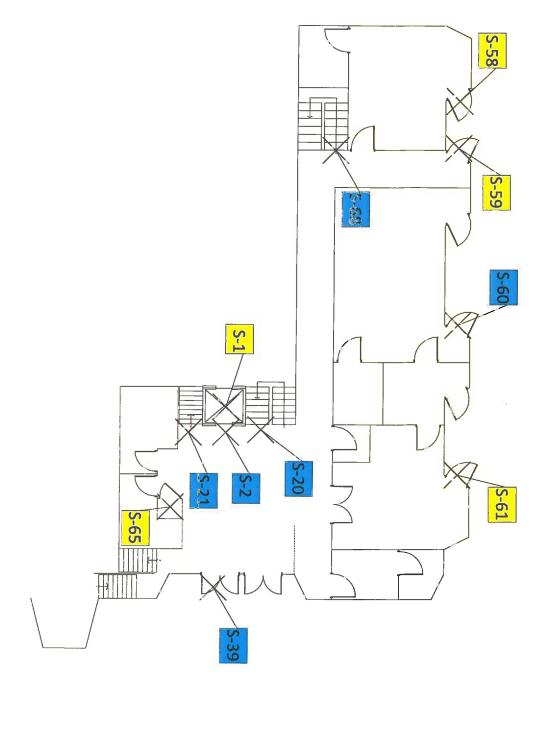
5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on surface sample results, Hillmann offers the following recommendations:

- Continue to limit access to the basement floor, ensuring that any patrons i.e. elevator maintenance workers, sump pump mechanics, etc. don the appropriate PPE including footwear coverings and gloves before entering the basement area. Prior to exiting the basement area footwear coverings and gloves should be properly disposed of and proper hand washing should be conducted.
- Limit preschool activities to only Level One to minimize potential for children to be in contact with lead-contaminated areas identified within the building (highlighted in Section 3.2).
- Post notices at basement access routes to notify individuals that a hazard of lead contamination dusts exists.
- Based on the sample results, Hillmann recommends additional area be considered for lead surface sampling. These areas include but are not limited to the classrooms, the outdoor playground, etc.
- A formal scope of work should be compiled to solicit a remediation contractor to adequately address the areas confirmed to contain residual lead dust levels above the EPA threshold. The scope of work should include remediation engineering controls, and methods to properly decontaminate areas impacted by elevated residual dust levels. Work shall be performed by workers with appropriate lead awareness training and experience handling and working around lead hazards.

APPENDIX A

MAPS



VETERAN'S PARK COMMUNITY CENTER BUILDING

CENTER BUILDING
6364 ZINDELL AVENUE,
CITY OF COMMERCE, CA 90040

1ST FLOOR



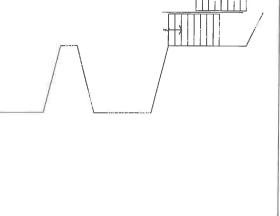
X = Sample Location
= No Lead Detected
= Lead Below EPA
= Lead Above EPA

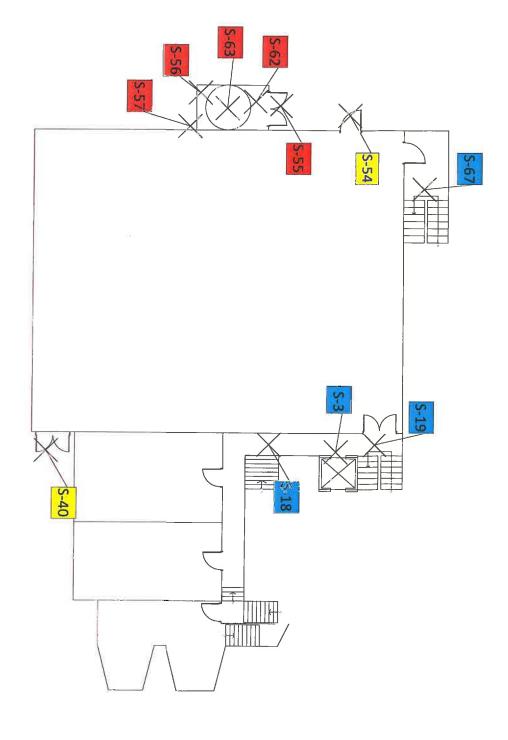




Lead Wipe Sample Locations & Map

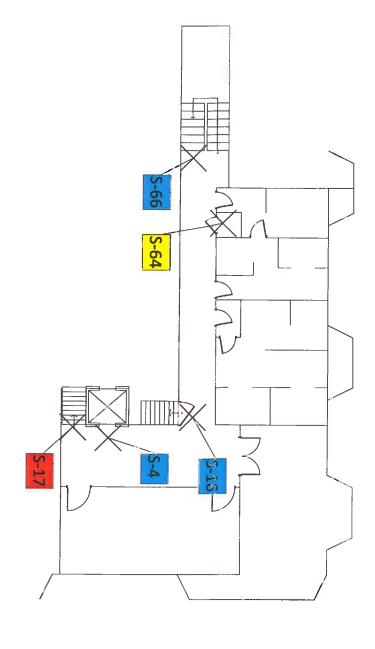






CENTER BUILDING 6364 ZINDELL AVENUE, CITY OF COMMERCE, CA 90040 2ND FLOOR Lead Wipe Sample Locations & Map Legend X = Sample Location = No Lead Detected

= Lead Below EPA = Lead Above EPA



VETERAN'S PARK COMMUNITY CENTER BUILDING

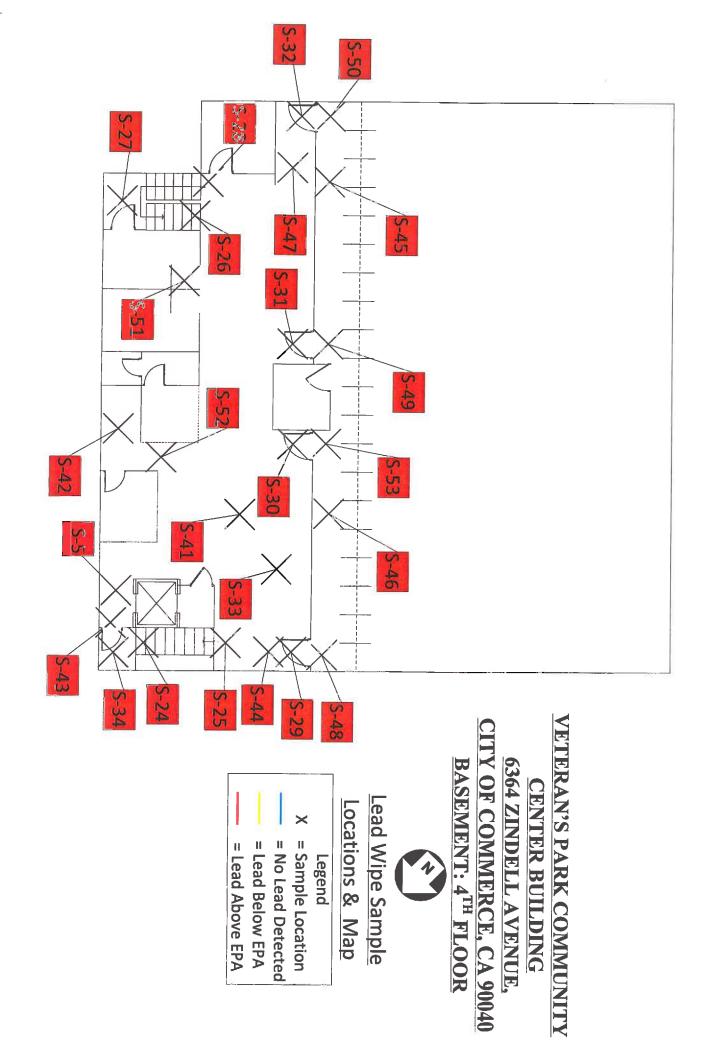
6364 ZINDELL AVENUE, CITY OF COMMERCE, CA 90040 3RD FLOOR

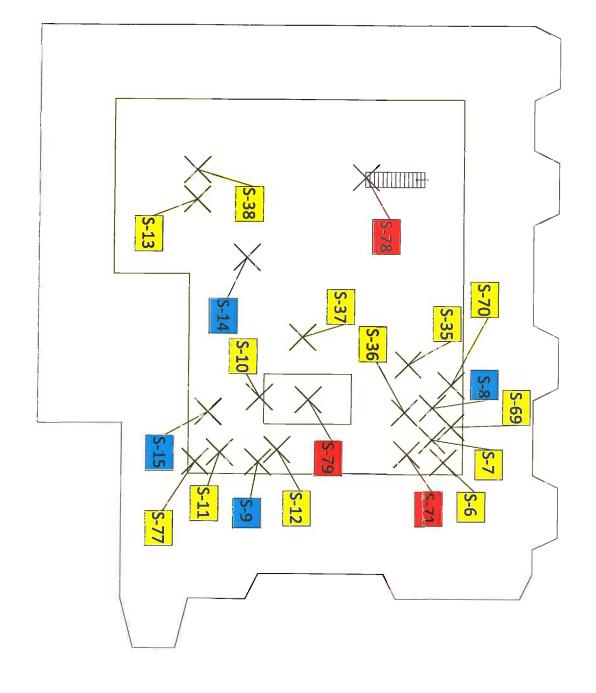


Lead Wipe Sample Locations & Map









VETERAN'S PARK COMMUNITY

CENTER BUILDING 6364 ZINDELL AVENUE,

CITY OF COMMERCE, CA 90040



Lead Wipe Sample Locations & Map

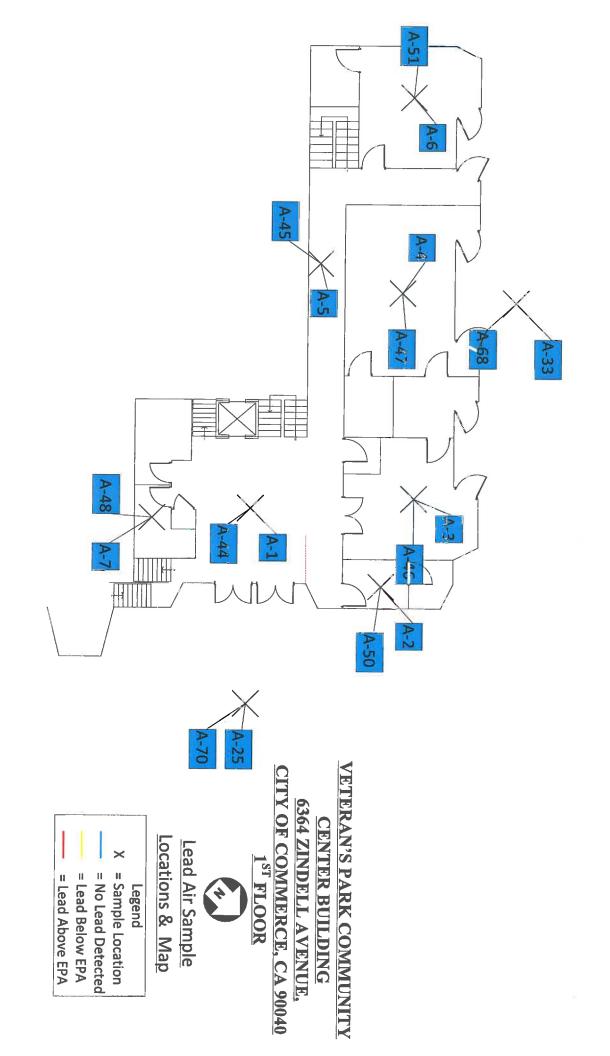
Legend

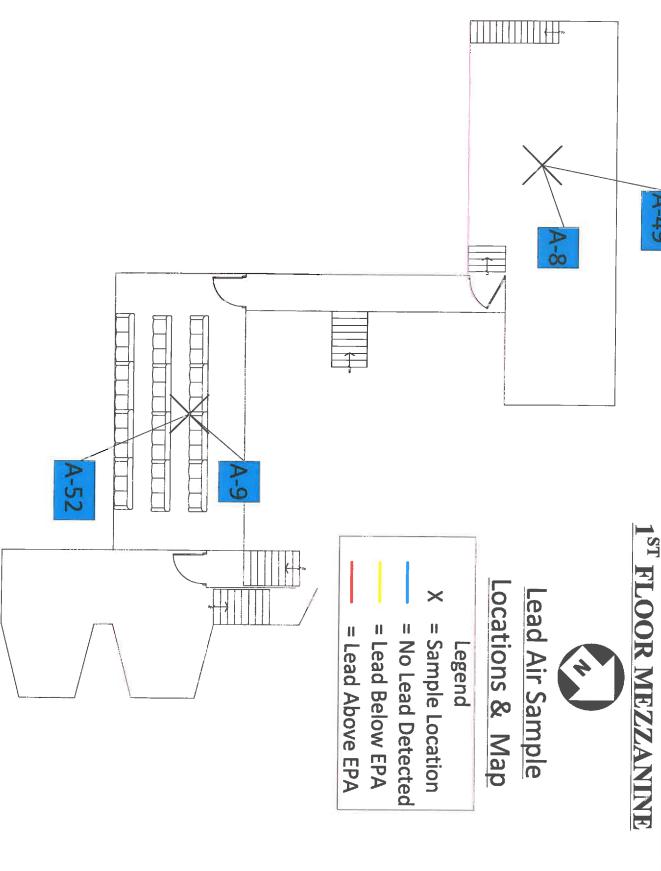
X = Sample Location

= No Lead Detected

= Lead Below EPA

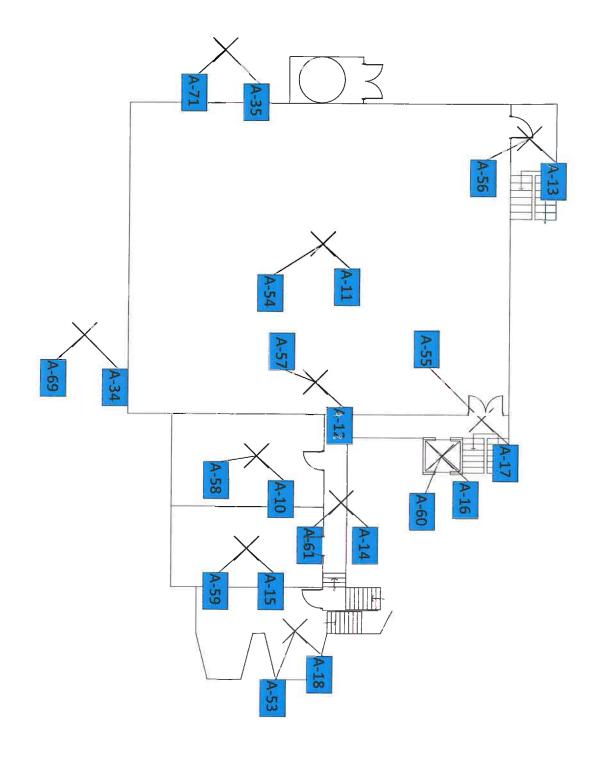
= Lead Above EPA





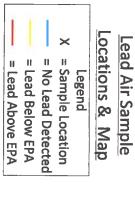
VETERAN'S PARK COMMUNITY

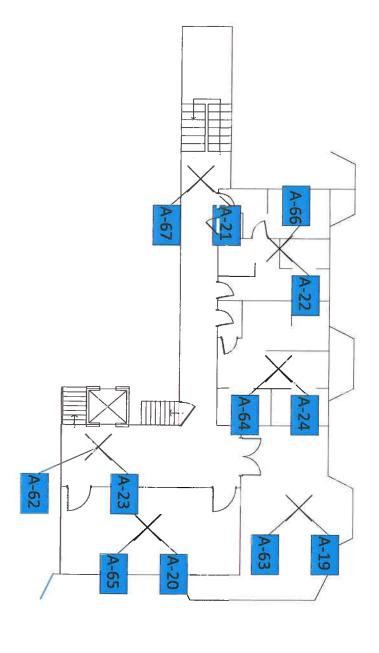
CENTER BUILDING
6364 ZINDELL AVENUE,
ITY OF COMMERCE, CA 90040
1ST FLOOR MEZZANINE



VETERAN'S PARK COMMUNITY CENTER BUILDING

6364 ZINDELL AVENUE, CITY OF COMMERCE, CA 90040 2ND FLOOR





VETERAN'S PARK COMMUNITY CENTER BUILDING

CITY OF COMMERCE, CA 90040 6364 ZINDELL AVENUE. 3RD FLOOR

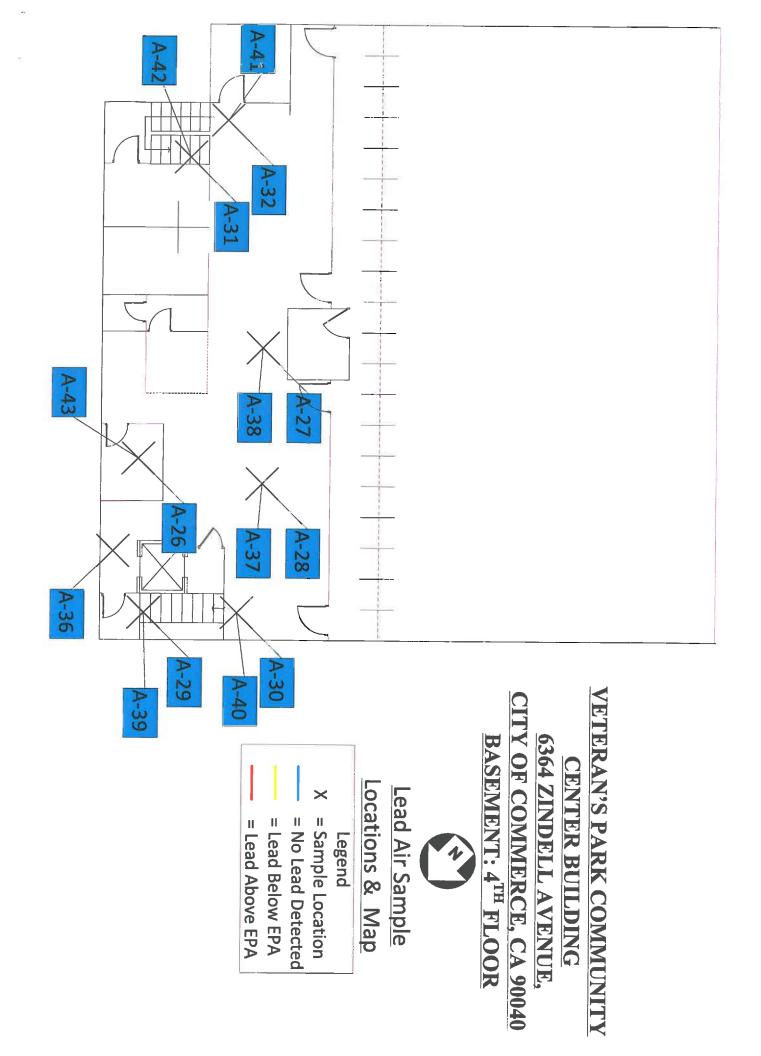


Lead Air Sâmple Locations & Map

Legend

= Sample Location = Lead Below EPA = No Lead Detected

= Lead Above EPA



APPENDIX B ANALYTICAL DOCUMENTATION



Phone/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331521195

ProjectID:

HILL65

CustomerID: CustomerPO:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone:

(714) 634-9500

Fax:

Received:

11/20/15 3:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected Analyzed	Volume	RDL	Lead Concentration	
A-1 331521195-0001	11/24/2015 Site: 1st entrance/lobby	240 L	17 μg/m³	<17 μg/m³	
A-2 331521195-0002	11/24/2015 Site: 1st ne offivce	240 L	17 μg/m³	<17 μg/m³	
A-3 331521195-0003	11/24/2015 Site: 1st rec room	240 L	17 μg/m³	<17 μg/m³	
A-4 331521195-0004	11/24/2015 Site: 1st dance studio	240 L	17 μg/m³	<17 μg/m³	
A-5 331521195-0005	11/24/2015 Site: 1st hallway	240 L	17 μg/m³	<17 μg/m³	
A-6 331521195-0006	11/24/2015 Site: 1st kindergarten	240 L	17 μg/m³	<17 µg/m³	
A-7 331521195-0007	11/24/2015 Site: 1st men's resterom	240 L	17 μg/m³	<17 µg/m³	
A-8 331521195-0008	11/24/2015 Site: 1st hvac/mech room	240 L	17 μg/m³	<17 µg/m³	
A-9 331521195-0009	11/24/2015 Site: 1st racketball seatin	240 L g	17 μg/m³	<17 µg/m³	
A-10 331521195-0010	11/24/2015 Site: 2nd racketball room	240 L	17 μg/m³	<17 μg/m³	
A-11 331521195-0011	11/24/2015 Site: 2nd basketball cente	240 L er	17 μg/m³	<17 µg/m³	

Michael Chapma

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 4 µg/filter. OSHA PEL - 50 µg/m³. OSHA action level - 30 µg/m³. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section. Unless otherwise noted, results in this report are not blank corrected. The Laboratory is not responsible for data reported in µg/m³ which is dependent on volume collected by non-laboratory personnel. This report may not be reproduced except in full, without written approval by LA Testing. This report relates only to those Items tested. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



Phone/Fax: (714) 828-4999 / (714) 828-4944

gardengrovelab@latesting.com

LA Testing Order: 331521195 HILL65

CustomerID:

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky Hillmann Consulting 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone:

(714) 634-9500

Fax:

Received:

