



**CITY OF VALDEZ**  
**Project Title: VHS Gym Floor Replacement**  
**Project No.: 16-310-9506**  
**Contract No.: 1294**

**TO: All Recipients**

**Date: March 24, 2017**

**SUBJECT: Addendum No.1**

This thirty three (33) page Addendum forms a part of the project scope documents and modifies the project scope for the above-referenced project. **Acknowledge receipt of this Addendum in the space provided on the Bid Form.** Failure to do so may subject the Bidder to disqualification.

This Addendum makes the following changes and/or clarifications:

**CHANGES TO PRIOR ADDENDA:** None

**CHANGES TO BIDDING REQUIREMENTS:** None

**CHANGES TO CONTRACTING REQUIREMENTS:** None

**CHANGES TO SPECIFICATIONS:**

- AD1-1.** SECTION 08 33 13 – COILING COUNTER DOORS, **DELETE** this section in its entirety.
- AD1-2.** SECTION 06 40 23 – INTERIOR ARCHITECTURAL WOODWORK, **DELETE** this section in its entirety.
- AD1-3.** SECTION 02 83 33 – LEAD REMOVAL / DISTURBANCE AND DISPOSAL: **ADD** Section in its entirety with attached SECTION 02 83 33.
- AD1-4.** SECTION 02 83 33 – CHEMICAL HAZARDS REMOVAL AND DISPOSAL: **ADD** Section in its entirety with attached SECTION 02 83 33.

**CHANGES TO DRAWINGS:**

- AD1-5.** SHEET A1.1, GYM DEMOLITION PLAN. **ADD** general note to read as follows:

“Existing flooring, doors and door frames contain hazardous materials, see

Abatement Specifications and Reports regarding demolition procedures.”

- AD1-6.** SHEET A1.1, GYM DEMOLITION PLAN: **DELETE** new CMU wall demolition at coiling door at Storage 193.
- AD1-7.** SHEET A2.2, GYM FLOOR PLAN: **DELETE** new coiling door and associated work in its entirety at Storage 193.
- AD1-8.** SHEET A2.3, COURT LINES PLAN: **REPLACE** sheet in its entirety with attached Sheet: A2.3.
- AD1-9.** SHEET A7.1, PLAN AND SECTION DETAILS: **REMOVE** Detail 3/NEW SERVICE PASS-THRU SECTION in its entirety.

**SUPPLEMENTAL INFORMATION:**

- AD1-10.** WHITE ENVIRONMENTAL CONSULTANTS, INC., Bulk Sample Analysis for Asbestos.
- AD1-11.** WHITE ENVIRONMENTAL CONSULTANTS, INC., Lead Analysis in Paint.