11/20/15 3:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected And	Analyzed Volume		RDL	Lead Concentration
A-12 331521195-0012	11/24 Site: 2nd baste		-	17 μg/m³	<17 µg/m³
A-13 331521195-0013	11/24 Site: 2nd baske		-	17 μg/m³	<17 µg/m³
A-14 331521195-0014	11/24/ Site: 2nd hallwa			17 μg/m³	<17 μg/m³
A-15 331521195-0015	11/24/ Site: 2nd racket		-	17 μg/m³	<17 µg/m³
A-16 331521195-0016	11/24/ Site: 2nd elevat			17 μg/m³	<17 µg/m³
A-17 331521195-0017	11/24/ Site: 2nd gym e			17 μg/m³	<17 µg/m³
A-18 331521195-0018	11/24/ Site: 2nd storag			17 μg/m³	<17 µg/m³
A-19 331521195-0019	11/24/ Site: 3rd storage			17 μg/m³	<17 μg/m³
A-20 331521195-0020	11/24/ Site: 3rd gym	2015 240 L		17 μg/m³	<17 µg/m³
A-21 331521195-0021	11/24/ Site: 3rd west ha			17 μg/m³	<17 μg/m³
A-22 331521195-0022	11/24/2 Site: 3rd women			17 μg/m³	<17 µg/m³

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

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Phone/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com gardengrovelab@latesting.com LA Testing Order: 331521195 CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone:

(714) 634-9500

Fax:

Received:

11/20/15 3:15 PM

Collected:

Project: **C3-6416**

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected Analyzed	Volume	RDL	Lead Concentration	
A-23 331521195-0023	11/24/2015 Site: 3rd north hallway	240 L	17 μg/m³	<17 µg/m³	
A-24 331521195-0024	11/24/2015 Site: Men's restroom	320 L	13 µg/m³	<13 µg/m³	
A-25 331521195-0025	11/24/2015 Site: Exterior east	240 L	17 μg/m³	<17 µg/m³	
A-26 331521195-0026	11/24/2015 Site: Gunsmith/lockerroon	240 L m	17 μg/m³	<17 μg/m³	
A-27 331521195-0027	11/24/2015 Site: Rangemaster	240 L	17 μg/m³	<17 µg/m³	
A-28 331521195-0028	11/24/2015 Site: Center lobby	240 L	17 μg/m³	<17 μg/m³	
A-29 331521195-0029	11/24/2015 Site: Marksman stairs top	240 L	17 μg/m³	<17 μg/m³	
A-30 331521195-0030	11/24/2015 Site: Marksman stairs bot	240 L tom	17 μg/m³	<17 µg/m³	
A-31 331521195-0031	11/24/2015 Site: Top emergency exit	240 L stairs	17 μg/m³	<17 μg/m³	
A-32 331521195-0032	11/24/2015 Site: Bottom emergency e	240 L exit	17 μg/m³	<17 µg/m³	
A-33 331521195-0033	11/24/2015 Site: Exterior north	n/a	4.0 μg/filter	<4.0 µg/filter	

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 4 µg/filter. OSHA PEL - 50 µg/m³. OSHA action level - 30 µg/m³. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AlHA, unless specifically indicated otherwise in the comment section. Unless otherwise noted, results in this report are not blank corrected. The Laboratory is not responsible for data reported in µg/m³ which is dependent on volume collected by non-laboratory personnel. This report may not be reproduced except in full, without written approval by LA Testing. This report relates only to those items tested. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

MG http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331521195

CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue

Suite 110 Orange, CA 92868 Phone: Fax:

(714) 634-9500

Received:

11/20/15 3:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected Analyzed	Volume	RDL	Lead Concentration
A-34 331521195-0034	11/24/2015 Site: Ext south	n/a	4.0 μg/filter	<4.0 µg/filter
A-35 331521195-0035	11/24/2015 Site: Ext west	n/a	4.0 µg/filter	<4.0 µg/filter

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 4 µg/filter. OSHA PEL - 50 µg/m³. OSHA action level - 30 µg/m³. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section. Unless otherwise noted, results in this report are not blank corrected. The Laboratory is not responsible for data reported in µg/m³ which is dependent on volume collected by non-laboratory personnel. This report may not be reproduced except in full, without written approval by LA Testing. This report relates only to those Items tested. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only):

Unit F5

Garden Grove, CA 92841

11652 Knott Avenue

7-1	ESTING	7	#331521	40-	.,,			PHONE (714) 8	
			1021	195				FAX (714) 8	28-4944
Company:	Hillmann Consultin	g			EMSL-Bi	Il to: V	Diffe	erent Same	Z.
Street: 174	5 W. Orangewood A	Ave. Sui	te #110	7	hird Party Billing req				nady
City: Orang	e	State/	Province: CA		al Code: 92868			Country: United	1 to their
Report To (Name):Ryan Sokolo	ovsky	The same of the sa	A Arrest Street . 9 Town	ne #: 71463495				
Email Addr	ess: rsokolovsky@	hillmanr	ngroup.com	Fax #:				Purchase Order	
	ne/Number:C3-6416				rovide Results:	FA	-	Purchase Order	Mail
	Samples Taken: CA							The second secon	
		Tı	urnaround Time (TA	AT) Ontion	oles: Commer	ciai/Taxai	ole 🗀	Residential/Ta	x Exempt
3 Hou	☐ 6 Hour		Hour 48 Hou			6 Hour		1 Week	2 Week
	*Analysis		nd in accordance with EM				ice Guid	de	2 WEEK
	Matrix		Method		Instrum			orting Limit	Check
Chips □ %	by wt. 🔲 mg/cm² [□ ppm	SW846-7000	В	Flame Atomic A	osorption		0.01%	
Air			NIOSH 7082	2	Flame Atomic A	sorption		4 μg/filter	
			NIOSH 7105		Graphite Furn		0.	03 µg/filter	
			NIOSH 7300 mod	dified	ICP-AES/ICI	P-MS	0	.5 µg/filter	
Wipe*	ASTM	ax.	SW846-7000	В	Flame Atomic Al	sorption	1	0 μg/wipe	XX
*if no box	non ASTM is checked, non-ASTM		SW846-6010B	or C	ICP-AES		1	.0 μg/wipe	
TO! D	Wipe is assumed		SW846-7000B/7		Graphite Furnace AA		0.0)75 µg/wipe	
TCLP			SW846-1311/7000B/S		Flame Atomic Absorption		0.4 mg/L (ppm)		
Soil			SW846-1131/SW846-6		ICP-AES			mg/L (ppm)	
3011			SW846-7000I SW846-7010	-	Flame Atomic At	THE PARTY IN THE WARRANT WARRANT TO TAKE		mg/kg (ppm)	
			SW846-6010B		Graphite Furnace AA ICP-AES			mg/kg (ppm) ng/kg (ppm)	
Wastewate	r Unpreserved		SM3111B/SW846-		Flame Atomic At			mg/L (ppm)	
	with HNO ₃ pH < 2		EPA 200.9	ange , Aprille Bagge Le agla, y - LeCharles annue mader	Graphite Furna	Market Control of the Control		3 mg/L (ppm)	
			EPA 200.7		ICP-AES			0 mg/L (ppm)	
	ater Unpreserved with HNO ₃ pH < 2	\mathbb{R}^{-1}	EPA 200.9		Graphite Furna	ce AA		3 mg/L (ppm)	
			EPA 200.8 40 CFR Part 5	0	ICP-MS			1 mg/L (ppm)	
TSP/SPM F	ilter		40 CFR Part 5		ICP-AES Graphite Furna			2 µg/filter	
Other:			10 01111 0110		Oraphite Furte	UG AA	3	.6 µg/filter	
Name of Sa	mpler: Ryan Sokolo	vsky		Signa	ture of Sample	<u> </u>			
Sample #		Location	on .	Joigina	Volume/Are			Date/Time S	ampled
4-1	1st ent	rance	11 11	240	L	Comment of the Commen	Salinad der de verill sed	W/w/c	:70
4-2	1 ST NE	o FF	i ce	į, s		-			
4 - 3	251 Ros	Ros	M-	**************************************	Marie		71-1-	# h	1.
4-4	2st Dans	e (tudio	**				P .	***
4-5	1st Hall	way		age disconnection of the state	After 1 6 7 milyology () many many pupils " After " management of the second	-		Per	~
Client Samp	ole #'s	1			Tota	I # of Sa	mples	7.5	
Relinquishe	d (Client):	KA-	Date:	11/1	4/15	Time:			the state of the s
Received (La Comments:	b):	MA	Date:	14:	20/15	Time:		5:15)	and the state of t
			<u> </u>		ē				

Page 1 of _____ pages



LEAD (Pb) CHAIN OF CUSTODY EMSLOPER ID (Lab Use Only):

LATesting 11652 Knott Avenue Unit F5

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
A-6	2st Kindersarten	790 L	11/19/18 6:30
A-7	1st Meuil Restroom		11
A-8	2st HVAC/mech. Room		£ (
A-9	Exal Recliptall Senting		14/19/15 7:45
A-10	2 ml Rocketball Room		c,
A-11	26 d Bayleetball center		~
4-12	202 Bestelball Blenchers		**
A-13	Zul Baskethall Starnell		
A-14	202 Hallway		•
	2nd Rackettall Room		
A-16	2nd Fleinfor Cab	-	• 1
A-17	\$2nd Gym Entrance		*.
A-18	Fablud Storage Room		2
	3rd Storage		11/14/10-8:55
	316 Gym		II CX
	302 voest Malling		4
4-22	Je women's Pertron		7 7
A-23	3rd North Hallway		1 2
Comments/Sp	ecial Instructions:		

Page ____ of ____ pages



LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

LATesting 11652 Knott Avenue Unit F5

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
A-24	un's Restroom	320 L	W12/15 855
A-41	Ederor Augh Est	240 6	11/14/10 8:55
A-21	Consuith / Lockerroom (Based	7240 L	11/11/15 11:30
4.27	Rangement (Byend)	240 6	te in
4-24	Center Lobby	1)	G Sec
A-25	Marksman Stairs (top)"	١,	
A-30	Martson Stairs (Botton)"	***	•
A-31	Top Energency exit start	~	
A-32	Botton Eregan ruft "	14	6
a-33	Exterior North		
A-34	Ext. South		
A-35	Ext. West		
X7 - 31/			
A- 37			
A 138	1/5		
1/1800	1 1/3va		
A-40	trte (1) plant		
A-91	1 / 2 / 15		
/Comments/Sp	pecial Instructions:		
Ē.			

Page of pages

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Phone/Fax: (714) 828-4999 / (714) 828-4944

gardengrovelab@latesting.com

LA Testing Order: 331521194

CustomerID: HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky Hillmann Consulting 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 5:15 PM

Collected:

11/20/2015

Project: C3-6416

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected Analyzed	Volume	RDL	Lead Concentration
A-36 331521194-0001	11/20/2015 11/24/2015 Site: Elevator landing	240 L	17 μg/m³	<17 µg/m³
A-37 331521194-0002	11/20/2015 11/24/2015 Site: Main	240 L	17 μg/m³	<17 μg/m³
A-38 331521194-0003	11/20/2015 11/24/2015 Site: Middle behind maste	240 L	17 μg/m³	<17 μg/m³
A-39 331521194-0004	11/20/2015 11/24/2015 Site: Marksman stair top	240 L	17 μg/m³	<17 µg/m³
A-40 331521194-0005	11/20/2015 11/24/2015 Site: Marksman stair botto	240 L	17 μg/m³	<17 µg/m³
A-41 331521194-0006	11/20/2015 11/24/2015 Site: Emergency stair bot	240 L	17 μg/m³	<17 µg/m³
A-42 331521194-0007	11/20/2015 11/24/2015 Site: Emergency stair top	240 L	17 μg/m³	<17 µg/m³
A-43 331521194-0008	11/20/2015 11/24/2015 Site: Lockers	240 L	17 μg/m³	<17 µg/m³
A-44 331521194-0009	11/20/2015 11/24/2015 Site: Lobby 1st floor	240 L	17 μg/m³	<17 µg/m³
A-45 331521194-0010	11/20/2015 11/24/2015 Site: 1st floor hallway	240 L	17 µg/m³	<17 μg/m³
A-46 331521194-0011	11/20/2015 11/24/2015 Site: 1st floor rec room	240 L	17 μg/m³	<17 μg/m³

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 4 µg/filter. OSHA PEL - 50 µg/m³. OSHA action level - 30 µg/m³. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section. Unless otherwise noted, results in this report are not blank corrected. The Laboratory is not responsible for data reported in µg/m³ which is dependent on volume collected by non-laboratory personnel. This report may not be reproduced except in full, without written approval by LA Testing. This report relates only to those thems tested. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406



Orange, CA 92868

11652 Knott Street Unit F5, Garden Grove, CA 92841

(714) 828-4999 / (714) 828-4944

http://www.LATesting.com gardengrovelab@latesting.com LA Testing Order: 331521194

CustomerID: HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110

Phone: Fax:

(714) 634-9500

Received:

11/20/15 5:15 PM

Collected:

11/20/2015

Project: C3-6416

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected Analyzed	Volume	RDL	Lead Concentration
A-47 331521194-0012	11/20/2015 11/24/2015 Site: 1st floor dance st	240 L udio	17 μg/m³	<17 μg/m³
A-48 331521194-0013	11/20/2015 11/24/2015 Site: 1st floor men's re	240 L stroom	17 μg/m³	<17 μg/m³
A-49 331521194-0014	11/20/2015 11/24/2015 Site: 1st floor (mezzan	240 L ine) strorage	17 μg/m³	<17 µg/m³
A-50 331521194-0015	11/20/2015 11/24/2015 Site: 1st floor office	240 L	17 µg/m³	<17 µg/m³
A-51 331521194-0016	11/20/2015 11/24/2015 Site: 1st floor kinderga	240 L ten	17 µg/m³	<17 μg/m³
A-52 331521194-0017	11/20/2015 11/24/2015 Site: 1st floor (mezzani	240 L ne) deck hall view	17 µg/m²	<17 μg/m³
A-53 331521194-0018	11/20/2015 11/24/2015 Site: 2nd floor storage	240 L	17 µg/m³	<17 µg/m³
A-54 331521194-0019	11/20/2015 11/24/2015 Site: 2nd floor center o	240 L ourt	17 μg/m³	<17 μg/m³
A-55 331521194-0020	11/20/2015 11/24/2015 Site: 2nd floor gym ent	240 L rance	17 μg/m³	<17 μg/m³
A-56 331521194-0021	11/20/2015 11/24/2015 Site: 2nd floor gym stal	240 L	17 μg/m³	<17 µg/m³
A-57 331521194-0022	11/20/2015 11/23/2015 Site: 2nd floor basketba	240 L all bleachers	17 μg/m³	<17 µg/m³

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 4 µg/filter. OSHA PEL - 50 µg/m³. OSHA action level - 30 µg/m³. The QC data associated with the sample results Sample received in acceptance constitution trines of netwise noted. Reporting minit is 4 paritier. OSTA PEL - 30 µg/m². USHA action level - 30 µg/m². The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AlHA, unless specifically indicated otherwise in the comment section. Unless otherwise noted, results in this report are not blank corrected. The Laboratory is not responsible for data reported in µg/m² which is dependent on volune collected by non-laboratory personnel. This report may not be reproduced except in full, without written approval by LA Testing. This report relates only to those Items tested. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



(714) 828-4999 / (714) 828-4944

http://www.LATesting.com gardengrovelab@latesting.com LA Testing Order: 331521194 CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky Hillmann Consulting 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 5:15 PM

Collected:

11/20/2015

Project: **C3-6416**

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected Analyzed Volume		RDL	Lead Concentration
A-58 331521194-0023	11/20/2015 11/23/2015 Site; 2nd floor racketball	240 L court #1	17 μg/m³	<17 µg/m³
A-59 331521194-0024	11/20/2015 11/23/2015 Site: 2nd floor racketball	240 L court #2	17 μg/m³	<17 µg/m³
A-60 331521194-0025	11/20/2015 11/23/2015 Site: 2nd floor elevator c	240 L ab	17 μg/m³	<17 μg/m³
A-61 331521194-0026	11/20/2015 11/23/2015 Site: 2nd floor racketball	240 L hallway	17 μg/m³	<17 μg/m³
A-62 331521194-0027	11/20/2015 11/23/2015 Site: 3rd floor marksroon	240 L n stairs	17 μg/m³	<17 µg/m³
A-63 331521194-0028	11/20/2015 11/23/2015 Site: 3rd floor storage roo	240 L	17 μg/m³	<17 µg/m³
A-64 331521194-0029	11/20/2015 11/23/2015 Site: 3rd floor men's rr	240 L	17 μg/m³	<17 μg/m³
A-65 331521194-0030	11/20/2015 11/23/2015 Site: 3rd floor gym	240 L	17 μg/m³	<17 μg/m³
A-66 331521194-0031	11/20/2015 11/23/2015 Site: 3rd floor women's rr	240 L	17 μg/m³	<17 μg/m³
A-67 331521194-0032	11/20/2015 11/23/2015 Site: 3rd floor stairs end l	240 L nall	17 μg/m³	<17 µg/m³
A-68 331521194-0033	11/20/2015 11/23/2015 Site: Ext north	240 L	17 μg/m³	<17 μg/m³

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 4 µg/filter. OSHA PEL - 50 µg/m². OSHA action level - 30 µg/m³. The QC data associated with the sample results Sample received in acceptable condition thress otherwise noted. Reporting limit is 4 paritier. OSINA FEL - 30 µg/m². USINA action level - 30 µg/m². The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section. Unless otherwise noted, results in this report are not blank corrected. The Laboratory is not responsible for data reported in µg/m² which is dependent on volume collected by non-laboratory personnel. This report may not be reproduced exceept in full, without written approval by LA Testing. This report relates only to those items tested. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted. Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



Phone/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331521194 CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Fax:

(714) 634-9500

Phone:

Received:

11/20/15 5:15 PM

Collected:

11/20/2015

Project: C3-6416

Test Report: Lead in Air by Flame AAS (NIOSH 7082)*

Client SampleDescription	Collected Analyzed	Volume	RDL	Lead Concentration <17 μg/m³	
A-69 331521194-0034	11/20/2015 11/23/2015 Site: Ext south	240 L	17 μg/m³		
A-70 331521194-0035	11/20/2015 11/23/2015 Site: Ext east	240 L	17 μg/m³	<17 μg/m³	
A-71 331521194-0036	11/20/2015 11/23/2015 Site: Ext west	240 L	17 μg/m³	<17 μg/m³	

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 4 µg/filter. OSHA PEL - 50 µg/m³. OSHA action level - 30 µg/m³. The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section. Unless otherwise noted, results in this report are not blank corrected. The Laboratory is not responsible for data reported in µg/m³ which is dependent on volume collected by non-laboratory personnel. This report may not be reproduced execept in full, without written approval by LA Testing. This report relates only to those items tested. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only):

Unit F5

Garden Grove, CA 92841

11652 Knott Avenue

PHONE: (714) 828-4999 FAX: (714) 828-4944

#3	3	4	5	2	1	1	9	4	_
								10101	

Company: Hillmann Consulting			EMSL-Bill to:						
Street: 1745 W. Orangewood Ave. Suite #110			Th	ird Party Billing requi				artv	
City: Orang	SUCCESSION AND A SECURITY OF THE SECURITY OF T				l Code: 92868	- State - The state -	And the page of th	ountry: United	Children and Late of the Control of the Control
	Name):Ryan Sokolov	THE RESERVE OF THE PARTY OF THE			e#: 714634950	0		The season of th	The second secon
	ss: rsokolovsky@hi		up.com	Fax #:		11	Pı	urchase Order	
	ne/Number:C3-6416		avenue i i		ovide Results:	FAX		Market III . III	Mail
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U.S. State S	amples raken.	Turna	round Time (TA				ie L.J.	tesidential/14/	LAUTIPE
☐ 3 Hour		☐ 24 Hou	ır 🔲 48 Hour	1 72	P. Hour ☐ 96	Hour	_		2 Week
20,0		ompleted in a	accordance with EMS	L's Terms a					01 1
	Matrix		Method		Instrume			orting Limit	Check
Chips 🗆 %	by wt. 🗌 mg/cm² 📋	ppm	SW846-7000E	3	Flame Atomic Ab	sorption		0.01%	
Air			NIOSH 7082		Flame Atomic Ab	sorption		μg/filter	23
		4	NIOSH 7105	·	Graphite Furna			3 µg/filter	
			NIOSH 7300 mod	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ICP-AES/ICP			5 µg/filter	
Wipe*	ASTM	R -	SW846-7000E		Flame Atomic Ab	sorption	-) µg/wipe	
fif no bo	non ASTM x is checked, non-ASTM		SW846-6010B o		ICP-AES) µg/wipe	
	Wipe is assumed		SW846-7000B/7	010	Graphite Furnace AA			75 µg/wipe	
TCLP			SW846-1311/7000B/SM 3111B		Flame Atomic Absorption			mg/L (ppm)	
		SI	W846-1131/SW846-6		ICP-AES			mg/L (ppm)	
Soil			SW846-7000E SW846-7010	and a second Consequence	Flame Atomic Absorption Graphite Furnace AA		40 mg/kg (ppm) 0.3 mg/kg (ppm)		278 - 000 000 00
			SW846-6010B o		ICP-AES		2 mg/kg (ppm)		
			SM3111B/SW846-7	7000B Flame Atomic Absorption			mg/L (ppm)		
Wastewate	r Unpreserved with HNO ₃ pH < 2	8	EPA 200.9		Graphite Furnace AA			mg/L (ppm)	
			EPA 200.7 ICP-AES				mg/L (ppm)		
			EPA 200.9	Graphite Furnace AA		The second second second	3 mg/L (ppm)		
Preserved	with HNO₃ pH < 2		EPA 200.8	^	ICP-MS			1 mg/L (ppm)	
TSP/SPM F	ilter		40 CFR Part 5 40 CFR Part 5	and a second sec	and product the second control of the second			2 µg/filter 6 µg/filter	
Other:	<u> </u>		40 01101 010		Crapino i diria	30771	J.	о рулнот	
Name of Sa	ampler: Ryan Sokolov	sky		Signa	ture of Sample	ľa.			
Sample #		Location			Volume/Are	а		Date/Time S	Sampled
A-36	Elevator	andia	- 63	70	706			11/20/15	6:30
A-37	Mail	12 Vac Wanta C - 196 - Roman			1			and the state of t	11
1.30	Middle		Mester				The same agency of	į.	2-4
1 35 12 1 11 1 2			-		Service Control Service Service Service		8. 4	-	
A-90	Marksman	Stair	Rutin			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ι.	1
40.4	Client Sample #'s Total # of Samples:								
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Relinquish	ed (Client):	TEST.	Date:	14/2	415	Time:		5.120	/ x
Received (Lab): Date: 11/20/5 Time: 5:15)									
Comments:	a		1		1				
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LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

#331521194

LATesting 11652 Knott Avenue Unit F5

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time	Sampled
A-41	Everycury Stair Bottom	240 1	11/2/15	6:30
A-42	Everyency star top		i	۲,
4-43	Lockers		1,	*
A.44	Lopby 1st Floor		11/20/15	7 45
1.41	7,2 Floor Mellucy		12	(_
	1st floor Rec. Room		(.	.1
A-47	1st Hour Dana Studio		t _l	1
A-98	1st floor teli Restroom		* 2	19
A-49	1st Floor (Mezzanie) Storega		•	4
	7.1 Floor Office		٠,	7.
A-51	2.1 Floor Kindergarten		4.	*2
A-52	7st Floor (Nervane) View		11	8:50
A-53	2nd Flore Sturage room		\r	۲.
A-54	2nd Floor Center court		۲.	۲
A-55	2nd Flow Crym Entrance		((
A-56	2nd place Crym Startiale		4,	۲.
A-59	2 - 2 Flow bushelfull Blenebers		(-
A - 58	2-2 Floor Butallall Combes		₹	£.,
Comments/Sp	ecial Instructions:			

Page 2 of 3 pages

.



LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

#331521194

LATesting 11652 Knott Avenue Unit F5

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
A-54	2rd Floor RickHall Court HZ	240 L	11/20/11-11:00
A=60	2nd Floor Flewfor Cab		1.
A-41	2nd Flos: Perfethal Hallowy		
A-62	31d Floor		
A-65	312 Floor Storage room		2
	3/1 Moor Men's PR		1 :
A-65	314 Floor Gym		1 :
A-66	3rd Flow women's RR		7 :
A_67	31d Flori Stars end this		*
	Ext North		11/24/15 12/15
A-69	Ext South		4 4
4-70	Ext East		~
A-71	End west		7 1
Comments/Sp	ecial Instructions:		
34.			

Page of pages

- - - -



(714) 828-4999 / (714) 828-4944

http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331521200 CustomeriD: HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 5:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-1 331521200-0001	11/24/2015 Site: Elevator cab	144 in²	10 μg/ ft²	22 µg/ft²
S-2 331521200-0002	11/24/2015 Site: 1st floor ele.landing	144 in²	10 μg/ft²	<10 µg/ft²
S-3 331521200-0003	11/24/2015 Site: 2nd floor ele.landin	144 in² g	10 μg/ft²	<10 µg/ft²
S-4 331521200-0004	11/24/2015 Site: 3rd floor ele.landing	144 in²	10 μg/ft²	<10 µg/ft²
S-5 331521200-0005	11/24/2015 Site: Basement floor ele	144 in² landing	10 μg/ft²	180 μg/ft²
S-6 331521200-0006	11/24/2015 Site: Roof vent lower ver	144 in² nt east nroth	10 μg/ft²	34 μg/ft²
S-7 331521200-0007	11/24/2015 Site: Roof vent north larg	144 in² ge 1	10 μg/ft²	29 μg/ft²
S-8 331521200-0008	11/24/2015 Site: Roof vent north larg	144 in² ge 2	10 μg/ft²	<10 µg/ft²
S-9 331521200-0009	11/24/2015 Site: Roof vent north larg	144 in² ge 3	10 μg/ft²	<10 µg/ft²
S-10 331521200-0010	11/24/2015 Site: Elevator vent large	144 in²	10 μg/ft²	92 μg/ft²
S-11 331521200-0011	11/24/2015 Site: Roof vent north sma	144 in²	10 μg/ft²	40 μg/ft²

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



Phone/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com gardengrovelab@latesting.com LA Testing Order: 331521200 CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 5:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Anal	yzed Area Sampled	RDL	Lead Concentration
S-12 331521200-0012	11/24/2 Site: Roof vent n		10 μg/ft²	32 µg/ft²
S-13 331521200-0013	11/24/2 Site: Roof vent ea		10 μg/ft²	200 μg/ft²
S-14 331521200-0014	11/24/2 Site: Roof vent ea		10 μg/ft²	<10 µg/ft²
S-15 331521200-0015	11/24/2 Site: Roof vent ea		10 μg/ft²	17 μg/ft²
S-16 331521200-0016	11/24/2 Site: 3rd floor sta		10 μg/ft²	<10 µg/ft²
S-17 331521200-0017	11/24/2 Site: 3rd floor dou		10 μg/ft²	40 μg/ft²
S-18 331521200-0018	11/24/20 Site: 2nd floor lan		10 μg/ft²	<10 µg/ft²
S-19 331521200-0019	11/24/20 Site: 2nd floor gyr		10 μg/ft²	<10 µg/ft²
S-20 331521200-0020	11/24/20 Site: 1st floor gym		10 µg/ft²	<10 µg/ft²
S-21 331521200-0021	11/24/20 Site: 1str floor up		10 μg/ft²	<10 µg/ft²
S-22 331521200-0022	11/24/20 Site: 1st floor loft		10 μg/ft²	260 μg/ft²

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



LA Testing Order: 331521200 CustomerID:

CustomerPO:

HILL65

ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone:

(714) 634-9500

Fax:

Received:

11/20/15 5:15 PM

Collected:

Project: **C3-6416**

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-23 331521200-0023	11/24/2015 Site: 1st floor loft to roof	144 in²	10 μg/ft²	<10 µg/ft²
S-24 331521200-0024	11/24/2015 Site: Basement markwors	144 in² ship top stair	10 μg/ft²	260 μg/ft²
S-25 331521200-0025	11/24/2015 Site: Basement markwors	144 in² ship bottom stairs	20 μg/ft²	670 μg/ft²
S-26 331521200-0026	11/24/2015 Site: Emergency staircas	144 in² e landing top	10 μg/ft²	390 μg/ft²
S-27 331521200-0027	11/24/2015 Site: Emergency staircase	144 in² e landing	10 μg/ft²	390 μg/ft²
S-28 331521200-0028	11/24/2015 Site: Emergency staircase	144 in² e bottom	20 μg/ft²	650 μg/ft²
S-29 331521200-0029	11/24/2015 Site: Range door north 1	144 in²	100 μg/ft²	3600 µg/ft²
S-30 331521200-0030	11/24/2015 Site: Range door north 2	144 in²	20 μg/ft²	640 µg/ft²
S-31 331521200-0031	11/24/2015 Site: Rand door south 1	144 in²	10 μg/ft²	400 µg/ft²
S-32 331521200-0032	11/24/2015 Site: Rand door south 2	144 in²	100 µg/ft²	2700 μg/ft²
S-33 331521200-0033	11/24/2015 Site: Range intake vent no	144 in² orth	10 μg/ft²	48 μg/ft²

Michael Chapma Michael Chapman, Laboratory Manager

or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406



Phone/Fax: (714) 828-4999 / (714) 828-4944

G http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331521200 CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 5:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-34 331521200-0034	11/24/2015 Site: Elevator maintenan	144 in² ce room	10 μg/ft²	140 μg/ft²
S-35 331521200-0035	11/24/2015 Site: Hvac north vent 1	144 in²	10 µg/ft²	110 µg/ft²
S-36 331521200-0036	11/24/2015 Site: Hvac vent north 2	144 in²	10 μg/ft²	120 µg/ft²
S-37 331521200-0037	11/24/2015 Site: Hvac center vent	144 in²	10 μg/ft²	59 μg/ft²
S-38 331521200-0038	11/24/2015 Site: Hvac southwest	144 in²	10 μg/ft²	28 μg/ft²
S-39 331521200-0039	11/24/2015 Site: 1st ext front entrand	144 in² e	10 μg/ft²	<10 µg/ft²
S-40 331521200-0040	11/24/2015 Site: 1st ext court entrand	144 in² ce	10 μg/ft²	18 μg/ft²

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only):

#331521200

11652 Knott Avenue

Unit F5

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

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Company :	Hillmann Consulting	3			EMSL-Bit If Bill to is Diffe	to:	Differ Structions in	ent Same	2
	W. Orangewood A		te #110	771	nird Party Billing requ				m as affect
City: Orang	6	State/F	Province: CA		al Code: 92868	ings willig	White I have been reduced to the	ountry: United	Company of the Compan
Report To (Name):Ryan Sokolo	vsky		1	ne #: 714634950	00		2 / The let be supply the second larger	
Email Addre	ss: rsokolovsky@t	hillmanr	group.com	Fax #:	in raint of related	Merce	P	rchase Order	p.)
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3 Hour	☐ 6 Hour		Hour 48 Hou			6 Hour	□1	Week	2 Week
	*Analysis	complete	d in accordance with EMS						
	Matrix		Method		Instrume	nt	Repo	rting Limit	Check
Chips 🗆 %	by wt. 🔲 mg/cm² 📋	ppm	SW846-7000	В	Flame Atomic Ab	sorption		0.01%	
Air			NIOSH 7082	2	Flame Atomic Ab	sorption	4	μg/filter	
			NIOSH 7105	5	Graphite Furna	ce AA	0.0	3 µg/filter	
			NIOSH 7300 mod	dified	ICP-AES/ICP	-MS		μg/filter	
Wipe*	ASTM	34	SW846-7000	В	Flame Atomic Ab	sorption	10	µg/wipe	N.
*if no box	non ASTM is checked, non-ASTM		SW846-6010B	or C	ICP-AES	The second secon	1.0	µg/wipe	
	Wipe is assumed		SW846-7000B/7	010	Graphite Furnace AA		0.07	5 µg/wipe	
TCLP			SW846-1311/7000B/S	SM 3111B	Flame Atomic Absorption		0.4 n	ng/L (ppm)	77 - 1
			SW846-1131/SW846-6		ICP-AES		0.1 mg/L (ppm)		
Soil			SW846-7000	Woodraged on the Street Walter	Flame Atomic Absorption		40 mg/kg (ppm)		
			SW846-7010		Graphite Furna	THE RESERVE OF THE PARTY OF THE	0.3 mg/kg (ppm)		
			SW846-6010B c SM3111B/SW846-		ICP-AES			/kg (ppm)	
Wastewate			EPA 200.9	THE STATE OF THE PROPERTY OF T			ng/L (ppm) mg/L (ppm)		
Preserved	with HNO ₃ pH < 2		EPA 200.7		ICP-AES		0.020	mg/L (ppm)	
	ater Unpreserved		EPA 200.9		Graphite Furnae	ce AA		mg/L (ppm)	
Preserved i	with HNO ₃ pH < 2		EPA 200.8		ICP-MS		0.001 mg/L (ppm)		
TSP/SPM F	ilter	161	40 CFR Part 5		ICP-AES			µg/filter	
Other:			40 CFR Part 5	0	Graphite Furnac	ce AA	3.6	μg/filter	
	mpler: Ryan Sokolov	vskv		Ciana	kuna af Campular			,	
Sample #		Locatio	on .	Joigna	ture of Sampler Volume/Area			Dete/Time S	annala d
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Client Samp	1/1/	9/200			Tota	# of Sa	mples:	40	F Populari
Relinquishe	d (Client):	4/1	Date:	11/17	115	Time:		Territory of M	
Received (La Comments:	b):	201	Date:	1 11/2	20/15	Time:		5:17	The real law in the sea
comments:			1		1				



LEAD (Pb) CHAIN OF CUSTODY

LATesting 11652 Knott Avenue Unit F5

Garden Grove, CA 92841 PHONE: (714) 828-4999

FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location Location		olume/Area		me Sampled
5-6	Rost Vent Lower east/minh	2 ft		11/15/1	1-8:00
5.7	Rad vent North lage (1)			11	Ć q
	Rust vent Northlarge (2)			£s	* 4
1	Root vent horst large (3)			~ 4	7
5-10	Elevator Vent Lange	7()		11/15/1	- 8:15
5-11	Roof vent North (small)			i	٤,
5-12	Rock vert NorthEast (small)			(,	4
5-13	Root vent east (Small)			1.	5
	Rust Mut east (Large)			4	Á
5-15	Rost ve-1 e-st (small) (2)			N =	ř
5-16	Brd Floor State (tailoutise			4.1	G: 93-
5-17	Bid Floor Do-ble Star			1.	~ 6
5-18	2nd Floor landing			t .	-,
	Zud Floor gymentrona				~
5-20	1,1 Floor gym antona			· (
5-21	2st Flor up to landing		444	C (6)	-,
5-22	2,1 Floor (lost) walking)		150
5.23	14 Flour (1014) to rout			4	•
Comments/Spe	ecial Instructions:	····	<u> </u>		
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Page $\frac{1}{2}$ of $\frac{1}{2}$ pages



LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

#331521200

LATesting
11652 Knott Avenue

Unit F5

Garden Grove, CA 92841

PRONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

	A seekler		•		
Sample #	Location	Volu	me/Area	Date/Time	Sampled
5-24	Beleved preckmaship top stors	1 1-1		14/15/15	1195
5-75	11 Marknewshy buffor skills			· .	56/g
5-26	Freigney Slawcese landing (pp)			*14	
5-27	11 (1 landing			4	
5-28	" Botton			-1	
5-29	Range Door North 1				
5-30	Range Door NOGL 2			₩°.	-
5-31	Range Dair South]			1.	Ç,
5-32	Range Dar South 2			4	7
5-33	Range intake wat North			1	(
5-34	Elevator Mantenare Room			ζ,	۲,
5-35	HVAC Norment 1			U	((
5-36	HVAC vent North 2			*/	4 ,
5-37	HVAC center cent			(1	e .
5-38	HVAC Conthuct			Ci	
5-39	21 Ext Front entrana			11/19/15	1:15
5-40	21 Ext Front entrance			(1	1:12
SX					
Comments/Sp	ecial Instructions:			·	
					i i

Page of 3 pages

. . . .



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331521199 CustomerID: HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 3:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-41 331521199-0001	11/24/2015 Site: Range lobby	144 in²	20 μg/ft²	640 µg/ft²
S-42 331521199-0002	11/24/2015 Site: Gunsmith	144 in²	10 μg/ft²	49 μg/ft²
S-43 331521199-0003	11/24/2015 Site: Elevator equip ro	144 in² om entrance	10 μg/ft²	240 μg/ft²
S-44 331521199-0004	11/24/2015 Site: Range hvac vent	144 in² bay 1	10 μg/ft²	79 µg/ft²
S-45 331521199-0005	11/24/2015 Site: Range vent int ba	144 in² y 1	10 µg/ft²	92 μg/ft ^a
S-46 331521199-0006	11/24/2015 Site: Range vent (int)	144 in² bay 19	10 μg/ft²	110 μg/ft²
S-47 331521199-0007	11/24/2015 Site: Ext side hvac ven	144 in² t#1	100 μg/ft²	2900 μg/ft²
S-48 331521199-0008	11/24/2015 Site: North range door	144 in² 1 int	500 μg/ft²	7500 μg/ft²
S-49 331521199-0009	11/24/2015 Site: Middle range door	144 in² 2 int	100 μg/ft²	3900 µg/ft²
S-50 331521199-0010	11/24/2015 Site: South range door	144 in² int	200 μg/ft²	5100 μg/ft²
S-51 331521199-0011	11/24/2015 Site: Men's restroom er	144 in² ntrance	10 μg/ft²	360 μg/ft²

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

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* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



(714) 828-4999 / (714) 828-4944

http://www.LATesting.com gardengrovelab@latesting.com LA Testing Order: 331521199

CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 3:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-52 331521199-0012	11/24/2015 Site: Outside gunsmit su	144 in² pplies	20 μg/ft²	610 µg/ft²
S-53 331521199-0013	11/24/2015 Site: Middle range door	144 in² 1 int	100 μg/ft²	3500 µg/ft²
S-54 331521199-0014	11/24/2015 Site: Ext west side fire e	144 in² xit	10 μg/ft²	96 µg/ft²
S-55 331521199-0015	11/24/2015 Site: Range vent ext ma	144 in² st door	10 μg/ft²	220 µg/ft²
S-56 331521199-0016	11/24/2015 Site: Range vent top of s	144 in² tructure	10 μg/ft²	250 μg/ft²
S-57 331521199-0017	11/24/2015 Site: Ext range vent on p	144 in² ipe	500 μg/ft²	15000 µg/ft²
S-58 331521199-0018	11/24/2015 Site: North door by kinde	144 in² rgarten 1 ext	10 μg/ft²	17 μg/ft²
S-59 331521199-0019	11/24/2015 Site: North door by kinde	144 in² rgarten #2 ext	10 μg/ft²	25 μg/ft²
S-60 331521199-0020	11/24/2015 Site: Dance studio ext do	144 in² oor	10 μg/ft²	<10 µg/ft²
S-61 331521199-0021	11/24/2015 Site: Office ext door	144 in²	10 μg/ft²	20 μg/ft²
S-62 331521199-0022	11/24/2015 Site: Range vent ext stud	144 in² k floor	1000 μg/ft²	38000 µg/ft²

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

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* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



(714) 828-4999 / (714) 828-4944

http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331521199 CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky Hillmann Consulting 1745 West Orangewood Avenue Suite 110 Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

11/20/15 3:15 PM

Collected:

Project: C3-6416

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-63 331521199-0023	11/24/2015 Site: Range vent middle	144 in² stock	500 μg/ft²	13000 µg/ft²
S-64 331521199-0024	11/24/2015 Site: 3rd floor janitor clos	144 in² et	10 μg/ft²	21 μg/ft²
S-65 331521199-0025	11/24/2015 Site: 1st floor janitor close	144 in² et	10 μg/ft²	18 μg/ft²
S-66 331521199-0026	11/24/2015 Site: 3rd floor kindergarte	144 in² n staircase	10 μg/ft²	<10 µg/ft²
S-67 331521199-0027	11/24/2015 Site: 2nd floor kindergarte	144 in² en staircase	10 μg/ft²	<10 µg/ft²
S-68 331521199-0028	11/24/2015 Site: 1st floor kindergarte	144 in² n staircase	10 μg/ft²	<10 μg/ft²
S-69 331521199-0029	11/24/2015 Site: Nw roof vent co 1	144 in²	10 μg/ft²	170 μg/ft²
S-70 331521199-0030	11/24/2015 Site: Nw roof vent co 2	144 in²	10 μg/ft²	100 μg/ft²
S-71 331521199-0031	11/24/2015 Site: Nw roof vent co 3	144 in²	50 μg/ft²	960 μg/ft²
S-72 331521199-0032	11/24/2015 Site: North roof vent co 1	144 in²	10 μg/ft²	120 µg/ft²
S-73 331521199-0033	11/24/2015 Site: North roof vent co 2	144 in²	10 μg/ft²	240 μg/ft²

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406



LA Testing Order: 331521199

CustomerID:

HILL65

CustomerPO: ProjectID:

Attn: Ryan Sokolovsky **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110

Phone: Fax:

(714) 634-9500

Received:

11/20/15 3:15 PM

Collected:

Orange, CA 92868

Project: **C3-6416**

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-74 331521199-0034	11/24/2015 Site: North roof vent co 3	144 in²	10 µg/ft²	97 µg/ft²
S-75 331521199-0035	11/24/2015 Site: North roof vent co 4	144 in²	10 µg/ft²	130 µg/ft²
S-76 331521199-0036	11/24/2015 Site: North roof vent co 5	144 in²	10 µg/ft²	300 µg/ft²
S-77 331521199-0037	11/24/2015 Site: Roof vent sewage v	144 in² ent	10 µg/ft²	110 µg/ft²
S-78 331521199-0038	11/24/2015 Site: Roof top stairs landi	144 in²	100 μg/ft²	3400 µg/ft²
S-79 331521199-0039	11/24/2015 Site: Elevator roof mecha	144 in² nical floor	10 µg/ft²	470 μg/ft²

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406



Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only): #3 3 1 5 2 1 1 9 9

11652 Knott Avenue

Unit F5

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Company: Hillmann Consulting					Different Same	
Street: 1745 W. Orangewood Ave. Suite #110						
	Province: CA	Third Party Billing requires written authorization from third party Zip/Postal Code: 92868 Country: United States				
Report To (Name):Ryan Sokolovsky			e#: 714634950	00		
Email Address: rsokolovsky@hillmanr	ngroup.com	Fax #:			Purchase Order	
Project Name/Number:C3-6416			rovide Results:	FAX	The second secon	Mail
U.S. State Samples Taken: CA					le ☐ Residential/Tax	
	urnaround Time (TA				T I TO SHAPITE AND THE	LACINIPL
	Hour 48 Hour			Hour	☐ 1 Week ☐	2 Week
	ed in accordance with EMS	L's Terms a				
Matrix	Method		Instrume	nt	Reporting Limit	Check
Chips % by wt. mg/cm² ppm	SW846-7000E	3	Flame Atomic Ab	sorption	0.01%	
Air	NIOSH 7082		Flame Atomic Ab	sorption	4 μg/filter	TX.
	NIOSH 7105		Graphite Furna	and with the state of the state of the	0.03 µg/filter	
ray, yes reference.	NIOSH 7300 mod		ICP-AES/ICP	****	0.5 µg/filter	
Wipe* ASTM non ASTM	SW846-7000E		Flame Atomic Ab		10 µg/wipe	X
*if no box is checked, non-ASTM	SW846-6010B o		ICP-AES		1.0 µg/wipe	
Wipe is assumed	SW846-7000B/7		Graphite Furna		0.075 µg/wipe	
TCLP	SW846-1311/7000B/S SW846-1131/SW846-6		Flame Atomic Absorption		0.4 mg/L (ppm)	
Soil	SW846-7000E		ICP-AES Flame Atomic Absorption		0.1 mg/L (ppm) 40 mg/kg (ppm)	
3011	SW846-7010		Graphite Furnace AA		0.3 mg/kg (ppm)	
I	SW846-6010B o	r C	ICP-AES		2 mg/kg (ppm)	
Wastewater Unpreserved	SM3111B/SW846-1	7000B	Flame Atomic Ab	ATTENDED TO SELECT AND ADDRESS OF THE PARTY	0.4 mg/L (ppm)	
Preserved with HNO ₃ pH < 2	EPA 200.9		Graphite Furna	CHRONICA CALL TO SECURE OF THE	0.003 mg/L (ppm)	
Drinking Water Unpreserved	EPA 200.7		ICP-AES Graphite Furna		0.020 mg/L (ppm) 0.003 mg/L (ppm)	
Preserved with HNO ₃ pH < 2			ICP-MS	G0 7V1	0.003 mg/L (ppm)	
	40 CFR Part 5	0	ICP-AES		12 µg/filter	
<u> </u>	TSP/SPM Filter 40 CFR Part 50		Graphite Furna	ce AA	3.6 µg/filter	
Other:						
Name of Sampler: Ryan Sokolovsky		Signa	ture of Sample			
Sample # Locati	on		Volume/Are	a	Date/Time S	ampled
5-41 Range Lobb		7 8	+ 1		11/20/15	650
5- 92 Gumenila						-
5-43 Elevatur Eguip	. Roomento	æ			Commission of Demonstration (Control of Control of Cont	
5-49 Rance HVAC Vet Ray 1					*.	**
5-45 Range Vert	(Tet) Day 2	2004 . Whitehold State Committee Com			*	••
Client Sample #'s Total # of Samples:						
Relinquished (Client): Date:			/15	Time:	2,00	
Received (Lab): Date:			11/20/15	Time:	5:17	
	رس در این سما خانوردیشینسولییشاللللله، منظم	Title (No. 1000) September (1000)			enough spould-appropriate over the second of	Account to the second party.



LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

#331521199

LATesting 11652 Knott Avenue Unit F5

Garden Grove, CA 92841

FAX: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time	Sampled
5-96	Range Kent (Iv) Ray 19	2 61 17	4/20/15	6:50
5- +7	Ext side HVAC vent & 2		10	-1
5-48	Worth Range Door I (Int.)		•.	*.
	Middle Royce Par 2 (Jut).		4	t
5.50	South Raye Dor (Int.)		¥,	* _
5-51	Men's Restroom entrance		5	
s e se	outside Guranth supplies		~	100
5.53	Missle Rouse Dista (Int.)			*
	Est. Fire exit		•	8:00
5-55	Range Vent Entery + Duor		(,	8:20
5.56	Range bent top of structure		4	8:00
5-57	Ext. Range vert on pipe		40	8:40
5 - 58	are a deli	Q+	**	9:90
- 59		24 +	* #	9.
5 - 63	Dance Studio est. door		*.	•
-61	Office ext. door			٨.
5 - 62			10	<i>P</i> .
- 63	Range best but. Stack floor Range best Middle stack		<i>c.</i>	-,
omments/Sp	ecial Instructions:			
and the second				

Page 2 of 3 pages

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LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

LATesting 11652 Knott Avenue

Unit F5

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

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APPENDIX C CERTIFICATIONS







SURFACE LEAD & EXTERIOR PAINT CHIP SAMPLING

VETERAN'S PARK COMMUNITY CENTER BUILDING 6364 ZINDELL AVENUE COMMERCE, CA 90040

Prepared For:

City of Commerce 865 South Figueroa Street, Suite 3000 Los Angeles, CA 90017

Hillmann Project Number: C3-6528a

March 31, 2016



March 31, 2016

Mr. Paul Banuelos City of Commerce 865 South Figueroa Street, Suite 3000 Los Angeles, CA 90017

RE:

Surface Lead & Exterior Paint Chip Sampling

6364 Zindell Avenue Commerce, CA 90040

Hillmann Project Number: C3-6528

Dear Mr. Banuelos:

Hillmann Consulting, LLC, is pleased to provide the results of our Surface Lead & Paint Chip Sampling Inspection of the above referenced property. The survey was performed in accordance with Environmental Protection Agency/ASTM recommended procedures.

This report is for the exclusive use of the entities named on the front cover, and no other party shall have any right to rely on any service provided by Hillmann Consulting, LLC, without prior written consent.

We appreciate the opportunity to provide environmental consulting services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact the Project Manager at 714-634-9500.

Very Truly Yours,

Hillmann Consulting, LLC

Vregon Shapper

Greg Shaffer

Project Manager

Ryan Terwilliger, CLIA # 22479

In filling

Sr. Project Manager

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1.0 EXECUTIVE SUMMARY

1.1 General

On March 16, 2016 Hillmann Consulting, LLC (Hillmann) conducted surface and paint chip sampling for lead of the property located at 6364 Zindell Avenue, City of Commerce, California. This service was performed at the request of Mr. Paul Banuelos, Project Manager for the City of Commerce, and Swinerton Management & Consulting.

The surface lead and paint chip sampling survey was performed in general accordance with the Scope of Work as prepared by Hillmann and accepted by the City of Commerce. Site survey work included lead Surface sampling in the following areas:

- Side yard pavement that contains exhaust fan from basement, full length of building
- Top of CMU wall at side yard, that contains exhaust fan from basement
- Basketball courts and stands/bleachers
- Putting green pavement
- Metal grate located at side yard

And paint chip sampling in the following areas:

- Pavement on western side yard of the building
 - West block wall near basketball court
 - Exterior exhaust vent
 - Fan room exhaust vent.

The surface lead and paint chip sampling survey was performed by Mr. Gregory Shaffer, a California Department of Public Health Certified Sampling Technician (#25690) under the direction of Mr. Ryan Terwilliger, a Department of Health Certified Lead Inspector/Risk Assessor (#22479).

1.2 Sampling Strategy/Findings

- Forty-five (45) surface dust wipe samples were analyzed for lead. The samples were taken off various surfaces including concrete pavement, concrete block walls, and metal seating. All samples were taken off surfaces that were flat in the areas designated in the above mentioned and agreed upon scope of work. While on-site, Hillmann utilized professional judgement in choosing locations of additional surface samples to help meet the client's needs. Measured lead levels in the subject areas ranged from below the limit of detection <10 μg/ft² 1,900 μg/ft². The Environmental Protection Agency (EPA) considers exterior horizontal surfaces with levels of lead equal to or above 400 μg/ft² to be contaminated with lead.
- Four (4) paint chip samples were analyzed for lead. The sample locations were chosen by the City of Commerce. Currently, the State of California, HUD, and the Environmental

Protection Agency (EPA) define lead-based paint as paint or other surface coating with lead content equal to or greater than 1.0 milligram per square centimeter (mg/cm²) of surface area (via XRF instrumentation) or greater than or equal to 0.5% by weight, 5,000 ppm, or 5,000 mg/kg. However, a more stringent level is established by the Los Angeles County Department of Health Services (LACDHS) which defines "dangerous level of lead-bearing substances" as paint or other surface coating with lead in excess of 0.7 mg/cm² (0.35% by weight) (Los Angeles County Code, Title 11, Chapter 11.28, Section 11.28.010 C). Levels of lead in paint ranged from 0.054% wt. to 2.3% wt.

1.3 Observations

On March 16, 2016, Hillmann was on-site at the Veteran's Park Community Center Building at 8:00 AM and met with Mike, the facilities manager at the Property. Mike informed Hillmann that the areas to be inspected were accessible.

Hillmann walked the side yard on the western side of the building, the basketball courts, fan room, and putting green areas. Hillmann noted nothing out of the ordinary at these locations.

It was also requested that Hillmann observe and photograph the exhaust fan flue on the side yard in order to determine whether or not it was closed. Hillmann determined that the flue was closed from inside the fan room. Hillmann also observed evidence that the exterior exhaust opening and doors to the fan room were previously sealed with duct tape and poly sheeting, which was confirmed by Mr. Paul Banuelos. Some residual tape was observed, however, nearly all poly sheeting had been removed or disintegrated.

2.0 INTRODUCTION

2.1 General

On March 16, 2016 Hillmann Consulting, LLC (Hillmann) conducted surface and paint chip sampling for lead on the property located at 6364 Zindell Avenue, City of Commerce, California. This service was performed at the request of Mr. Paul Banuelos, Project Manager for the City of Commerce, and Swinerton Management & Consulting.

The inspection and sampling were performed by a trained technician using Environmental Protection Agency (EPA) and CAL/OSHA sampling techniques. Samples were analyzed at LA Testing in Garden Grove, California, a certified NVLAP Laboratory # 200232-0.

2.2 Sampling Parameters and Methodology

Hillmann selected the sampling parameters based on consultations with the client, the laboratories performing the analysis, and our in-house experts. The chosen parameters were lead in surface dust and paint as well as an inspection for a general screening to identify if potential hazards exist, and at what levels if they do.

The City of Commerce instructed Hillmann to collect lead wipe samples from various specified locations including: the side yard pavement, exhaust fan, top of CMU wall, basketball courts, basketball stands, basketball bleachers, exhaust fan flue, and putting green pavement. Paint samples from concrete paving at side yard, exhaust fan, and the CMU block wall were also requested to be sampled.

2.2.1 Lead Surface Sampling

Surface dust samples were collected using "Ghost Wipes TM" covering an area of 12 square inches in accordance with EPA Method 6010B. The Method 6010B quantifies the total amount of particles collected on the Ghost Wipe as found upon each surface.

The California Department of Public Health under Title 17 has set in place a definition of lead-contaminated dust which is regulated by the following quantities:

- Interior floors 40 μg/ft²
- Interior horizontal surfaces 250 μg/ft²
- Exterior floors and exterior horizontal surfaces 400 μg/ft²

2.2.2 Paint Chip Sampling

Samples of suspect paint were collected from various surfaces throughout the interior of the spaces and submitted to LA Laboratories for total lead analysis utilizing Flame AAS (SW 846 3050B*/7000B).

Currently, the State of California, HUD, and the Environmental Protection Agency (EPA) define lead-based paint as paint or other surface coating with lead content equal to or greater than 1.0 milligram per square centimeter (mg/cm²) of surface area or greater than or equal to 0.5% by weight or 5,000 ppm. However, a more stringent level is established by the Los Angeles County Department of Health Services (LACDHS) which defines "dangerous level of lead-bearing substances" as paint or other surface coating with lead in excess of 0.7 mg/cm² (0.35% by weight) (Los Angeles County Code, Title 11, Chapter 11.28, Section 11.28.010 C).

3.0 RESULTS

3.1 Surface Lead Sample Results

Sample Number	Date	Location	Area	Results	Standard*
S-1	3/16/2016	CMU wall-side yard	144 in ²	96 μg/ft²	400 μg/ft²
S-2	3/16/2016	CMU wall-side yard	144 in ²	24 μg/ft²	400 μg/ft²
S-3	3/16/2016	CMU wall-side yard	144 in ²	54 μg/ft²	400 μg/ft²
S-4	3/16/2016	CMU wall-side yard	144 in ²	650 μg/ft ²	400 μg/ft²
S-5	3/16/2016	CMU wall-side yard	144 in ²	1,900 µg/ft ²	400 μg/ft ²
S-6	3/16/2016	CMU wall-basketball court	144 in ²	1,200 μg/ft ²	400 μg/ft²
S-7	3/16/2016	CMU wall-basketball court	144 in ²	1,400 μg/ft ²	400 μg/ft²
S-8	3/16/2016	CMU wall-basketball court	144 in ²	300 μg/ft ²	400 μg/ft²
S-9	3/16/2016	Pavement, side yard	144 in ²	62 μg/ft²	400 μg/ft²
S-10	3/16/2016	Pavement, side yard	144 in ²	55 μg/ft²	400 μg/ft ²
S-11	3/16/2016	Pavement, side yard	144 in²	1,300 μg/ft ²	400 μg/ft ²
S-12	3/16/2016	Pavement, side yard	144 in ²	670 μg/ft ²	400 μg/ft²
S-13	3/16/2016	Pavement, side yard	144 in ²	1,100 μg/ft ²	400 μg/ft ²
S-14	3/16/2016	Side yard, drain metal grate	144 in²	1,700 µg/ft ²	400 μg/ft²
S-15	3/16/2016	Side yard, exhaust flue	144 in²	630 μg/ft ²	400 μg/ft²
S-16	3/16/2016	South Basketball court, pavement	144 in²	18 μg/ft²	400 μg/ft²
S-17	3/16/2016	South Basketball court, pavement	144 in²	< 10 μg/ft²	400 μg/ft²
S-18	3/16/2016	South Basketball court, pavement	144 in ²	< 10 μg/ft²	400 μg/ft²
S-19	3/16/2016	North Basketball court, pavement	144 in ²	< 10 μg/ft²	400 μg/ft²
S-20	3/16/2016	North Basketball court, pavement	144 in²	< 10 μg/ft²	400 μg/ft²
S-21	3/16/2016	North Basketball court, pavement	144 in²	17 μg/ft²	400 μg/ft²
S-22	3/16/2016	Side court bench	144 in²	< 10 μg/ft²	400 μg/ft²
S-23	3/16/2016	Side court bench	144 in²	< 10 μg/ft ²	400 μg/ft²
S-24	3/16/2016	Bleacher seat	144 in²	< 10 μg/ft²	400 μg/ft²
S-25	3/16/2016	Bleacher seat	144 in²	25 μg/ft²	400 μg/ft²
S-26	3/16/2016	Bleacher seat	144 in²	28 μg/ft²	400 μg/ft ²
S-27	3/16/2016	Bleacher seat	144 in²	< 10 μg/ft²	400 μg/ft²
S-28	3/16/2016	Stands, pavement	144 in²	54 μg/ft²	400 μg/ft²
S-29	3/16/2016	Stands, pavement	144 in ²	17 μg/ft²	400 μg/ft²
S-30	3/16/2016	Stands, pavement	144 in²	< 10 μg/ft ²	400 μg/ft²
S-31	3/16/2016	Stands, pavement	144 in²	26 μg/ft²	400 μg/ft²
S-32	3/16/2016	Stand hand rail	144 in²	34 μg/ft²	400 μg/ft²
S-33	3/16/2016	Stand hand rail	144 in²	28 μg/ft²	400 μg/ft²
S-34	3/16/2016	Putting green, pavement	144 in²	150 μg/ft²	400 μg/ft²

Sample Number	Date	Location	Area	Results	Standard*
S-35	3/16/2016	Putting green, pavement	144 in ²	31 μg/ft ²	400 μg/ft ²
S-36	3/16/2016	Putting green, pavement	144 in ²	68 μg/ft ²	400 μg/ft ²
S-37	3/16/2016	Putting green, pavement	144 in ²	78 μg/ft²	400 μg/ft ²
S-38	3/16/2016	CMU wall, putting green	144 in ²	48 μg/ft²	400 μg/ft²
S-39	3/16/2016	Putting green, pavement	144 in²	160 μg/ft²	400 μg/ft²
S-40	3/16/2016	Putting green, pavement	144 in²	81 μg/ft ²	400 μg/ft²
S-41	3/16/2016	Putting green, pavement	144 in ²	28 μg/ft ²	400 μg/ft²
S-42	3/16/2016	Putting green, pavement	144 in ²	13 μg/ft²	400 μg/ft ²
S-43	3/16/2016	Putting green, CMU wall	144 in ²	< 10 μg/ft²	400 μg/ft²
S-44	3/16/2016	Putting green, CMU wall	144 in ²	< 10 μg/ft ²	400 μg/ft²
S-45	3/16/2016	Putting green, CMU wall	144 in ²	11 μg/ft²	400 μg/ft²

^{*} Note: The Environmental Protection Agency (EPA) recommends that surfaces and/or objects contaminated with lead do not exceed 40 μ g/ft² for interior floors and 400 μ g/ft² for exterior horizontal surfaces.

3.2 Paint Chip Sample Results

Sample Number	Date	Location	Area	Results	Standard
C-1	3/16/2016	Side guard, concrete	144 in²	0.054% wt	0.35% wt
C-2	3/16/2016	Basketball court, CMU wall	144 in ²	0.085% wt	0.35% wt
C-3	3/16/2016	Side yard, exhaust vent	144 in ²	0.50% wt	0.35% wt
C-4	3/16/2016	Fan room, exhaust vent	144 in ²	2.3% wt	0.35% wt

3.3 Findings

Forty-five (45) surface samples were analyzed for lead. The samples were taken off of various surfaces around the exterior portions of the facility. Measured lead levels in the subject areas ranged from below the limit of detection <10 μ g/ft² to 1,900 μ g/ft². The Environmental Protection Agency (EPA) considers exterior floor surfaces with levels of lead greater than or equal to 400 μ g/ft² to be contaminated with lead.

Four (4) paint chip samples were analyzed for lead. The samples were considered "area" samples. Measured lead levels in the subject spaces ranged from 0.054% wt. – 2.3% wt. The Los Angeles County Department of Health Services (LACDHS) defines "dangerous level of lead-bearing substances" as paint or other surface coating with lead with levels of lead greater than or equal to 0.7 mg/cm² (0.35% by weight).

3.4 References

The EPA requires we distribute the booklet *Renovate Right* with all lead screening reports and a copy is attached to this report. This booklet can also be downloaded from http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf.

Additional reference materials can be found on the EPA's Lead website at: http://www.epa.gov/lead/pubs/leadinfo.htm#resources

A copy of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing can be downloaded from http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm

A copy of EPA's Lead Debris memo of July 31, 2000 can be found at http://www.epa.gov/oppt/lead/pubs/hhwmemo-july00fnl.pdf.

4.0 DISCUSSION

While on-site, Hillman performed surface and paint chip sampling and observed facility work conditions.

4.1 Lead

According to OSHA Fact Sheet 93-49, Lead Exposure in Constructions, "Lead is a cumulative and persistent toxic substance that poses a serious health risk. A rigorous housekeeping program and adherence to basic personal hygiene practices will minimize employee exposure to lead. In addition, these two elements of the worker protection program will help to prevent taking lead-contaminated dust out of the firing range and home to the workers' families, thus ensuring that the duration of lead exposure does not extend beyond the workplace and providing added protection to employees and their families."

4.2 Lead Wipes

All surfaces determined to be contaminated with lead (> $400 \mu g/ft^2$) were located to the southeast of the opening of the basement exhaust fan flue. These surfaces included the pavement on the side yard and the top of the CMU wall along the southwestern site boundary. The sample located farthest from the flue was sample S-7, which is located at the top of the CMU wall near the half-court line of the southwestern basketball court. No other surfaces returned with levels of lead above the EPA limit.

4.3 Lead Paint Chips

The exterior and interior of the basement exhaust fan flue was determined to be coated with lead based paint. The painted pavement in the side yard and the CMU wall along the southwestern site boundary had detectable levels of lead but are not considered to be lead based paint.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on surface dust sample results, Hillmann offers the following recommendations:

• A formal scope of work should be compiled to solicit a remediation contractor to adequately address the areas confirmed to contain residual lead dust levels above the EPA threshold. The scope of work should include remediation engineering controls, and methods to properly decontaminate areas impacted by elevated residual dust levels. Work shall be performed by workers with appropriate lead awareness training and experience handling and working around lead hazards.

Based on the findings of the Lead Based Paint screening, Hillmann offers the following recommendations:

- Samples C-3 and C-4 contained lead in concentrations greater than or equal to 0.35% wt. as measured by laboratory analysis. Hillmann recommends that lead safe work practices be followed during the renovation and/or demolition of the components which tested positive for lead based paint or are considered to be lead-containing coatings, including compliance with all OSHA requirements and directives.
- Samples C-1 and C-2 contained detectable amounts of lead based upon the limitations of the
 analytical method. The lead present in building materials with any detectable concentration
 must be removed by workers with lead awareness training, and the contractor must provide
 initial employee exposure monitoring to evaluate worker exposure during work that disturbs
 these identified lead-containing materials according to requirements set forth in 8 CCR
 1532.1.
- Waste items generated during an abatement or demolition project should be properly sampled and profiled to determine the final disposition of the waste.