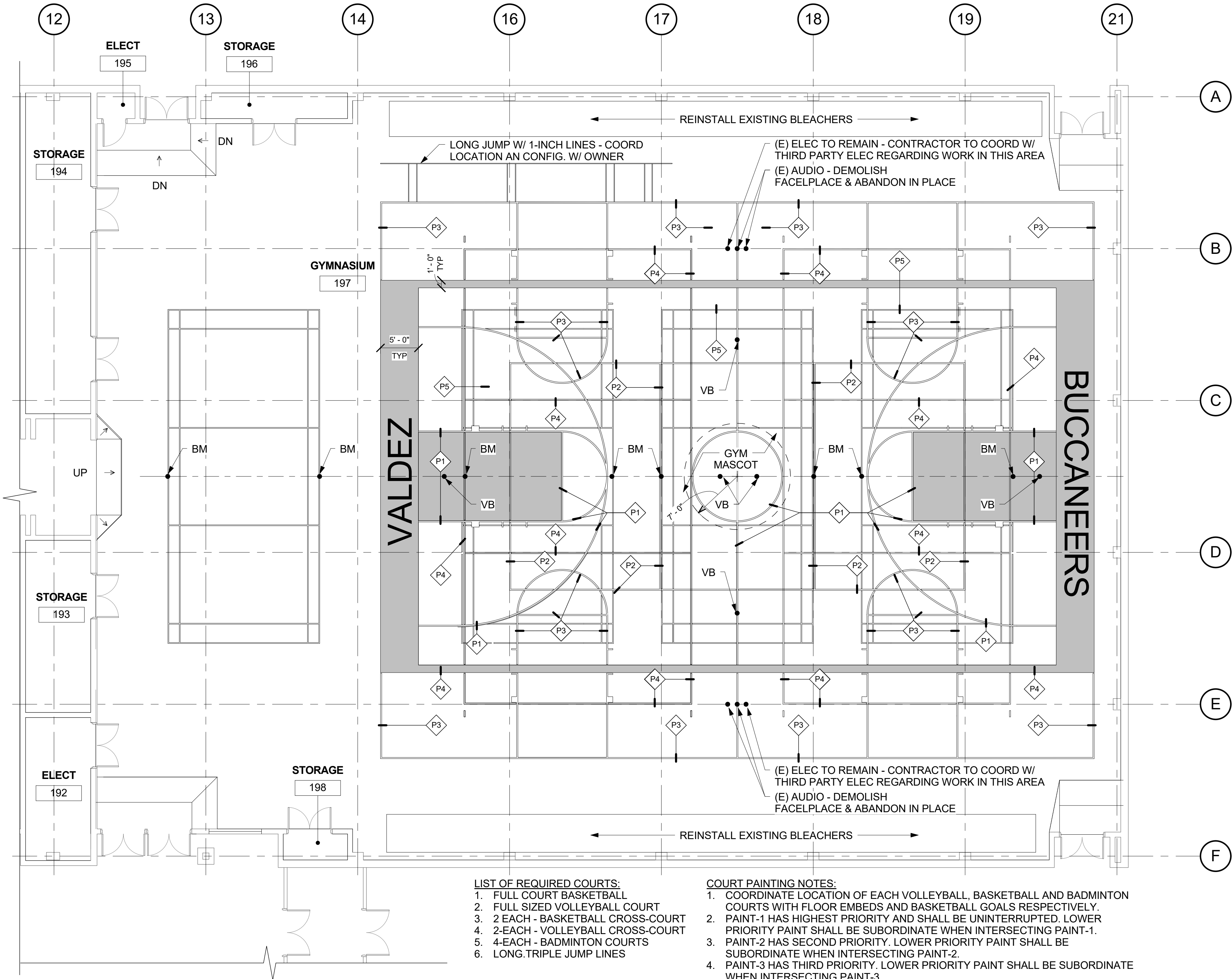


FOR REFERENCE ONLY. FINAL MASCOT  
COLORS AND CONFIGURATION TO BE  
DETERMINED DURING SUBMITTAL PROCESS

2

GYM FLOOR - MASCOT

1/2" = 1'-0"



1

GYM FLOOR PAINTING PLAN

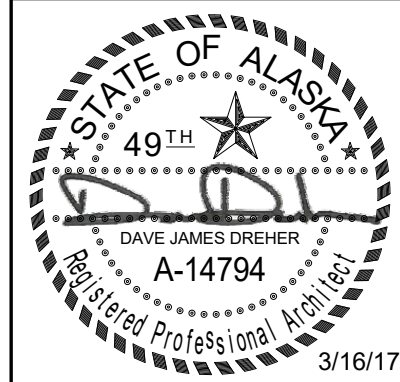
1/8" = 1'-0"

GENERAL:  
1. REPLACE ALL VOLLEYBALL AND BADMINTON STANDARD FLOOR INSERTS.  
ASSUME 8 BADMINTON AND 6 VOLLEYBALL EMBEDDED INSERTS W/ MTL COVERS  
2. RAISE EXISTING BASKETBALL HOOPS TO REGULATION HEIGHT

- LIST OF REQUIRED COURTS:
1. FULL COURT BASKETBALL
  2. FULL SIZED VOLLEYBALL COURT
  - 2 EACH - BASKETBALL CROSS-COURT
  - 2-EACH - VOLLEYBALL CROSS-COURT
  - 4-EACH - BADMINTON COURTS
  6. LONG-TRIPLE JUMP LINES

VB = VOLLEYBALL BASE LOCATION  
BM = BADMINTON BASE LOCATION

- COURT PAINTING NOTES:
1. COORDINATE LOCATION OF EACH VOLLEYBALL, BASKETBALL AND BADMINTON COURTS WITH FLOOR EMBEDS AND BASKETBALL GOALS RESPECTIVELY.
  2. PAINT-1 HAS HIGHEST PRIORITY AND SHALL BE UNINTERRUPTED. LOWER PRIORITY PAINT SHALL BE SUBORDINATE WHEN INTERSECTING PAINT-1.
  3. PAINT-2 HAS SECOND PRIORITY. LOWER PRIORITY PAINT SHALL BE SUBORDINATE WHEN INTERSECTING PAINT-2.
  4. PAINT-3 HAS THIRD PRIORITY. LOWER PRIORITY PAINT SHALL BE SUBORDINATE WHEN INTERSECTING PAINT-3.
  5. PAINT-4 HAS LOWEST PRIORITY AND SHALL BE SUBORDINATE WHEN INTERSECTING ANY OTHER PAINT.
  6. PAINT-5 HAS LOWEST PRIORITY AND SHALL BE SUBORDINATE WHEN INTERSECTING ANY OTHER PAINT.
  7. MAIN BASKETBALL COURT LINES SHALL BE BLACK.
  8. MAIN VOLLEYBALL COURT LINES SHALL BE RED.
  9. CROSS COURT BASKETBALL LINES SHALL BE OFF WHITE.
  10. CROSS COURT VOLLEYBALL LINES SHALL BE OFF WHITE
  11. "VALDEZ" AND "BUCCANEERS" SHALL BE COLUMBIA BLUE.
  12. BADMINTON COURT LINES SHALL BE OFF WHITE
  13. PERIMETER BASKETBALL COLOR TO BE BLACK
  14. IN COLUMBIA BLUE KEY, GHOST CROSS-COURT VOLLEYBALL LINES, MAIN VOLLEYBALL LINE TO BE RED
  15. BADMINTON LINES TO BE 1.5-INCHES. ALL OTHER 2-INCH TYP
  16. COORD. ALL LINE WITH (E) GOALS AND FLOOR INSERTS



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CITY OF VALDEZ  
**HIGH SCHOOL GYM FLOOR  
REPLACEMENT**  
VALDEZ, ALASKA

DATE:	03/16/17
DRAWN:	BJN
CHECKED:	DJD
PROJECT:	1704
DRAWING TITLE:	COURT LINES PLAN
REVISIONS:	1 ADDENDUM 1 3/23/17
SHEET NO:	<b>A2.3</b>

Chemical Hazard Removal and Disposal

**CHEMICAL HAZARDS REMOVAL AND DISPOSAL  
SECTION 02 08 10**

**PART 1 – GENERAL**

1.01 DESCRIPTION OF WORK: The work includes proper removal of hazardous materials from portions of Valdez High School Gymnasium including:

A. Mercury in gym floor (13250 square feet)

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 13280 Asbestos Removal and Disposal

B. Section 13281 Lead Removal and Disposal

1.03 DEFINITIONS AND ABBREVIATIONS: Definitions and abbreviations are provided in the applicable publications listed in Paragraph 1.04 of this section.

1.04 APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification:

A. General Requirements: All work shall be done in compliance with the Uniform Building Code, Uniform Plumbing Code, and the National Electrical Code and the publications listed in this section.

B. Title 29 CFR, Department of Labor  
Part 1910 General Occupational Safety and Health Standards  
Part 2926 Safety and Health Regulations for Construction

C. Title 40 CFR, Environmental Protection Agency  
Part 61 National Emission Standards for Hazardous Air Pollutants  
Part 260 Hazardous Waste Management System: General  
Part 261 Identification and Listing of Hazardous Waste  
Part 262 Standards Applicable to Generators of Hazardous Waste  
Part 263 Standards Applicable to Transporters of Hazardous Waste  
Part 270 The Hazardous Waste Permit Program  
Part 273 Standards of Universal Waste Management  
Part 311 Worker Protection

D. Title 49 CFR, Department of Transportation  
Part 171 General Information, Regulations and Definitions  
Part 172 Hazardous Materials Communication and Regulations  
Part 173 General Requirements for Shipment and Packaging  
Part 177 Carriage by Public Highway  
Part 178 Specifications for Packaging



Chemical Hazard Removal and Disposal

Part 382 Requirements for Drug Testing  
Part 383 Commercial Driver's License Standards