9

APPENDIX A

MAPS

S-26 S-34 S-40 S-43 S-29 **S-25 S-33** S-38 S-37 5-22, 23 S-45 S-30 S-31 S-16 8-20 S-8 **S-21 S-2 8-9** S-1 da Agireseallentes

VETERAN'S PARK COMMUNITY

6364 ZINDELL AVENUE,

CITY OF COMMERCE, CA 90040



Lead Wipe Sample Locations & Map

Legend X = Sample Location = No Lead Detected

= Lead Below EPA
= Lead Above EPA

APPENDIX B ANALYTICAL DOCUMENTATION



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

TING http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: CustomerID:

331604784 HILL65

CustomerPO: ProjectID:

Attn: Gregory Shaffer **Hillmann Consulting** 1745 West Orangewood Avenue Suite 110

(714) 634-9500

Phone: Fax:

Received:

03/16/16 1:45 PM

Collected:

3/16/2016

Orange, CA 92868

Project: C3-6528 @-

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected	Analyzed	Area Sampled	RDL	Lead Concentration
S-1 331604784-0001	3/16/2016 Site: CMU	3/17/2016 J wall-side yar	144 in² d	10 μg/ft²	96 μg/ft²
S-2 331604784-0002	3/16/2016 Site: CMU	3/17/2016 J wall-side yan	144 in² d	10 μg/ft²	24 μg/ft²
S-3 331604784-0003		3/17/2016 J wall-side yar	144 in² d	10 μg/ft²	54 μg/ft²
S-4 331604784-0004	3/16/2016 Site: CML	3/17/2016 J wall-side yard	144 in² d	20 μg/ft²	650 µg/ft²
S-5 331604784-0005	3/16/2016 Site: CMU	3/17/2016 wall-side yard	144 in²	50 μg/ft²	1900 μg/ft²
S-6 331604784-0006	3/16/2016 Site: CME	3/17/2016 wall-basketba	144 in² all court	50 μg/ft²	1200 µg/ft²
S-7 331604784-0007	3/16/2016 Site: CME	3/17/2016 wall-basketba	144 in² all court	50 μg/ft²	1400 µg/ft²
S-8 331604784-0008		3/17/2016 wall-basketba	144 in² all court	10 μg/ft²	300 µg/ft²
S-9 331604784-0009	3/16/2016 Site: Pave	3/17/2016 ment, side yaı	144 in²	10 μg/ft²	62 µg/ft²
S-10 331604784-0010	3/16/2016 Site: Pave	3/17/2016 ment, side yar	144 in²	10 μg/ft²	55 μg/ft²
S-11 331604784-0011	3/16/2016 Site: Pave	3/17/2016 ment, side yar	144 in²	50 μg/ft²	1300 μg/ft²

Michael Chapman Michael Chapman, Laboratory Manager

or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

http://www.LATesting.com

Phone/Fax: (714) 828-4999 / (714) 828-4944

gardengrovelab@latesting.com

LA Testing Order: CustomerID:

ProjectID:

331604784 HILL65

CustomerPO;

Attn: Gregory Shaffer Hillmann Consulting 1745 West Orangewood Avenue

Fax:

(714) 634-9500

Phone:

Received:

03/16/16 1:45 PM

Collected:

3/16/2016

Orange, CA 92868

Suite 110

Project: C3-6528 @-

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyz	ged Area Sampled	RDL	Lead Concentration
S-12 331604784-0012	3/16/2016 3/17/20 Site: Pavement, si		10 μg/ft²	670 μg/ft²
S-13 331604784-0013	3/16/2016 3/17/20 Site: Pavement, si		50 μg/ft²	1100 μg/ft²
S-14 331604784-0014	3/16/2016 3/17/20 Site: Side yard, dra		50 μg/ft²	1700 μg/ft²
S-15 331604784-0015	3/16/2016 3/17/20 Site: Side yard exh		20 μg/ft²	630 µg/ft²
S-16 331604784-0016	3/16/2016 3/17/20 Site: S. basketball		10 μg/ft²	18 μg/ft²
S-17 331604784-0017	3/16/2016 3/17/20 Site: S. basketball		10 μg/ft²	<10 µg/ft²
S-18 331604784-0018	3/16/2016 3/17/2015 Site: S. basketball		10 μg/ft²	<10 µg/ft²
S-19 331604784-0019	3/16/2016 3/17/201 Site: N. basketball		10 μg/ft²	<10 µg/ft²
S-20 331604784-0020	3/16/2016 3/17/201 Site: N. basketball		10 μg/ft²	<10 µg/ft²
S-21 331604784-0021	3/16/2016 3/17/201 Site: N. basketball		10 μg/ft²	17 μg/ft²
S-22 331604784-0022	3/16/2016 3/17/201 Site: Side court ber		10 μg/ft²	<10 µg/ft²

Michael Chapman, Laboratory Manager

or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406



Attn: Gregory Shaffer

Hillmann Consulting

LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

1745 West Orangewood Avenue

Phone/Fax: (714) 828-4999 / (714) 828-4944

gardengrovelab@latesting.com

(714) 634-9500

LA Testing Order: 331604784

HILL65

CustomerID:

CustomerPO:

ProjectID:

Phone: Fax:

Received:

03/16/16 1:45 PM

Collected:

3/16/2016

Suite 110 **Orange, CA 92868**

Project: C3-6528 0-

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	Area Sampled	RDL	Lead Concentration
S-23 331604784-0023	3/16/2016 3/17/2016 Site: Side court pavem	144 in² ent	10 μg/ft²	<10 µg/ft²
S-24 331604784-0024	3/16/2016 3/17/2016 Site: Bleacher seat	144 in²	10 μg/ft²	<10 µg/ft²
S-25 331604784-0025	3/16/2016 3/17/2016 Site: Bleacher seat	144 in²	10 μg/ft²	25 μg/ft²
S-26 331604784-0026	3/16/2016 3/17/2016 Site: Bleacher seat	144 in²	10 μg/ft²	28 μg/ft²
S-27 331604784-0027	3/16/2016 3/17/2016 Site: Bleacher seat	144 in²	10 μg/ft²	<10 μg/ft²
S-28 331604784-0028	3/16/2016 3/17/2016 Site: Stands, pavemen	144 in²	10 μg/ft²	54 μg/ft²
S-29 331604784-0029	3/16/2016 3/17/2016 Site: Stands, pavemen	144 in² t	10 μg/ft²	17 μg/ft²
S-30 331604784-0030	3/16/2016 3/17/2016 Site: Stands, pavement	144 in² t	10 μg/ft²	<10 µg/ft²
S-31 331604784-0031	3/16/2016 3/17/2016 Site: Stands, pavement	144 in²	10 μg/ft²	26 μg/ft²
S-32 331604784-0032	3/16/2016 3/17/2016 Site: Stand hand rail	144 in²	10 μg/ft²	34 μg/ft²
S-33 331604784-0033	3/16/2016 3/17/2016 Site: Stand hand rail	144 in²	10 μg/ft²	28 μg/ft²

Michael Chapman, Laboratory Manager

or other approved signatory

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406



Orange, CA 92868

LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

ING http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: 331604784 CustomerID: HILL65

CustomerPO: ProjectID:

Attn: Gregory Shaffer Hillmann Consulting 1745 West Orangewood Avenue Suite 110

Fax:

(714) 634-9500

Received:

03/16/16 1:45 PM

Collected:

Phone:

3/16/2016

Project: C3-6528 a

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyze	d Area Sampled	RDL	Lead Concentration
S-34 331604784-0034	3/16/2016 3/17/2016 Site: Putting green,		10 μg/ft²	150 μg/ft²
S-35 331604784-0035	3/16/2016 3/17/2010 Site: Putting green,		10 μg/ft²	31 µg/ft²
S-36 331604784-0036	3/16/2016 3/17/2016 Site: Putting green,		10 μg/ft²	68 µg/ft²
S-37 331604784-0037	3/16/2016 3/17/2016 Site: Putting green,		10 μg/ft²	78 μg/ft²
S-38 331604784-0038	3/16/2016 3/17/2016 Site: CMU wall,puttir		10 μg/ft²	48 μg/ft²
S-39 331604784-0039	3/16/2016 3/17/2016 Site: Putting green, p		. 10 μg/ft²	160 µg/ft²
S-40 331604784-0040	3/16/2016 3/17/2016 Site: Putting green, p		10 μg/ft²	81 µg/ft²
S-41 331604784-0041	3/16/2016 3/17/2016 Site: Putting green, p		10 μg/ft²	28 μg/ft²
S-42 331604784-0042	3/16/2016 3/17/2016 Site: Putting green, p		10 μg/ft²	13 µg/ft²
S-43 331604784-0043	3/16/2016 3/17/2016 Site: Putting green C		10 μg/ft²	<10 µg/ft²
S-44 331604784-0044	3/16/2016 3/17/2016 Site: Putting green C		10 μg/ft²	<10 µg/ft²

Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: CustomerID:

331604784

HILL65

CustomerPO: ProjectID:

Attn: Gregory Shaffer

Hillmann Consulting

1745 West Orangewood Avenue

Suite 110

Orange, CA 92868

Phone:

(714) 634-9500

Fax:

Received:

03/16/16 1:45 PM

Collected:

3/16/2016

Project: C3-6528 0~

Test Report: Lead in Dust by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription Collected Analyzed Area Sampled RDL Lead Concentration 3/16/2016 3/17/2016 144 in² S-45 10 µg/ft² 11 μg/ft² 331604784-0045 Site: Putting green CMU wall

> Michael Chapman, Laboratory Manager or other approved signatory

Michael Chapman

Sample received in acceptable condition unless otherwise noted. Reporting limit is 10 ug/wipe. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied

Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC-ELLAP Accredited #101650, CA ELAP 1406

331604784



Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

LATesting Unit F5

11652 Knott Avenue

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Company : Hillmann Consulting			EMSL-Bill to: / Different Same If Bill to is Different note instructions in Comments**			
Street: 1745 W. Orangewood Ave. Su	ite #110) n	hird Party Billing requires writte	en authorization from third	nartv	
City: Orange State/	Province: CA	Zip/Postal Code: 92868 Country: United States				
Report To (Name): Gregory Shaffer		Telephone #: 7146349500				
Email Address: gshaffer@hillmanngre	oup.com	Fax #:		Purchase Orde	г:	
Project Name/Number: C3- 6528 a.		Please P	Provide Results: FA	X /E-mail	Mail	
U.S. State Samples Taken: CA		CT Same	oles: Commercial/Taxa	ble Residential/Ta	x Exempt	
T	urnaround Time (TA	AT) Option	ns* - Please Check		LA EXOMPT	
3 Hour 6 Hour 24	Hour 48 Hou	r 17	2 Hour 96 Hour		2 Week	
*Analysis complete		SL's Terms a	nd Conditions located in the P			
Matrix	Method		Instrument	Reporting Limit	Check	
Chips % by wt. mg/cm² ppm	SW846-7000	В	Flame Atomic Absorption	0.01%		
Air	NIOSH 7082	2	Flame Atomic Absorption	4 μg/filter		
	NIOSH 710	5	Graphite Furnace AA	0.03 µg/filter		
	NIOSH 7300 mod	dified	ICP-AES/ICP-MS	0.5 µg/filter		
Wipe* ASTM Non ASTM	SW846-7000	В	Flame Atomic Absorption	10 µg/wipe	1X	
non ASTM [1]	SW846-6010B	or C	ICP-AES	1.0 µg/wipe		
Wipe is assumed	SW846-7000B/7	7010	Graphite Furnace AA	0.075 µg/wipe		
TCLP	SW846-1311/7000B/5	SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)		
	SW846-1131/SW846-6		ICP-AES	0.1 mg/L (ppm)		
Soil	SW846-7000I		Flame Atomic Absorption	40 mg/kg (ppm)		
	SW846-7010 SW846-6010B o		Graphite Furnace AA	0.3 mg/kg (ppm)		
	SM3111B/SW846-		ICP-AES	2 mg/kg (ppm)		
Wastewater Unpreserved	EFA 200.9	70000	Flame Atomic Absorption Graphite Furnace AA	0.4 mg/L (ppm) 0.003 mg/L (ppm)		
Preserved with HNO₃ pH < 2 ☐	EPA 200.7		ICP-AES	0.003 mg/L (ppm)		
Drinking Water Unpreserved	EPA 200.9		Graphite Furnace AA	0.003 mg/L (ppm)		
Preserved with HNO ₃ pH < 2	EPA 200.8		ICP-MS	0.001 mg/L (ppm)		
TSP/SPM Filter	40 CFR Part 5		ICP-AES	12 µg/filter		
Other:	40 CFR Part 5	0	Graphite Furnace AA	3.6 µg/filter		
				<u> </u>		
Name of Sampler:		Signa	ture of Sampler:			
Sample # Locati		1 6	Volume/Area	Date/Time	Sampled	
5-1 Cinu Wall-Sd 5-2 Chin Wall-Sd	e year	141	The second section of the second section of the second section of the second section section as a second section secti	3/6/16		
5 - 4 Chiu Will - Side	40.01	1				
5-3 "	., 0		manufacturent indepute 186.º Ballacenseruste Statuslas			
5-4	1,		 Market A Addison Strong of the Addison Strong of the			
5-5 11	11		U	J		
Client Sample #'s S-L - S-	45		Total # of Sa	imples: 4°		
Relinquished (Client): Yuyy	M Date:	3//	6// Time:	1342		
Received (Lab):	Date:	3.14	Time:	1345	***	
Comments: lease se Kristine Soweno (kse ona@hillmanegroup com) isn all	invoices		and the state of t	A sparrage and the spar		
IIITe: Hilmann Consulting, 1745 W. Crangewood Ave. Sulta #1 Itention, Kristine Savona Phone. / 146349500 Email Issavonach	10 Orange CA 62998 United Sta	sî ar e				

Page 1 of ______ pages

331604784



LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

LATesting Unit F5

11652 Knott Avenue

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
5-6	Chin Wall - Bosketsell Court	19+2	3//6//6
5-7		İ	
5-8	1		
5-9	Pavement, side yard		
5-10			
5-11			
5-12			
5-13	4		
5-14	Side yard Problemake Grah		
5-16	Side yord exhaust flue.		
	S. Beslatbell Court, personer		
5-17			
5-18	4		
5-19	N. Biskethell Cari, Paremat		
5-70			
5-21	Ψ		
522	Side Cout Bench		
5.23	Side Cour Pavement	Ţ	1
Please oc Kristine Saw BillTo: Hillmann Consu	Decial Instructions: one (#sevene@hilmanngroup close) sin 28 instrices damp, 1745 W. Orangewood Ave., Suite #110, Orange, CA, 192668. United States one Prone 7145349509 Email knavens@hilmanngroup.colo Purchase Order		

Page 2 of 4 pages



331604784

LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

LATestin	
Unit F5	

Unit F5 11652 Knott Avenue

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
5-24	Bleecher, Seet	142	3/14/16
5-25	Bleacher, Sect		1
5-20			
2-27	J		
5-28	Stands, pavement		
5-21			
5-30			
5-31	J		
5-32	Stands, hand rail		
5-33			
5-34	Patting Green, pavement		
5-35			
5-36			
5-37	J		
5-38	CMu Well, Patting Green		
5-39	Pattly Green parement		
5-40	+ '		
5-41		J	*
Please of Kristine Sous BillTo: Hillmann Comad	ecial Instructions: na (ksavora@hillmanngroup com) on all invoices ing. 1745 W. Orangedond Ava. വാര #110, Orange, CA, വേളില് United States na Phone: 7148349500 Eninel ksaviina @hillmanngroup com Purchase Ordon		

Page 3 of 4 pages



331604784

LEAD (Pb) CHAIN OF CUSTODY

EMŜL	ORDER		
		,,.	

LATesting Unit F5

11652 Knott Avenue

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled		
5-42	Patting Green, pavement	1413	3/16/14		
5-43	Patting Green, pavements Patting Green CM Well				
S-43 S-44 S-45					
5-45	U U	V	4		
		·			
	*				
Comments/Special Instructions: Flease or Krighter Saudna (knavona@hillmanngroup com) on 38 invokras BillTo Hillmann Crossiting, 1745 W. Crangewood Ave., Suite #110, Orange. CA, 92609, Unded Status Attention. Kristine Saudna Phone. 7146349500 Email: ksavona@hillmanngroup.com Purchate. Order					

Page ____ of ____ pages

APPENDIX C CERTIFICATIONS





LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead I	dazard Evaluation Marc	h 16, 2016			
Section 2 — Type of Lead I	Hazard Evaluation (Chec	k one box only)			
Lead Inspection	Risk assessment	Clearance Inspection	Other (specify) Renov	ration Survey, Lead Wipe sampling	
Section 3 — Structure Whe	ere Lead Hazard Evaluat	ion Was Conducted			
Address [number, street, apartm	ent (if applicable)]	City	County	Zip Code	
6364 Zindell Avenue		Commerce	Los Angeles	90040	
Construction date (year) of structure	Type of structure Multi-unit building	School or daycare	Children living in str	ucture?	
1960s	Single family dwelling	Other Public Park	Don't Know	ı	
Section 4 — Owner of Stru	cture (if business/agenc	y, list contact person)			
Name			Telephone number		
Commerce City - Paul I	Banuelos		213-814-8635		
Address [number, street, apartm	ent (if applicable)]	City	State	Zip Code	
865 S. Figueroa Street		Los Angeles	CA	90017	
Section 5 — Results of Lea	d Hazard Evaluation (ch	eck all that apply)			
No lead-based paint detected No lead hazards detected	ted Intact lead	d-based paint detected	Deteriorated learninated soil found	ad-based paint detected Other	
Section 6 — Individual Con	ducting Lead Hazard Ev	aluation			
Name			Telephone number		
Ryan Terwilliger			(714) 634-9500		
Address [number, street, apartme	ent (if applicable)]	City	State	Zip Code	
1745 W. Orangewoo	d Avenue #110	Orange	CA	92868	
CDPH certification number		Signature		Date	
22479				3/30/2016	
Name and CDPH certification nu	nber of any other individuals	conducting sampling or testing	(if applicable)		
Gregory Shaffer - 2	5960				
Section 7 — Attachments					
A. A foundation diagram or sk lead-based paint; B. Each testing method, devid C. All data collected, including	e, and sampling procedu	re used;	·		
First copy and attachments retain	ed by inspector	Third copy only (no a	ttachments) mailed or fax	red to:	
Second copy and attachments retained by owner		Childhood Lead Pois 850 Marina Bay Park	California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656		



LIMITED ASBESTOS AND LEAD INSPECTION



6364 ZINDELL AVE COMMERCE, CA 90040

Prepared For:

City of Commerce 865 South Figueroa St. Suite 3000 Los Angeles, California 90017

Hillmann Project Number: C3-6528b

March 31, 2016



March 31, 2016

Mr. Paul Banuelos City of Commerce 865 South Figueroa St. Suite 3000 Los Angeles, California 90017

RE: Hazardous Material Inspection Report

6364 Zindell Ave Commerce, CA 90040

Hillmann Project Number: C3-6528

Dear Mr. Banuelos:

Hillmann Consulting, LLC, is pleased to provide the results of our Limited Asbestos and Lead Inspection of the above referenced property. The survey was performed in accordance with Environmental Protection Agency/AHERA recommended procedures.

This report is for the exclusive use of the entities named on the front cover, and no other party shall have any right to rely on any service provided by Hillmann Consulting, LLC, without prior written consent.

We appreciate the opportunity to provide environmental consulting services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact the Project Manager at 714-634-9500.

Very Truly Yours,

Hillmann Consulting, LLC

Rennetts a. Thombugh

Kenneth A. Thornburgh, PH.D., CAC

Project Manager CAC # 92-0500 Ryan Terwilliger, CLIA # 22479

Project Manager

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		Appendix C	Guide to ACM Categories, Friability, Disturbance & Condition	
		Appendix D	Certifications	

1.0 EXECUTIVE SUMMARY

- On March 16, 2016 Hillmann Consulting (Hillmann) conducted a Limited Asbestos and Lead Based Paint Survey of the public facility, located at 6364 Zindell Avenue, Commerce, California. The facility was built in approximately 1971 and is about 38,150 square feet. The purpose of the Limited Asbestos and Lead Based Paint Survey was to identify potentially hazardous materials that may be impacted by the tenant improvements at the facility.
- The survey was performed in general accordance with the scope of work as prepared by Hillmann and accepted by Mr. Paul Banuelos, Project Manager for the City of Commerce and Swinerton Management and Consulting. Site survey work included an inspection of interior for Asbestos-Containing Building Materials (ACBM) and Lead-Based Paint (LBP) in the sub level 4 of the Property.
- The survey was performed by Mr. Gregory Shaffer, a California State Department of Public Health Certified Site Surveillance Technician (#13-5132) and State of California Department of Public Health Certified Lead Sampling Technician (#25690), and Mr. Jonathan McConnell a certified building inspector (ASI0824150005N7972) under the direction of Kenneth Thornburgh, Ph.D., a State of California Certified Asbestos Consultant (#92-0500) and Mr. Ryan Terwilliger, a California Department of Public Health (DOSH) Certified Lead Inspector/Risk Assessor (CLIA#22479).
- A summary of Asbestos materials that were found upon investigation at 6364 Zindell Ave Commerce, California included:
- Miscellaneous ACBM Yellow floor mastic and tan floor mastic.
- A summary of Lead Based Paint materials that were found upon investigation at 6364 Zindell Ave Commerce, California included:
- Lead Based Paint (LBP) (≥ 0.35% by weight or 3,500 ppm)

2.0 ASBESTOS SURVEY

On March 16, 2016, Mr. Gregory Shaffer and Jonathan McConnell of Hillmann, performed an asbestos inspection at the Veterans Park at 6364 Zindell Ave Commerce, California in order to identify accessible asbestos-containing building materials (ACBM). The inspection included the following: visual survey of the construction impacted materials, sampling plan development, material sampling and laboratory analysis of suspect asbestos-containing building materials (ACBMs).

A summary of the findings and conclusions of the asbestos inspection are provided below. This summary alone does not constitute the complete inspection. The report is intended to be read in its entirety.

2.1 Findings

The sampling of suspect-ACBM was conducted on March 16, 2016 following the provisions of 40 CFR Part 763.86. The analysis of suspect ACBM samples for asbestos was performed per Appendix A, Subpart F, 40 CFR Part 763, Section 1 via Polarized Light Microscopy (PLM), by LA Testing Lab Services located in Garden Grove, CA. LA Testing is an AIHA, EMLAP, and NVLAP accredited laboratory.

The following is a summary of the building materials that were tested for asbestos during the survey. **ACBMs** were detected during the site assessment.

Component	Samples	Colors	Locations	Asbestos Content by PLM
12" x 12" VFT	1-3	White	Gun Smith Room	ND
VFT Mastic	4-6	Yellow	Gun Smith Room	ND
12" x 12" VFT	7-11	Blue	Main Room	ND
VFT Mastic	12-16	Yellow	Main Room	2%
12" x 12" VFT	17-21	Dark Blue	Gun Range	ND
VFT Mastic	22-26	Tan	Gun Range	2%
4" Base Cove	27-29	Black	Stairs to Sub-level 3	ND
Base Cove Mastic	30-32	Tan	Stairs to Sub-level 3	ND

Peg Board Paneling	33-35	Brown/White	Gun Range	ND
Plaster	36-38	Grey	Gun Range	ND
Joint Compound	39-41	White	Gun Range	ND
Insulation	42-44	Pink	Gun Range	ND
Insulation Paper	45-47	Brown	Gun Range	ND
2' x 4' Ceiling Tile	48-52	White	Main Room	ND
Sound Panels	53-59	White	Gun Range	ND
Adhesive On Sound Panels	60-66	Brown	Gun Range	ND

2.2 Recommendations

Based on the analytical results shown above, asbestos was detected in some of the samples collected. These building materials represented by these samples are regulated as asbestoscontaining materials (ACBMs) in the State of California, Cal/OSHA.

If additional impacted suspect ACBMs are discovered during the removal, relocation or demolition for which there are no sample results from similar materials, Hillmann recommends pursuing one of the following alternatives: sample and analyze the discovered suspect material(s) to determine whether they contain asbestos; or assume the material(s) to be asbestos-containing materials, quantify and remove on a unit cost basis.

2.3 Purpose/Scope of Work

An asbestos-containing building material (ACBM) survey of the building was completed at the request of Mr. Paul Banuelos. The purpose of the survey was to locate and identify accessible asbestos-containing materials on the interior of the building that may be disturbed by the planned interior remodel to the building. The survey was also intended to report an estimate of the quantity of identified ACM, the existing condition of the ACM, and to make recommendations based upon the findings of the inspection.

2.4 Area Description

The Subject Property was constructed into its current configuration circa 1971, and consists of an approximately 38,150 ft² of recreational space. The Property is located at 6364 Zindell Avenue, Commerce, California. The Property inspected is the sub level 4 (four) of the gun range. The inspected area makes up of approximately 6,000 ft². It is made up of concrete walls and floors with VFT, plaster and joint compound walls and a drop ceiling in the main room.

2.5 Inspection Personnel

The Asbestos Inspection was conducted by Mr. Gregory Shaffer a California State Department of Public Health Certified Site Surveillance Technician (#13-5132) and Mr. Jonathan McConnell a certified building inspector (ASI0824150005N7972), under the direction of Kenneth Thornburgh, Ph.D., a State of California Certified Asbestos Consultant (#92-0500).

2.6 Inspection Protocol

The survey and assessment was conducted under the supervision of a California State Division of Occupational Safety and Health (DOSH) Certified Asbestos Consultant (CAC) qualified by experience, education and training in the recognition of suspect ACM and approved bulk sampling techniques. The work was performed in general accordance with recommended procedures found in the U. S. Environmental Protection Agency's NESHAP Regulation 40 CFR Part 61 Subpart M, and AHERA Regulation 40 CFR Part 763.85 through Part 763.88. These procedures identify visual inspection procedures for suspect asbestos building materials and identify procedures for the collection and analysis of representative samples of suspect material. These sections of the regulation also identify analysis methods and assessment methods for the identified suspect materials.

Sixty six (66) samples of suspect material were collected. It is Hillmann's opinion that an acceptable number of critical areas were sampled in keeping with the homogeneous nature of the materials that were observed.

The samples were delivered to LA Testing of Garden Grove, CA. LA Testing is an AIHA, NVLAP Accredited Laboratory #101650. The method of analysis was Polarized Light Microscopy (PLM) with dispersion staining, as recommended by the USEPA.

2.7 Inaccessible Areas

Intrusive methods were utilized during the survey of the premises for suspect ACBM. However, suspect materials may exist within the inspected areas of the building that were not accessible during the survey. Such areas typically include, but may not necessarily be limited to, enclosed wall cavities, ceiling plenums, sealed pipe chases and risers, the interior of HVAC equipment and ductwork.

2.8 Limitations and Exceptions

Hillmann has conducted this asbestos survey using reasonable efforts according to industry standards, and in accordance with the agreed upon scope of services. Unless otherwise specified in Section 2.1, this report is not definitive and should not be assumed to be an exhaustive survey of all asbestos containing materials that exist at the project site. Unless otherwise specified in Section 2.1, information in this report is not intended to be used as a construction document and should not be used for demolition, renovation or other construction purposes without field verification by the construction/demolition contractor.

4

Report findings, conclusions and recommendations of this report are based, in part, on information and/or documents provided by the Client or project site representative. Hillmann relies on such information and/or documents, and assumes that information to be true and correct. Regardless of the findings stated in this report, Hillmann is not responsible for consequences or conditions arising from facts that were concealed, withheld or not fully disclosed.

Identification of asbestos materials is also advised for ACM that is to remain in place. Building occupants who have been informed of asbestos hazard locations are less likely to disturb the material and cause fibers to be released into the air.

2.9 Abbreviations/Acronyms

Hillmann may use the following abbreviations and acronyms for common terminology described in our report. Not all abbreviations or acronyms may be applicable to this report:

ACM Asbestos Containing Material ACBM Asbestos Containing Building Material AHERA Asbestos Hazard Emergency Response Act ELAP Environmental Laboratory Approval Program **EPDM** Ethylene Polymer Diene Monomer **HVAC** Heating Ventilation Air Conditioning LF Linear Feet

NESHAP National Emissions Standards for Hazardous Air Pollutants

NOB Non-friable Organically Bound

National Voluntary Laboratory Accreditation Program **NVLAP**

PLM Polarized Light Microscopy

SF Square Feet

TEM Transmission Electron Microscopy TSI Thermal Systems Insulation

United Stated Environmental Protection Agency USEPA

VAT Vinyl Asbestos Tile

Please refer to the Guide to ACM Categories, Friability, Disturbance & Condition in Appendix A for background regarding some of the terminology utilized in this section.

2.10 **Summary of Results**

Surfacing Material ACBM – No materials found.

Thermal System Insulation (TSI) ACBM – No materials found.

Miscellaneous ACBM – Yellow floor mastic and tan mastic.

2.11 Recommendations

Based on the asbestos survey conducted at 6364 Zindell Ave, Commerce, California the following recommendations are made:

3.0 LEAD BASED PAINT SURVEY

Hillmann was authorized by Mr. Paul Banuelos to conduct a Lead Based Paint (LBP) screening of the pubic facility located at 6364 Zindell Ave, Commerce, California. The facility inspected consisted of an approximately 6,000 ft² of inspected space. This work was conducted in accordance with modified HUD protocols as well as accepted industry standards. The screening was conducted on March 16, 2016 by Mr. Gregory Shaffer, a State of California Department of Public Health Certified Lead Sampling Technician under the direction of Mr. Ryan Terwilliger, a California Department of Public Health Certified Lead inspector/Risk Assessor (CLIA #22479).

The Subject Property was constructed into its current configuration circa 1971 and the sample locations are presented in Appendix A.

Currently, the State of California, HUD, and the Environmental Protection Agency (EPA) define lead-based paint as paint or other surface coating with lead content equal to or greater than 1.0 milligram per square centimeter (mg/cm²) of surface area (via XRF instrumentation) or greater than or equal to 0.5% by weight, 5,000 ppm, or 5,000 mg/kg. However, a more stringent level is established by the Los Angeles County Department of Health Services (LACDHS) which defines "dangerous level of lead-bearing substances" as paint or other surface coating with lead in excess of 0.7 mg/cm² (0.35% by weight) (Los Angeles County Code, Title 11, Chapter 11.28, Section 11.28.010 C). A summary of the findings and recommendations of this report are included below. This summary alone does not constitute the complete screening report. The report must be read in its entirety.

3.1 Findings

The objective of this screening was to determine and report the existence and location of lead-based paint containing components. The Lead Paint Survey was done using extraction and analysis of Paint Chips by Flame Atomic Absorption Spectrometry (AAS), (SW 846 3050/700B).

3.2 Test Results

Surface coatings tested included all painted, glazed, sprayed and varnished surfaces and materials. The laboratory analytical concentrations for the presence of lead in surface coatings (paints and primers) were all less than the limit of detection. OSHA considers any detectable amount of lead in paint as lead containing.

Paint Chip Results

Sample	Building Description	Room	Wall	Substrate	Color	Paint Condition	Sample Description	Lead Conc.
C-1	Exterior	Side yard	Floor	Concrete	White	I	Floor Coating	0.054 % wt
C-2	Exterior	Basketball Court	South Wall	CMU	Tan	I	Wall	0.085 % wt
C-3	Exterior	Side yard	Room Vent	Metal	Tan	D	Exhaust vent	0.50 % wt
C-4	Exterior	Fan room	Exhaust vent	Metal	Grey	D	Range Vent	2.3 % wt
C-5	Interior	Gun range	East wall	Wood	White	I	Kitchen Wall	<0.043 % wt
C-6	Interior	Gun range	North wall	Concrete	Green	1	Main room wall	<0.048 % wt
C-7	Interior	Main room	Ceiling	Concrete	White	I	Main room ceiling	0.032 % wt
C-8	Interior	Storage room	Door frame	Metal	Yellow	1	Storage room door frame	7.7 % wt
C-9	Interior	Storage room	Door	Metal	White	1	Storage room door	0.25 % wt
C-10	Interior	Main room/Gun room	Middle	Polycarbonate	White	1	Gun range wall divider	0.43 % wt
C-11	Interior	Stairs	North	Wood	Brown	I	Varnish on handrail	0.19 % wt
C-12	Interior	Gun range	Middle	Concrete	Green	I	Partition	0.088 % wt

*Abbreviations:

I= Intact

P= Poor

D= Damaged

3.3 Discussion of Test Results

Based on the analytical results, any disturbance to the lead-based and/or lead-containing materials referenced above should only be performed by lead trained personnel in accordance with federal, state and local regulatory requirements governing lead in construction.

A copy of the lead analytical results and chain of custody are included as an attachment.

3.4 Recommendations

Based on the findings of this Lead Based Paint screening, Hillmann offers the following recommendations:

- Sample C-3, C-4, C-8 and C-10 contained lead in concentrations greater than or equal to 0.35 percent by dry weight as measured by laboratory analysis. Hillmann recommends that lead safe work practices be followed during the renovation and/or demolition of the components which tested positive for lead based paint or are considered to be lead-containing coatings, including compliance with all OSHA requirements and directives.
- Eleven (11) samples contained detectable amounts of lead based upon the limitations of the
 analytical method. The lead present in building materials with any detectable concentration
 must be removed by workers with lead awareness training, and the contractor must provide
 initial employee exposure monitoring to evaluate worker exposure during work that disturbs
 these identified lead-containing materials according to requirements set forth in 8 CCR
 1532.1.
- Waste items generated during an abatement or demolition project should be properly sampled and profiled to determine the final disposition of the waste.

3.5 Purpose/Scope of Work

The objective of this screening was to determine and report the existence and location of lead-based paint. As part of this screening, samples of suspect paint were collected from various surfaces throughout the interior of the spaces and submitted to LA Laboratories for total lead analysis utilizing Flame AAS (SW 846 3050B*/7000B).

Sampling locations were chosen by a Department of California Department of Public Health (CDPH) Certified Lead Inspector/Risk Assessor. Testing followed modified HUD/EPA Methodology. The modifications included not testing every wall but to perform a representative survey of the painted components.

3.6 Abbreviations/Acronyms

Hillmann may use the following abbreviations and acronyms for common terminology described in our report:

EPA – United States Environmental Protection Agency
HEPA – High Efficiency Particulate Air (filters)

HVAC – Heating Ventilation & Air Conditioning

HUD - United States Department of Housing and Urban Development

LBP - Lead-based Paint

OSHA – Occupational Safety and Health Administration

XRF - X-Ray Fluorescence

3.7 Screening Methodology

The building was evaluated using several factors, first, the age, and second, the painted materials and their susceptibility to being disturbed by the pending renovations.

In compliance with Title 17, CCR, Division 1, Chapter 8 and 24 CFR Subtitle A, Part 35.55, Hillmann filed the 8552 form as required to notify the California Department of Public Health (CDPH) the findings of the LBP Inspection conducted on the site.

Currently, the State of California, HUD, and the Environmental Protection Agency (EPA) define lead-based paint as paint or other surface coating with lead content equal to or greater than 1.0 milligram per square centimeter (mg/cm²) of surface area or greater than or equal to 0.5% by weight or 5,000 ppm. However, a more stringent level is established by the Los Angeles County Department of Health Services (LACDHS) which defines "dangerous level of lead-bearing substances" as paint or other surface coating with lead in excess of 0.7 mg/cm² (0.35% by weight) (Los Angeles County Code, Title 11, Chapter 11.28, Section 11.28.010 C).

3.8 Limitations and Exceptions:

It is understood and agreed upon that Hillmann Consulting, LLC is not an insurer and the Survey and Report are not intended or to be construed as a guarantee or warranty of the adequacy, performance or condition of any structure, item or system at the Property address, all of which guaranties and warranties are expressly disclaimed. The client and anyone claiming by or through the Client, hereby releases and holds harmless the Hillmann Consulting, LLC and its agents and employees of and from all liability and responsibility for the cost of repairing or replacing any unreported defect or deficiency and for any consequential damage, property damage or personal injury of any nature.

In the event that the Hillmann Consulting, LLC and its agents or employees are found liable due to breach of contract, breach of warranty negligence, negligent misrepresentation, negligent hiring or any other theory of liability, then the liability of the Hillmann Consulting, LLC and its agents and employees shall be limited to a sum equal to the amount of the fee paid by the Client for the survey and report. Acceptance and understanding of this agreement are hereby acknowledged upon receipt of this report.

3.9 Disclosure Requirements

This report should be retained for the life of the building and disclosed as required.

3.9.1 Disclosure Responsibility

A copy of this summary must be provided to new lessees (tenants) and purchasers of this Property under Federal Law and Regulations (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. For residential properties, landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

3.9.2 Disclaimer

This is our report of a visual survey and sample analysis of the readily accessible areas of this building and tested components, in accordance with the terms and conditions contained in the proposal. The presence or absence of lead-based paint or lead-based paint hazards applies only to tested or assessed surfaces on the date of the field visit and those conditions may change due to deterioration or maintenance. Ongoing monitoring by the owner is usually necessary on a continuing basis. See the Recommendations Section for information about an Operations and Maintenance Program.

This document is provided for informational purposes only. The information contained in this document and these references represents the current view of the Hillmann Environmental Group, LLC on the issues discusses as of the date of publication. Information provided in this document is provided 'as is' without warranty of any kind, either expressed or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose and freedom from infringement. The user assumes the entire risk as to the accuracy and the use of this document.

Please review this report fully; including any remarks printed on each page and call us for an explanation of any aspect of this report, written or printed, which you do not fully understand.

3.10 Components Tested

The components tested during this screening included the following (without regard to substrate):

	Components Ta	ble
CMU	Plaster	Polycarbonate
Wood	Concrete	Metal

3.11 Identification of Location of Samples

Sample locations can be identified on the site drawings.

3.12 Exceptions

No exceptions are made.

3.13 References

The EPA requires we distribute the booklet *Renovate Right* with all lead screening reports and a copy is attached to this report. This booklet can also be downloaded from http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf.

Additional reference materials can be found on the EPA's Lead website at: http://www.epa.gov/lead/pubs/leadinfo.htm#resources

A copy of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing can be downloaded from http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm

A copy of EPA's Lead Debris memo of July 31, 2000 can be found at http://www.epa.gov/oppt/lead/pubs/hhwmemo-july00fnl.pdf.

4.0 RECOMMENDATIONS

Based on the findings of the asbestos survey, Hillmann offers the following recommendations:

- The building materials listed in Section 2.1 were tested for asbestos. Based on the analytical results shown above, asbestos was detected in some of the samples collected. These building materials represented by these samples are regulated as asbestos-containing materials (ACBMs) and/or asbestos containing construction materials (ACCMs) in the State of California, Cal/OSHA.
- If additional impacted suspect ACBM or ACCM are discovered during renovations, servicing or maintenance related work for which there are no sample documentation/results, Hillmann recommends pursuing one of the following alternatives: Sample and analyze the discovered suspect material(s) to determine whether it contains asbestos; or assume the material(s) to be asbestos-containing materials, quantify and remove on a unit cost basis.
- A copy of this report must be present on-site during any renovation or demolition activities affecting the sampled materials.

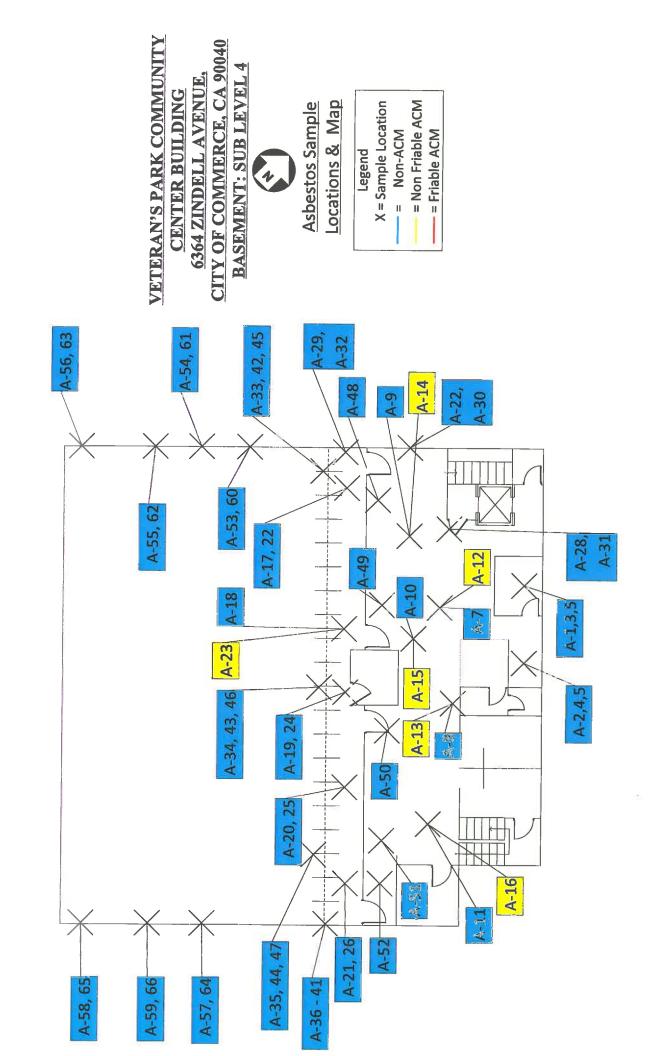
Based on the findings of the Lead Based Paint screening, Hillmann offers the following recommendations:

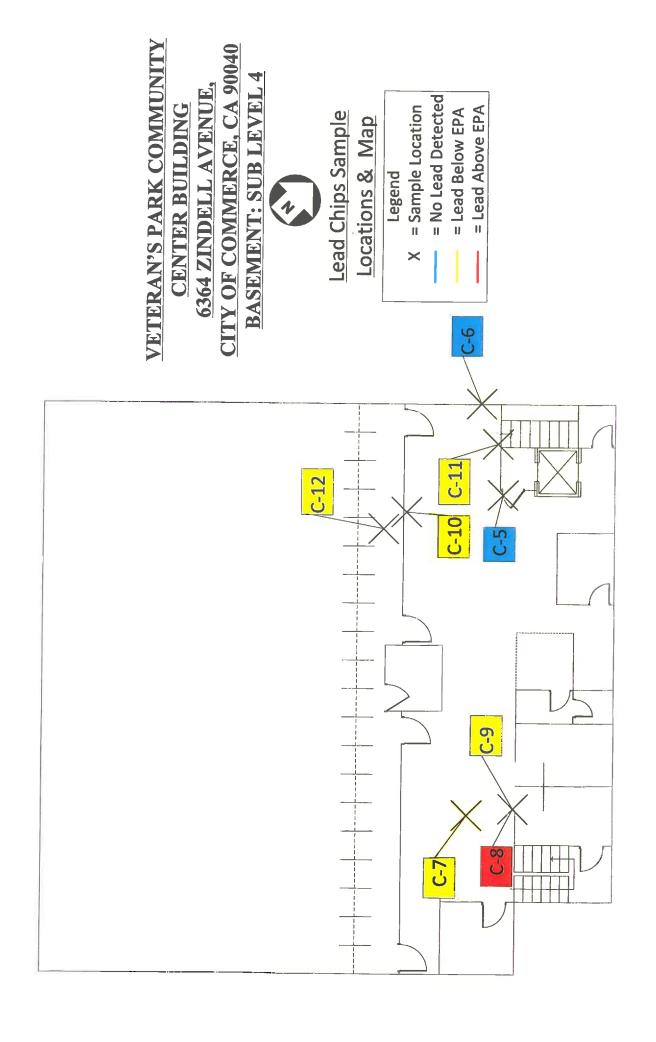
- Sample C-3, C-4, C-8 and C-10 contained lead in concentrations greater than or equal to 0.35 percent by dry weight (3,500 mg/g, 3,500 ppm, or 3,500 mg/kg) as measured by laboratory analysis. Hillmann recommends that lead safe work practices be followed during the renovation and/or demolition of the components which tested positive for lead based paint or are considered to be lead-containing coatings, including compliance with all OSHA requirements and directives.
- Eleven (11) samples contained detectable amounts of lead based upon the limitations of the analytical method. The lead present in building materials with any detectable concentration must be removed by workers with lead awareness training, and the contractor must provide initial employee exposure monitoring to evaluate worker exposure during work that disturbs these identified lead-containing materials according to requirements set forth in 8 CCR 1532.1.
- Waste items generated during an abatement or demolition project should be properly sampled and profiled to determine the final disposition of the waste.