- E. State of Alaska Administrative Codes (AAC)
  - 8 AAC 61 Occupations Safety and Health Standards
  - 18 AAC 60 Solid Waste Management
  - 18 AAC 62 Hazardous Wastes
  - 18 AAC 75 Oil and Hazardous Substances Pollutions Control
- F. State of Alaska Statutes (AS)
  - AS 45.50.447 Titles Relating to Industrial Hygiene
- G. Federal Standards
  - 313D Material Safety Data Sheets
- H. American National Standards Institute (ANSI)
  - Z9.2-79 Local Exhaust Systems
  - Z87.1-89 Eye and Face Protection
  - Z88.2-80 Practices for Respiratory Protection
- I. American Society for Testing and Materials
  - D-4397 Polyethylene Sheeting
- J. International Fire Code Institute
  - Uniform Fire Code (UFC) 1994 UFC Standards
- K. National Fire Protection Association (NFPA)
  - NFPA 701 (1989) Fire Tests for Flame Resistant Textiles and Films
- L. National Institute for Occupational Safety and Health (NIOSH)
  - Manual of Analytical Methods, 4<sup>th</sup> Edition (1994)

1.05 QUALITY ASSURANCE:

- A. On-Site Observations:
  - 1. The safety and protection of the Contractor's employees, sub-contractor's employees, the Owner's employees, the facility, and the public is the sole responsibility of the Contractor.
  - 2. The Owner, the Owner's representative, or the representatives of State or Federal agencies may make unannounced visits to the site during the work. The contractor shall make available two complete sets of clean protective clothing for such visitor use. It is the visitor's responsibility to supply his own respirator and to ensure current medical qualification training, and "fit test".
  - 3. If the Owner or agency visitor determines that practices are in violation of applicable regulations, they will immediately notify the

Chemical Hazard Removal and Disposal

Contractor that operations must cease until corrective action is taken. Such notification will be followed by formal confirmation.

4. The Contractor shall stop work after receiving such notification. The work may not be restarted until the Contractor receives written authorization from the Owner.
5. All costs resulting from such a stop work order shall be borne by the Contractor and shall not be a basis for an increase in the contract amount or an extension of time.

B. Monitoring and Testing: Monitoring and testing during the work shall be performed as follows:

1. The Contractor shall hire an independent testing/laboratories firm to collect and evaluate all air and toxicity characteristic leaching procedure (TCLP) samples, which are the responsibility of the Contractor. The Contractor shall direct its laboratories, in writing, to release monitoring and testing data, and all other pertinent data and records, to the Owner.
2. The Contractor shall be responsible for having its employees monitored for potential exposure to airborne contaminants as required by this specification and all applicable regulations.
3. The Contractor shall be responsible for having its work area monitored, as well as environmental monitoring outside the work area as required by this specification.
4. The Owner may perform monitoring and testing inside the building, inside the work area, and on the Contractor's employees while work is underway and at any time during the work.
5. The Contractor shall have its independent testing/laboratories firm archive all samples until the successful completion of the project.
6. Final inspection and visual clearance shall be conducted by the independent testing/laboratories firm.

1.06 PROTECTION OF EXISTING WORK TO REMAIN: Perform hazardous material removal work without damage or contamination of adjacent work or the site.

1.07 MEDICAL REQUIREMENTS:

- A. Institute and maintain a medical surveillance program in accordance with 29 CFR 1910.134.
- B. Institute and maintain a random drug testing program, as required by 49 CFR 382, for all drivers of vehicles transporting hazardous materials.

Chemical Hazard Removal and Disposal

- 1.08 TRAINING: Employ only workers who are trained and certified as required by 29 CFR 1910, 29 CFR 1926, 40 CFR 311, and 49 CFR 383 to remove, encapsulate, barricade, transport, or dispose of hazardous materials. All workers performing removal of mercury flooring shall have completed a 40 hour HAZWOPER course.
- 1.09 PERMITS AND NOTIFICATIONS: Secure necessary permits for hazardous material removal, storage, transport and disposal and provide timely notification as required by federal, state and local authorities.
- 1.10 SAFETY AND ENVIRONMENTAL COMPLIANCE: Comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding handling, storing, transporting, and disposing of hazardous materials and all other construction activities.
- 1.11 RESPIRATOR PROGRAM: Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134.
- 1.12 HAZARD COMMUNICATION PROGRAM: Implement a hazard communication program in accordance with 29 CFR 1910.1200.
- 1.13 SUBMITTALS:
  - A. The Contractor shall submit the following documentation to the Owner for review, approval or rejection as required by Section 01300, Submittal. Work shall not begin until submittals are approved.
    - 1. Shop drawings.
    - 2. Hazardous material removal work plan.
    - 3. Liability insurance policy and performance bond.
    - 4. Schedule.
    - 5. Independent testing laboratory.
    - 6. Disposal site designations.
    - 7. Waste Transporter Designations.
    - 8. Notifications and certifications.
    - 9. Representations.
    - 10. Competent Person Designation Notifications and Certifications.
    - 11. Request for Substitutions.