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APPENDIX A

MAPS





C-2

VETERAN'S PARK COMMUNITY CENTER BUILDING 6364 ZINDELL AVENUE,

CITY OF COMMERCE, CA 90040 EXTERIOR



Lead Chips Sample Locations & Map

Legend

X = Sample Location

= No Lead Detected

= Lead Containing

= Lead Based Paint

APPENDIX B ANALYTICAL DOCUMENTATION



3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134

Tel/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com Customer ID: HILL50
Customer PO: C3-6528b
Project ID:

Attention: G Shaffer

Hillmann Consulting, LLC 1600 Route 22 East Union, NJ 07083 Phone: (908) 688-7800

Fax:

Received Date: 03/16/2016 1:40 PM

Analysis Date: 03/18/2016 **Collected Date:** 03/16/2016

Project: C3-6528; City of Commerce; 6364 Zindell Ave, Commerce, CA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			<u>Non-/</u>	Asbestos	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
A-1	Sub Level 4-Gun Smith Room - 12x12	White Non-Fibrous	-	40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
511600328-0001	VFT, white	Homogeneous		oo /o (voi) horous (outor)	
A-2	Sub Level 4-Gun	White		40% Ca Carbonate	None Detected
	Smith Room - 12x12	Non-Fibrous		60% Non-fibrous (Other)	
511600328-0002	VFT, white	Homogeneous			
A-3	Sub Level 4-Locker	White		40% Ca Carbonate	None Detected
	Room - 12x12 VFT,	Non-Fibrous		60% Non-fibrous (Other)	
511600328-0003	white	Homogeneous			
A-4	Sub Level 4-Gun	Yellow		10% Ca Carbonate	None Detected
511600328-0004	Smith Room - Yellow mastic	Non-Fibrous		90% Non-fibrous (Other)	
		Homogeneous			
A-5	Sub Level 4-Gun	Yellow		10% Ca Carbonate	None Detected
511600328-0005	Smith Room - Yellow mastic	Non-Fibrous		90% Non-fibrous (Other)	
A-6	Sub Level 4-Locker	Homogeneous			
A-0	Room - Yellow mastic	Yellow Non-Fibrous		10% Ca Carbonate	None Detected
511600328-0006	Noom - Tellow Mastic	Homogeneous		90% Non-fibrous (Other)	
A-7	Sub Level 4-Main	Blue		400/ On Ondrawata	- N - 5
77-7	Room - 12x12 VFT,	Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
511600328-0007	blue	Homogeneous		00% Non-librous (Other)	
A-8	Sub Level 4-Main	Blue		40% Ca Carbonate	None Detected
	Room - 12x12 VFT,	Non-Fibrous		60% Non-fibrous (Other)	None Detected
511600328-0008	blue	Homogeneous		oo in Horringtons (Other)	
A-9	Sub Level 4-Main	Blue		40% Ca Carbonate	None Detected
	Room - 12x12 VFT,	Non-Fibrous		60% Non-fibrous (Other)	None Detected
511600328-0009	blue	Homogeneous		(
A-10	Sub Level 4-Main	Blue		40% Ca Carbonate	None Detected
	Room - 12x12 VFT,	Non-Fibrous		60% Non-fibrous (Other)	2000,00
511600328-0010	blue	Homogeneous			
A-11	Sub Level 4-Main	Blue		40% Ca Carbonate	None Detected
	Room - 12x12 VFT,	Non-Fibrous		60% Non-fibrous (Other)	
511600328-0011	blue	Homogeneous			
A-12	Sub Level 4-Main	Black/Yellow		10% Ca Carbonate	2% Chrysotile
	Room - Yellow mastic	Non-Fibrous		88% Non-fibrous (Other)	
511600328-0012		Homogeneous			
A-13	Sub Level 4-Main	Black/Yellow		10% Ca Carbonate	2% Chrysotile
511600328-0013	Room - Yellow mastic	Non-Fibrous		88% Non-fibrous (Other)	
		Homogeneous			
4-14	Sub Level 4-Main	Black/Yellow		10% Ca Carbonate	2% Chrysotile
511600328-0014	Room - Yellow mastic	Non-Fibrous		88% Non-fibrous (Other)	
	Ouls Law 14 4 4 4	Homogeneous			
A-15	Sub Level 4-Main	Black/Yellow		10% Ca Carbonate	2% Chrysotile
511600328-0015	Room - Yellow mastic	Non-Fibrous		88% Non-fibrous (Other)	
A-16	Sub Level 4-Main	Homogeneous Black/Yellow		1000 0 0 1	
7-10	Room - Yellow mastic	Non-Fibrous		10% Ca Carbonate	2% Chrysotile
511600328-0016	Noom - Tollow Heatle	Homogeneous		88% Non-fibrous (Other)	
		Torriogeneous			



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EMSL Order: 511600328
Customer ID: HILL50
Customer PO: C3-6528 b
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

0		_	Non-Asbe		<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
A-17	Sub Level 4-Gun Range - 12x12 VFT,	Blue Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
511600328-0017	dark blue	Homogeneous			
\ -18	Sub Level 4-Gun Range - 12x12 VFT,	Blue Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
11600328-0018	dark blue	Homogeneous			
N-19	Sub Level 4-Gun Range - 12x12 VFT,	Blue Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
11600328-0019	dark blue	Homogeneous			
-20	Sub Level 4-Gun Range - 12x12 VFT,	Blue Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
11600328-0020	dark blue	Homogeneous			
-21	Sub Level 4-Gun Range - 12x12 VFT,	Blue Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
11600328-0021	dark blue	Homogeneous			
11600328-0022	Sub Level 4-Gun Range - Tan mastic	Yellow Non-Fibrous	100	10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
	6h	Homogeneous			
-23	Sub Level 4-Gun Range - Tan mastic	Brown Non-Fibrous		98% Non-fibrous (Other)	2% Chrysotile
-24	Sub Level 4-Gun	Homogeneous			
-24 1600328-0024	Range - Tan mastic	Yellow Non-Fibrous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
-25	Sub Level 4-Gun	Homogeneous			
.25 1600328-0025	Range - Tan mastic	Yellow Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
26	Sub Level 4-Gun	Yellow		400/ 0- 0	N 5 /
1600328-0026	Range - Tan mastic	Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
-27	Sub Level 4-Stair - 4"	Black		100% Non-fibrous (Other)	None Detected
1600328-0027	cove base, black	Non-Fibrous Homogeneous		100% Non-librous (Other)	None Detected
-28	Sub Level 4-Main - 4"	Black		100% Non-fibrous (Other)	None Detected
1600328-0028	cove base, black	Non-Fibrous Homogeneous		13070 NOT HOUSE (Other)	None Detected
29	Sub Level 4-Main - 4"	Black		4000/ Non-Sharris (Other)	N. D
1600328-0029	cove base, black	Non-Fibrous		100% Non-fibrous (Other)	None Detected
30	Sub Level 4-Stair -	Homogeneous			
1600328-0030	Tan adhesive	Tan Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
31	Sub Level 4-Main	Tan		400/ On Ondersta	NP
600328-0031	area - Tan adhesive	Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
32	Sub Level 4-Main	Tan	· · ·	400/ 00 00-	N P · · ·
600328-0032	area - Tan adhesive	Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
33	Sub Level 4-Gun	Brown/White	70% Callulana	200/ Non-fibrago (Other)	N D-ttl
600328-0033	range - Peg board paneling	Fibrous Heterogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
34	Sub Level 4-Gun		700/ Cellulana	000/ Non-Share (01)	N. B.
	range - Peg board	Brown/White Fibrous	70% Cellulose	30% Non-fibrous (Other)	None Detected
600328-0034	paneling	Heterogeneous			
35	Sub Level 4-Gun range - Peg board	Brown/White Fibrous	70% Cellulose	30% Non-fibrous (Other)	None Detected
600328-0035	paneling	Heterogeneous			



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EMSL Order: 511600328 Customer ID: HILL50 Customer PO: C3-65286

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbe % Fibrous		Asbestos
A-36	Sub Level 4-Gun		% FIDIOUS	% Non-Fibrous	% Type
1-30	range - Plaster	Gray Non-Fibrous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
111600328-0036		Homogeneous		70% Nor-librous (Other)	
N-37	Sub Level 4-Gun	Gray		30% Ca Carbonate	None Detected
	range - Plaster	Non-Fibrous		70% Non-fibrous (Other)	THORID DOLOGICG
11600328-0037		Homogeneous			
4-38	Sub Level 4-Gun	Gray		30% Ca Carbonate	None Detected
511600328-0038	range - Plaster	Non-Fibrous		70% Non-fibrous (Other)	
	0.1111.0	Homogeneous			
A-39	Sub Level 4-Gun range - Joint	Tan/White Non-Fibrous		40% Ca Carbonate	None Detected
11600328-0039	compound	Heterogeneous		60% Non-fibrous (Other)	
\-40	Sub Level 4-Gun	Tan/White		400/ Co Corbonata	
1 40	range - Joint	Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
11600328-0040	compound	Heterogeneous		COM (Noti-fibrous (Other)	
N-41	Sub Level 4-Main	Tan/White		40% Ca Carbonate	None Detected
	area, fountain - Joint	Non-Fibrous		60% Non-fibrous (Other)	140110 Detected
11600328-0041	compound	Homogeneous			
N-42	Sub Level 4-Gun	Pink	90% Glass	10% Non-fibrous (Other)	None Detected
44600000 00 15	range - Pink	Fibrous		, .	
11600328-0042	insulation	Homogeneous			
N-43	Sub Level 4-Gun	Pink	90% Glass	10% Non-fibrous (Other)	None Detected
11600328-0043	range - Pink insulation	Fibrous			
-44	Sub Level 4-Gun	Homogeneous Pink	000/ 01	480/ N . 5/	
	range - Pink	Fibrous	90% Glass	10% Non-fibrous (Other)	None Detected
11600328-0044	insulation	Homogeneous			
-45	Sub Level 4-Gun	Brown	100% Cellulose		Nana Data-ta-d
	range - Brown paper	Fibrous	10070 Octiviose		None Detected
11600328-0045		Homogeneous			
-46	Sub Level 4-Gun	Brown	100% Cellulose		None Detected
	range - Brown paper	Fibrous			
11600328-0046		Homogeneous			
-47	Sub Level 4-Gun	Brown	100% Cellulose		None Detected
11600328-0047	range - Brown paper	Fibrous			
-48	Sub-Lovel 4 Main	Homogeneous	000/ 0.11		
-4 0	Sub Level 4-Main Area - 2'X4' Ceiling	Tan/White Fibrous	60% Cellulose	10% Ca Carbonate	None Detected
11600328-0048	tile	Heterogeneous		20% Perlite 10% Non-fibrous (Other)	
-49	Sub Level 4-Main	Tan/White	60% Cellulose	10% Ca Carbonate	None Detected
-	Area - 2'X4' Ceiling	Fibrous	OVA Cellulose	20% Perlite	None Detected
1600328-0049	tile	Heterogeneous		10% Non-fibrous (Other)	
-50	Sub Level 4-Main	Tan/White	60% Cellulose	10% Ca Carbonate	None Detected
	Area - 2'X4' Ceiling	Fibrous		20% Perlite	500000
1600328-0050	tile	Heterogeneous		10% Non-fibrous (Other)	
-51	Sub Level 4-Gun	Tan/White	60% Cellulose	10% Ca Carbonate	None Detected
1800328-0054	range - 2'X4' Ceiling	Fibrous		20% Perlite	
1600328-0051	tile	Heterogeneous		10% Non-fibrous (Other)	
-52	Sub Level 4-Gun	Tan/White	60% Cellulose	10% Ca Carbonate	None Detected
1600328-0052	range - 2'X4' Ceiling tile	Fibrous Heterogeneous		20% Perlite	
53	Sub Level 4-Gun		700/ Callulana	10% Non-fibrous (Other)	N = : : :
-00	range - White sound	Tan/White Fibrous	70% Cellulose	30% Non-fibrous (Other)	None Detected
1600328-0053	panels	Homogeneous			
54	Sub Level 4-Gun	Tan/White	70% Cellulose	30% Non-fibrous (Other)	None Detected
	range - White sound	Fibrous	10 W Cellulose	30 % Non-fibrous (Other)	None Detected
1600328-0054	panels	Homogeneous			

Initial Report From: 03/21/2016 13:02:53



3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134

Tel/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@em**sl.com** EMSL Order: 511600328 Customer ID: HILL50 Customer PO: C3-6528 b

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbe	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
A-55	Sub Level 4-Gun range - White sound	Tan/White Fibrous	70% Cellulose	30% Non-fibrous (Other)	None Detected
511600328-0055	panels	Homogeneous			
A-56 511600328-0056	Sub Level 4-Gun range - White sound panels	Tan/White Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
A-57	Sub Level 4-Gun	Tan/White	700/ 0-11-1	000/ 11 51 (01)	
511600328-0057	range - White sound panels	Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
A-58	Sub Level 4-Gun	Tan/White	70% Cellulose	000/ Non-Eberry (04)	
511600328-0058	range - White sound	Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
A-59	Sub Level 4-Gun	Tan/White Fibrous	70% Cellulose	30% Non-fibrous (Other)	None Detected
511600328-0059	panels	Homogeneous			
A-60	Sub Level 4-Gun range - Brown	Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
511600328-0060	adhesive on sound panels	Homogeneous			
A-61		Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
511600328-0061	adhesive on sound panels	Homogeneous			
A-62	-	Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
511600328-0062		Homogeneous			
A-63		Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
511600328-0063	•	Homogeneous			
A-64		Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
511600328-0064	•	Homogeneous			
A-65	Sub Level 4-Gun	Brown Non-Fibrous		100% Non-fibrous (Other)	None Detected
511600328-0065		Homogeneous			
A-66	Sub Level 4-Gun	Brown		100% Non-fibrous (Other)	None Detected
511600328-0066		Non-Fibrous Homogeneous			

Analyst(s)	Muchelle
Rebecca Ferrell (66)	

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Seattle, WA

J. Stidl

BULK SAMPLE IDENTIFICATION FORM

PLM COC, Version 3.3 Environmental Consulting & Lab Services, 1600 Route 22 East, Union, NJ 07083

gshaffer @hillmanngroup.com

(908) 688-7800 Fax (908) 686-2636 email:

CLIENT; City of Commerce

#51160032

DATE: 03/ (6/2016

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JOB#: c3-6528 b

 \Box POSITIVE STOP ON ALL HOMOG, SAMPLES TAT for PLM - 3-6hrs 8-12hrs 24hrs 48hpe 72hrs 8-7day TAT for TEM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 5-7day TAT for SOF-V - 1wk 2wk

•ANALYZE BOTTOM / INNER LAYERS FIRST AS INDICATED BY "BL" — IF POSITIVE THEN STOP ANALYSIS OF OTHER LAYERS Lab Results " VIA TEM IF NEGATIVE VIA PLM. POSITIVE STOP ON TEM ONLY Time Sample Collected NOB Friable? Cond Quantity in SOW? 200 th Day Character 282 Material Description 12x12 VFF, Blue dellar Mashr 子がらが ANALYZE ALL NOBS AS INDICATED BY Glensmith Run Location Description Grunsmith Resm Remi will porm bocker Room Mach LOCATION: 6364 Zindell Ave Commerce, CA Floor/Room Sub low Sample # CHAIN OF CUSTODY LAB instructions: 120 # 20 1 Q - ४ るとな 4 7-2 ر ک 9-45 1 7-0 から ر ح Homg, ID

Spaces Operating? Spaces Occupied? Access Issues? ANALYZED BY: RCUD, DOBLY JANUA 3/18/11/ 4:15#M 3-16-14 1340 RECEIVED BY: 3 TRANSPORTED BY: Mane 17 SAMPLED BY: 3-16-2/ Print Depoplem Material Codes Sign

padding mastic, CPT=carpet tile mastic, CT=ceiling tile, CTM=CT mastic, CWT*ceramic wall tile, FP=fireproofing, JC=joint compound, JT=joint tape, LC=leveling compound, PL=plaster, PP=pltch pocket, AP*acoustical plaster, BC=brown coat, BF=base flashing, BUR=built-up roofing, CB=cove base, CBM=cove base mastic, CF=curb flashing, CFT=ceramic floor tile, CM=carpet mastic, CPM=carpet PPW=parapet wall flashing, RFP=re-inforced fiberglass pariel, SP=soundproofing, TP=tar paper, VB=vapor barrier, VCT=vinyl floor tille, VCTM=VCT mastic, VSF=vinyl sheet flooring, WB=wallboard, WPA=wall paper adhesive, PI = pipe insulation, PFI = pipe fitting insulation, FG = fiberglass line ALL OTHER DESCRIPTIONS MUST BE WRITTEN OUT

CLIENT: City of Commerce

BULK SAMPLE IDENTIFICATION FORM

Environmental Consulting & Lab Services, 1600 Route 22 East, Union, NJ 07083 (908) 688-7800 Fax (908) 686-2636 email: 98haffer @hillmanngroup.com

PLM COC, Version 3,3

#511600328 DATE: 03/(5/2016

JOB#: c3-6528 b

 \Box Positive stop on all homog, samples

TAT for PLM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 57day TAT for TEM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 5-7day

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26-16 Material Codes

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padding mastic, CPT=carpet tile mastic, CT=cating tile, CTM=CT mastic, CWT=ceramic wall tile, FP=fireproofing, JC=joint compound, JT=joint tape, J.C=leveling compound, PL=plaster, PP=plich pocket, AP=acoustical plaster, BC=brown coat, BF=base flashing, BUR=built-up roofing, CB=cove base, CBM=cove base mastic, CF=curb flashing, CFT=ceramic floor tile, CM=carpet mastic, CPM=carpet PPW=parapet wall flashing, RFP=re-inforced fiberglass panel, SP=soundproofing, TP=tar paper, VB=vapor barrier, VCT=vinyl floor tile, VCTM=vCT mastic, VSF=vinyl sheet flooring, WB=wallboard, WPA=wall paper adhestve, PI = pipe insulation, FI = pipe fitting insulation, FG = fiberglass fine ALL OTHER DESCRIPTIONS MUST BE WRITTEN OUT

Spaces Operating? Spaces Occupied?

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BULK SAMPLE IDENTIFICATION FORM

PLM COC, Version 3.3 Environmental Consulting & Lab Services, 1600 Route 22 East, Union, NJ 07083

gshaffer @hillmanngroup.com

(908) 688-7800 Fax (908) 686-2636 email:

LOCATION: 6364 Zindell Ave Commerce, CA

CLIENT: City of Commerce

#51160032 DATE: 03/16/2016

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JOB#: c3-6528 b

☐ POSITIVE STOP ON ALL HOMOG. SAMPLES

TAT for PLM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 57day TAT for TEM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 5-7day TAT for SOF-V - 1wk 2wk

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	Lab #			Color	in SOW? Friable?	_	Collected	Lab Results	
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padding mastic, CPT=carpet tile mastic, CT=celling tile, CTM=CT mastic, CWT=ceramic wall tile, FP=fireproofing, JC=joint compound, JT=joint tape, LC=jeveling compound, PL=plaster, PP=pitch pocket, PPW=parapet wall flashing, RFP=re-inforced fiberglass panel, SP=soundproofing, TP=tar paper, VB=vapor barrier, VCT=vinyl floor tile, VCTM=VCT mastic, VSF=vinyl sheet flooring, WB=valiboard, WPA=wall paper adhesive, PI = pipe insulation, PH = pipe fitting insulation, FG = fiberglass line ALL, OTHER DESCRIPTIONS MUST BE WRITTEN OUT AP=acoustical plaster, BC=brown coat, BF=base flashing, BUR=built-up roofing, CB=cove base, CBM=cove base mastic, CF=curb flashing, CFT=ceramic floor tlle, CM=carpet mastic, CPM=carpet

Spaces Operating? Spaces Occupied?

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BULK SAMPLE IDENTIFICATION FORM

PLM COC, Versian 3.3 Environmental Consulting & Lab Services, 1600 Route 22 East, Union, NJ 07083 (908) 688-7800 Fax (908) 686-2636 email: 98haffer @hillmanngroup.com

DATE: 03/16/2016

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JOB#; c3-6528 b

☐ POSITIVE STOP ON ALL HOMOG-ŞAMPLES

TAT for TEM - 3-6hrs 8-12hrs 24hrs 48hrs 78hrs 5-7day TAT for PLM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs TAT for SOF-V - 1wk 2wk

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.OCATION: 6364 Zindell Ave Commerce,

CLIENT: City of Commerce

•ANALYZE BOTTOM / INNER LAYERS FIRST AS INDICATED BY "BL" — IF POSITIVE THEN STOP ANALYSIS OF OTHER LAYERS Lab Results " VIA TEM IF NEGATIVE VIA PLM. POSITIVE STOP ON TEM ONLY Time Sample Collected NOB in SOW? Friable? Cond Quantity 7001 Part I 9600 pass Material Description Adhere Peg Board Ponelchy bolot (compoure Color Plact (F) ANALYZE ALL NOBS AS INDICATED BY Location Description 7 Gra Ray Pare Resp Maw Silve 1 ا رون (ک Floor/Room Sub learn Sample # 04-0 CHAIN OF CUSTODY 4-36 4-7 73 LAB Instructions: Lab# 45-59 D - 3 A -38 4-33 12-37 5-2 Homg. ID

Material Codes

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padding mastic, CPT=carpet tile mastic, CT=ceiling tile, CTM=CT mastic, CWT=ceramic wall tile, FP=fireproofing, JC=joint compound, JT=joint tape, LC=leveling compound, PL=plaster, PP=pitch pocket, PPW=parapet wall flashing, RFP=ra-Inforced fiberglass panel, SP=soundproofing, TP=tar paper, VB=vapor barrier, VCT=vinyl floor tile, VCTM=VCT mastic, VSF=vinyl sheet flooring, WB=wallboard, WPA=wall paper adhesive, PI = pipe insulation, PFI = pipe fitting insulation, FG = fiberglass line ALL, OTHER DESCRIPTIONS MUST BE WRITTEN OUT AP=acoustical plaster, BC=brown coat, BF=base flashing, BUR=bullt-up roofing, CB=cove base, CBM=cove base mastic, CF=curb flashing, CFT=ceramic floor tile, CM=carpet mastic, CPM=carpet

Spaces Occupied? Spaces Operating?

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CLIENT: City of Commerce

BULK SAMPLE IDENTIFICATION FORM

PLM COC, Version 3.3 Environmental Consulting & Lab Services, 1600 Route 22 East, Union, NJ 07083 (908) 688-7800 Fax (908) 686-2636 email: Schaffer @hillmanngroup.com

DATE: 03///2016

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JOB#: 03-6528 b

TPOSITIVE STOP ON ALL HOMOG. SAMPLES IAT for PLM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 8-7day

IAT for TEM - 3-8hrs 8-12hrs 24hrs 48hrs 72hrs 5-7day TAT for SOF-V - 1wk 2wk

•ANALYZE BOTTOM / INNER LAYERS FIRST AS INDICATED BY "BL" — IF POSITIVE THEN STOP ANALYSIS OF OTHER LAYERS Lab Results " VIA TEM IF NEGATIVE VIA PLM. POSITIVE STOP ON TEM ONLY Time Sample Collected NOB in SOW? Friable? Cond DO-56 Quantity 7500 grand Dearly 中の中 7 Material Description John Compand ' وسلامها PINK INSCIPTION Proper Breeze ングナ Med Am, Fourth • ANALYZE ALL NOBS AS INDICATED BY Location Description Z Z Three الم Meest IJ LOCATION: 6364 Zindell Ave Commerce, Floor/Room and learn かれが Sample # をした 0S~4 34-V CHAIN OF CUSTODY 440 R L L S LAB Instructions: Date of 14-4g Lab# 一个女 न्स Homg, ID

3-16-16 Material Codes

Date Sign

padding mastic, CPT=carpet tile mastic, CT=celling tile, CTM=CT mastic, CWT=ceramic wall tile, FP=fireproofing, JC=joint compound, JT=joint tape, LC=leveling compound, PL=plaster, PP=pitch pocket, PPW=parapet wall flashing, RFP=re-Inforced fiberglass panel, SP=soundproofing, TP=tar paper, VB=vinyl floor tile, VCTM=VCT mastic, VSF=vinyl sheet flooring, WB=wallboard, WPA=wall paper adhesive, PI = pipe insulation, PFI = pipe fitting insulation, FG = fiberglass fine ALL OTHER DESCRIPTIONS MUST BE WRITTEN OUT AP=acoustical plaster, BC=brown coat, BF=base flashing, BUR=bullt-up roofing, CB=cove base, CBM=cove base mastic, CF=curb flashing, CFT=ceramic floor tile, CM=carpet mastic, CPM=carpet

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Access Issues?

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CLIENT: City of Commerce

BULK SAMPLE IDENTIFICATION FORM

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#51160032

DATE: 03/(C/2016

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JOB#: c3-6528 b

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L FOSTIVE STOP ON ALL HOMOG, SAMPLES	TAT for PLM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 97day	rs 48hrs 7zhrs 6-7day	•
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	TAT for PLM - 3-6hrs	TAT for TEM - 3-6hrs	TAT for SOE-W. duck Sout

•ANALYZE BOTTOM / INNER LAYERS FIRST AS INDICATED BY "BL" — IF POSITIVE THEN STOP ANALYSIS OF OTHER LAYERS Lab Results " VIA TEM IF NEGATIVE VIA PLM. POSITIVE STOP ON TEM ONLY Time Sample Collected NOB in SOW? | Friable? Cond Quantity 25204 なるな 自ってい Material Description عالم بدامعا Park Brans Hoheme Color لمسدير عاسار 224 ANALYZE ALL NOBS AS INDICATED BY Location Description Persi Priva Bylow Brose Fler. Ger. LOCATION: 6364 Zindell Ave Commerce, CA Floor/Room ると 3 35-4 242 454 B-K-CO CHAIN OF CUSTODY LAB Instructions: Sample # AS-X Lab # ターケッ K-12)9-X Homg. 1D

9-16-16 Material Codes

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padding mastic, CPT=carpet tile mastic, CT=celling tile, CTM=CT mastic, CWT=ceramic wall tile, FP=fireproofing, JC=joint compound, JT=joint tape, LC=leveling compound, PL=plaster, PP=pitch pocket, PPW=parapet wall flashing, RFF=re-inforced fiberglass panel, SP=soundproofing, TP=tar paper, VB=vapor barner, VCT=vinyl floor file, VCTM=VCT mastic, VSF=vinyl sheet flooring, WB=wallboard, AP=acoustical plaster, BC=brown coat, BF=base flashing, BUR=built-up roofing, CB=cove base, CBM=cove base mastic, CF=curb flashing, CFT=ceramic floor tile, CM=carpet mastic, CPM=carpet WPA=wall paper adhesive, PI = pipe insulation, PFI = pipe fitting insulation, FG = fiberglass line ALL OTHER DESCRIPTIONS MUST BE WRITTEN OUT

Spaces Operating? Spaces Occupied?

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#51160032 DATE: 03/ /2016

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JOB#: c3-6528 b

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TAT for TEM - 3-6hrs 8-12hrs 24hrs 48hrs 72hrs 5-7day 3-60ks 8-12hrs 24hrs 48hrs/72hrs 6-7day

•ANALYZE BOTTOM / INNER LAYERS FIRST AS INDICATED BY "BL" — IF POSITIVE THEN STOP ANALYSIS OF OTHER LAYERS Lab Results " VIA TEM IF NEGATIVE VIA PLM. POSITIVE STOP ON TEM ONLY Time Sample Collected NOB TAT for SOF-V - 1wk 2wk in SOW? | Friable? Cond Quantity Dages Material Description 5 Brun Adhere Penel Color MANALYZE ALL NOBS AS INDICATED BY Rame Location Description Shery LOCATION: 6364 Zindell Ave Commerce, CA Floor/Room からなって 日から Sample # CHAIN OF CUSTODY LAB Instructions: マイア Lab# 3 なのよ R-ton **で** な Homg. ID

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padding mastic, CPT=carpet tile mastic, CT=celling tile, CTM=CT mastic, CMT=ceramic wall tile, FP=fireproofing, JC=joint compound, JT=joint tape, LC=leveling compound, PL=plaster, PP=pitch pocket, PPW=parapet wall flashing, RFP=re-inforced fiberglass panel, SP=soundproofing, TP=tar paper, VB=vapor barrier, VCT=vinyl floor tile, VCTM=VCT mastic, VSF=vinyl sheet flooring, WB=wallboard, WPA=wall paper adhesive, Pt = pipe insulation, Pt = pipe fitting insulation, FG = fiberglass line ALL OTHER DESCRIPTIONS MUST BE WRITTEN OUT AP=acoustical plaster, BC=brown coat, BF=base flashing, BUR=bullt-up roofing, CB=cove base, CBM=cove base mastic, CF=curb flashing, CFT=ceramic floor tile, CM=cerpet mastic, CPM=cerpet **Material Codes**

Spaces Operating? Spaces Occupied?

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Attn: Gregory Shaffer

LA Testing

1745 West Orangewood Avenue

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

gardengrovelab@latesting.com

Phone: (714) 634-9500

Fax:

03/16/16 1:45 PM

LA Testing Order:

CustomerID:

CustomerPO:

ProjectID:

331604790

HILL65

Received: Collected:

3/16/2016

Suite 110 Orange, CA 92868

Hillmann Consulting

Project: C3-6528 b

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected Analyzed	RDL	Lead Concentration
C-1 331604790-0001	3/16/2016 3/17/2016 Site: Sideguard, concrete white	0.020 % wt	0.054 % wt
C-2 331604790-0002	3/16/2016 3/17/2016 Site: Basketball court, CMU wall, tan	0.018 % wt	0.085 % wt
C-3 331604790-0003	3/16/2016 3/17/2016 Site: Side yard, exhaust, vent, tan	0.020 % wt	0.50 % wt
C-4 331604790-0004	3/16/2016 3/17/2016 Site: Fan room, exhaust vent, gray	0.057 % wt	2.3 % wt
C-5 331604790-0005	3/16/2016 3/17/2016 Site: Wall white, wood, kitchen, area	0.043 % wt	<0.043 % wt
C-6 331604790-0006	3/16/2016 3/17/2016 Site: Wall, green, drywall, main area	0.048 % wt	<0.048 % wt
C-7 331604790-0007	3/16/2016 3/17/2016 Site: Ceiling, white, concrete, main area	0.010 % wt	0.032 % wt
C-8 331604790-0008	3/16/2016 3/17/2016 Site: Storage rm, yellow, door frame	0.20 % wt	7.7 % wt
C-09 331604790-0009	3/16/2016 3/17/2016 Site: Storage rm white door	0.077 % wt	0.25 % wt
C-10 331604790-0010	3/16/2016 3/17/2016 Site: Wall panel white	0.015 % wt	0.43 % wt
C-11 331604790-0011	3/16/2016 3/17/2016 Site: Stair, varnish, hand rail	0.041 % wt	0.19 % wt

Michael Chapman

Michael Chapman, Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Samples analyzed by LA Testing Garden Grove, CA AlHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406

Initial report from 03/17/2016 13:59:06



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

MG http://www.LATesting.com

gardengrovelab@latesting.com

LA Testing Order: CustomerID:

CustomerPO:

ProjectID:

331604790

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Gregory Shaffer

Hillmann Consulting

1745 West Orangewood Avenue

Suite 110

Orange, CA 92868

Phone: Fax:

(714) 634-9500

Received:

03/16/16 1:45 PM

Collected:

3/16/2016

Project: C3-6528 b

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription

Collected

Analyzed

RDL

Lead Concentration

C-12

331604790-0012

3/16/2016 3/17/2016

Site: Partition, green, concrete

0.015 % wt

0.088 % wt

Michael Chapman, Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Samples analyzed by LA Testing Garden Grove, CA AIHA-LAP, LLC--ELLAP Accredited #101650, CA ELAP 1406

Initial report from 03/17/2016 13:59:06

OrderID: 331604790



Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only):

LATesting Unit F5

11652 Knott Avenue

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

	11 11	£			(117) 9	E0-7077			
Company: Hillmann Consulting		EMSL-Bill to:							
Street: 1745 W. Orangewood Ave. Suite #110		Third Party Billing requires written authorization from third party							
City: Orange Star	te/Province: CA	The state of the s	The state of the s		Country: United States				
Report To (Name): Gregory Shaffer		Telephone #: 7146349500							
Email Address: gshaffer@hillmanngroup.com		Fax #: Purchase Order:							
Project Name/Number: C3-6528 b		Please Provide Results: FAX / E-mail Mail							
U.S. State Samples Taken: CA			CT Samples: Commercial/Taxable Residential/Tax Exempt						
Turnaround Time (TAT) Options* - Please Check									
□ 3 Hour □ 6 Hour □ 24 Hour □ 48 Hour □ 72 Hour □ 96 Hour □ 1 Week □ 2 Week									
	leted in accordance with EMS	SL's Torms a	nd Conditions located in ti						
Matrix	Method		Instrument	Rep	orting Limit	Check			
Chips 5 % by wt. mg/cm² ppr	n SW846-7000	В	Flame Alomic Absorpti	ion	0.01%	O.			
Air	NIOSH 7082	NIOSH 7082		ion .	4 μg/filter	0			
	NIOSH 7105	NIOSH 7105		0.	03 µg/filter				
	NIOSH 7300 mod	NIOSH 7300 modified		0	.5 μg/filter				
Wipe* ASTM	SW846-7000	В	Flame Atomic Absorpti	on 1	0 µg/wipe				
non ASTM *if no box is checked, non-ASTM	SW846-6010B c	SW846-6010B or C		1.	0 µg/wipe				
Wipe is assumed SW846-7000		010	Graphite Furnace AA		0.075 μg/wipe				
TCLP		SW846-1311/7000B/SM 3111B		omic Absorption 0.4					
	SW846-1131/SW846-6		ICP-AES		mg/L (ppm)				
Soil	SW846-7000F		Flame Atornic Absorpti		ng/kg (ppm)				
	SW846-7010 SW846-6010B o	4.00	Graphite Furnace AA		mg/kg (ppm)				
		SM3111B/SW846-7000B			ig/kg (ppm) mg/L (ppm)				
Wastewater Unpreserved Preserved with HNO ₃ pH < 2	EPA 200.9	ANY TRANSPORT CONTINUES AND THE COLOR OF THE PROPERTY OF THE P			mg/L (ppm)				
Preserved with HNO ₃ pH < 2	EPA 200 7	Multiple and the second			mg/L (ppm)				
Drinking Water Unpreserved	EPA 200.9	EPA 200.9			3 mg/L (ppm)				
Preserved with HNO₃ pH < 2 □	EPA 200.8		ICP-MS		1 mg/L (ppm)				
TSP/SPM Filter	SP/SPM Filter 40 CFR Part 50		ICP-AES	A 2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-	12 µg/filter				
Other:		0	Graphite Furnace AA	3	6 µg/filter				
Name of Sampler:		Signa	ture of Sampler			أسا			
			Signature of Sampler: Date/Time Sampled						
(-1 Side yard, Con	MI WIT			differențiili que himbaliq as abbaliques an assaș	3/16/10	ρ			
C-3 5:10 1 011	011		Charles and a State of the Control o						
State gara, exh	gast Ventten		The second secon	-					
C-84 Fax Resum OX	West Vent Gray	- Spanish and the Spanish and	the second secon		4				
Client Sample #'s (-1, -(-1) Total # of Samples: 12									
Relinquished (Client): Physics Date:		3//6//6 Time:		Parameter (A) To the Manager	1347_				
Received (Lab): Date:		3.1	ψ C (Tim	Armid supplied in the State of Mary Control	1345				
Comments: Please of Kristino Saliana (Asavono a hilimannigroup com) on all invoices									
BiltTio: Hillmann Consulting, 1745 W. Orangawood Avo., Suite #110, Orange. CA. \$22€8. United States. Attention: Kristent Savona Phone: 7146349500 Email: ksavona@hillmanngroup.com/Purchade Order:									

Page 1 of ___pages

OrderID: 331604790



LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

#331604790

LATesting Unit F5 11652 Knott Avenue

Garden Grove, CA 92841

PHONE: (714) 828-4999 FAX: (714) 828-4944

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
i-5	Well, White, Wood Kitchen Are		3/14/16
C-6	Well Green Drywell Main Area		
C-7	Ceiling While Cenerche Man Any		
(-9	Stock Ran / lev. Dear Frame		
(-9	Sterne Rm. White Door		
(F)	Stub Acrania Hazar vail		
(-10	Walt Panel Celate		
6-11	Star, Vanih, Hand Rail		
C-12	Partition, Green Concrete		
Please oc Kristine Savo BillTo, Halmanii Consul	ecial Instructions: ine (ksevona@hilmanigroup.com) to all invoices tog, 1745 W. Crangewood Ave. Sinte #110. Change. CA. 92008, United States na Phone: 7148349666 Email: ksavona@hilmonngroup.com Purchase Order:		

Page Zof 2 pages

APPENDIX C GUIDE TO ACM CATEGORIES, FRIABILITY, DISTURBANCE & CONDITION

GUIDE TO ACM CATEGORIES, FRIABILITY, DISTURBANCE & CONDITION

Categories

The USEPA categorizes ACM as either 1) surfacing material, 2) thermal system insulation, or 3) miscellaneous materials.

Surfacing Material

Surfacing ACM is defined by the USEPA as "materials which are sprayed-on, trowelled-on, or otherwise applied to surfaces. Examples included wallboard primer, sealer, paint and stucco, acoustical plaster on ceilings, fireproofing on structural components, or other materials applied to surfaces for acoustical, fireproofing, or other purposes."

Thermal Systems Insulation

Thermal system insulation ACM is defined as defined by the USEPA as "materials in a building or distribution system applied to pipes, fittings, boilers, breaching, tanks, ducts, or other system components to prevent heat loss or gain, water condensation, or for other purposes."

Miscellaneous Materials

Miscellaneous ACM is defined by the USEPA as "interior or exterior material components such as wallboard, linoleum, floor and ceiling tiles, fire doors, roofing, siding; and materials not an integral component of the building such as stage curtains, protective clothing, laboratory apparatus and equipment, and other materials considered to be part of the real estate."

Friability

Friable ACM

Friability is a mechanical classification defined by the most recent EPA AHERA regulations as "...those materials, which when dry, which may be crumbled, pulverized, or reduced to powder by hand pressure." This includes previously non-friable material after such materials become damaged to the extent that when dry they may be crumbled, pulverized, or reduced to powder by hand pressure.

Non-Friable ACM

Category I non-friable ACM is defined by NESHAP as, "asbestos containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent

asbestos" as determined by Polarized Light Microscopy (PLM).

Category II non-friable ACM includes any other non-friable material, excluding Category I ACM.

Disturbance

Several factors are used to determine the potential for disturbance. Planned renovation, construction and maintenance activities may affect building materials, and rate a high potential. Maintenance work that occurs regularly and/or accessible material in an occupied room may constitute moderate physical disturbance. The influence of vibration i.e., loud motors, vicinity to major airports or highways, music rooms, etc., is rated. Potential air erosion from a variety of sources is also considered.

Damage

Damage can be classified as: 1-Deterioration or Delamination; 2-Physical Damage; 3-Water Damage.

Deterioration

Deterioration may occur as a result of either the quality of the installation or environmental factors that affect the cohesive strength of the material. Delamination, a form of deterioration, is a result of loss of adhesive or adhesive strength. This causes the material to separate into layers or separate from its substrate.

Physical Damage

Physical damage is the result of accidental or deliberate contact with the material. This is evidenced by punctures, missing pieces, scrape marks, etc. Physical damage can cause materials that were once in good condition to have exposed friable surfaces. Exposed surfaces may release fibers if subjected to an air stream or vibrations, or if damaged further. Additionally, the act of damaging or inadvertently disturbing the material will cause fibers to be released, posing a potential hazard to occupants.

Water Damage

Water can dislodge, delaminate, or disturb friable ACM that are otherwise in good condition and can increase the potential for fiber release by dissolving and leaching out the material's binder. Materials considered non-friable may thus become friable. Water can also carry fibers to other areas where evaporation will leave a collection of fibers that may become suspended in the air.

Overall Condition

Ratings of "Good", "Fair", and "Poor" are meant to indicate the overall condition of the material as a combination of these types of damage.

Good Condition

A material in good condition has an intact jacket or a covering of paint, has very few gaps between insulation sections, and little or no evidence of physical damage. However, it is cautioned that materials in good condition have the potential for damage in the future.

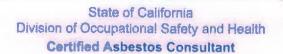
Fair Condition

A material in fair condition may show evidence of physical damage, have gaps between many insulation sections, or have a ripped jacket or loose insulation sections. The material in fair condition should remain in place only after it is properly repaired and returned to good condition. Work should be scheduled as soon as possible to prevent further disturbance and accidental fiber release. Removal is always preferable - existing damage is a good indicator of future damage.

Poor Condition

A material in poor condition usually shows extensive physical damage, may have a loose or missing jacket, and often appears as dislocated insulation sections or sections on the ground. The material in poor condition should be abated as soon as possible. Repair is not an option. Precautions should be taken to inform persons of the potentially hazardous nature of the area if the material is highly accessible or in a frequently used area. Limiting access to the area or room is advised until such time as the material has been properly removed.

APPENDIX D CERTIFICATIONS



Kenneth Allen Thornburgh

Certification No. 92-0500

Expires on 07/31/16

This certification was upsued of the Division of Occupational Safata and Meetings authorized by Sections 7150 of the his doc Business and Professions Code.

State of California Division of Occupational Safety and Health Certified Site Surveillance Technician

Gregory P Shaffer

Name

Certification No. 13-5132

Expires on _05/14/16

This certification was essent by the Division of Occupational Salary and Hoalth as authorized by Sections 7180 at seq. of the Business and Professions Code.



Asbestos 40 Hr. Contractor / Supervisor Course

Jonathan McConnell

CERT #: ASIO824150005N7972 Training Date: 08/24/2015 Exam Date 08/28/2015 Expiration:08/28/2016 DOSH # CA-015-03

Michael W. Horner Transng Director

Successfully convented at easies of the optication requirements to Advisors accomplished in pay 150.0.10s in

NATEC International, Inc. 10 Technology State Sutra Anadom, CA 2005; 1239 Capusi Street Sutra Anadom, CA 2005; 1239 Capusi Street Sutra Capusi Str



State of California Department of Public Health Lead Related Construction Certificate Inspector/Assessor Project Monitor John R. Terwilliger Date 22479

LEAD HAZARD EVALUATION REPORT

Mar	ob 16 2016				
Section 1 — Date of Lead Hazard Evaluation Mar	ch 16, 2016				
Section 2 — Type of Lead Hazard Evaluation (Che	ck one box only)				
Lead Inspection Risk assessment	Clearance Inspection	Other (specify) Renova	tion Survey, Lead Wipe sampling		
Section 3 — Structure Where Lead Hazard Evalua	tion Was Conducted				
Address [number, street, apartment (if applicable)]	City	County	Zip Code		
6364 Zindell Avenue	Commerce	Los Angeles	90040		
Construction date (year) Type of structure of structure		Children living in stru	Children living in structure?		
Multi-unit building	School or daycar	e Yes	Yes No		
1960s Single family dwelling	Don't Know	Don't Know			
Section 4 — Owner of Structure (if business/agend	cy, list contact person)				
Name		Telephone number			
Commerce City - Paul Banuelos		213-814-8635			
Address [number, street, apartment (if applicable)]	City	State	Zip Code		
865 S. Figueroa Street	Los Angeles	CA	90017		
Section 5 — Results of Lead Hazard Evaluation (cl	neck all that apply)				
No lead hazards detected Lead-contaminated Section 6 — Individual Conducting Lead Hazard Events		ntaminated soil found	Other		
Name		Telephone number			
Ryan Terwilliger		(714) 634-9500			
Address [number, street, apartment (if applicable)]	City	State	Zip Code		
1745 W. Orangewood Avenue #110	Orange	CA	92868		
CDPH certification number	Signature		Date		
22479					
Name and CDPH certification number of any other individuals	s conducting sampling or testi	ng (if applicable)	3/30/2016		
Gregory Shaffer - 25960		, , , , , , , , , , , , , , , , , , , ,			
Section 7 — Attachments					
A. A foundation diagram or sketch of the structure indic lead-based paint; B. Each testing method, device, and sampling procedu C. All data collected, including quality control data, laborated.	re used;				
					

First copy and attachments retained by inspector

Third copy only (no attachments) mailed or faxed to:

Second copy and attachments retained by owner

California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403

Fax: (510) 620-5656