Chemical Hazard Removal and Disposal

12. Updated Project Information.
- B. Shop drawings shall show:
1. Boundaries of all hazardous material removal areas.
  2. Location and construction of decontamination stations, if required.
  3. Location of temporary site storage facilities.
  4. Location of air monitoring stations, if required.
  5. Emergency egress route(s).
- C. The work plan shall include procedures for:
1. Work area set-up and protection.
  2. Worker protection and decontamination.
  3. Mercury-containing material removal procedures.
  4. Monitoring and testing procedures (Sampling and Analysis Plan)
  5. Waste handling, packaging, labeling, and manifesting procedures.
- D. Schedule: Submit construction schedule by work area.
- E. Independent Testing/Laboratories Firm and Personnel: Submit the name, location, and phone number of proposed independent testing laboratories, and the names and certifications of the industrial hygiene technicians. Include the laboratory's accreditation. Not all laboratories will require all accreditations.
1. The Independent Testing/Laboratories firm shall be acceptable to the Owner.
  2. Evidence that a laboratory has demonstrated proficiency in performing analysis according to Method 1311 TCLP, corresponding to the current versions or Test Methods for Evaluating Solid Wastes (Chemical Physical Methods), SW-846.
  3. Submit the name, address, telephone number, and resume of the Industrial Hygienist (IH) who prepared the Sampling and Analysis Plan and will oversee the on-site monitoring. Submit the names, addresses, and resumes of industrial hygiene technician who may assist the IH for on-site tasks. The Contractor shall submit



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documentation that the IH has all the qualifications for the assigned duties as required by the Contractor's liability insurance policy.

4. Submit copies of the Contractor's letters to the independent testing laboratories, directing each to release all the results for this project to the Owner as these results become available and specified herein.
- F. Disposal Site: Submit the name and location of the proposed U.S. Environmental Protection Agency (EPA) permitted disposal sites.
  - G. Waste Transporter: Submit the name and address of the proposed waste transporters.
  - H. Certifications, Permits, and Notifications: Submit legible copies of each Worker's Hazardous Waste Operations and Emergency Response (HAZWOPER) cards and/or a copy of the refresher training certificate to show that all workers have received their initial training or an eight-hour refresher course within the past year. Submit copies of his/her EPA Hazardous Waste Generator identification number for the purpose of accumulating hazardous waste in accordance with 40 CFR 262 and an EPA identification number for transporting hazardous waste.
  - I. Representations: Submit statement by the Contractor that records of the employee's work assignments, certifications, respirator fit tests, and medical records are accurate, up-to-date, and available for inspection.
  - J. Competent Person: Submit the name and certifications of the Contractor's proposed Competent Person and a list of his/her previous projects. Certify that the Competent Person has the knowledge and training to supervise the work in compliance with the publications listed in Paragraph 1.04 above.
  - K. Substitutions: Submit requests for substitutions of materials, equipment and methods as permitted by Section 01300, Submittals.
  - L. Updated Project Information: Submit changes to the submitted project information at least 24 hours prior to the effective time of change for the following:
    1. Updated schedules for hazardous material removal.
    2. Change in competent person.
    3. Training certificates for additional workers.
    4. Changes to work plan.

Chemical Hazard Removal and Disposal

- 1.14 TEST REPORTS: Submit the following documentation produced during the work as received:
  - A. Project daily logs.
  - B. Monitoring and testing data sheets and laboratory reports.
- 1.15 PROJECT COMPLIANCE DOCUMENTS: Submit the following documents with the application for final payment as required by Section 01300, Submittals.
  - A. Daily sign-in sheets.
  - B. Contractor's actual "start and finish" project dates.
  - C. All hazardous waste shipping manifests.
  - D. Disposal site receipts.
  - E. All final laboratory results.
- 1.16 SANITARY FACILITIES: Provide adequate toilet and hygiene facilities.
- 1.17 MATERIAL STORAGE: Store all materials subject to damage off the ground and secure from damage, weather, or vandalism.
- 1.18 ON-SITE DOCUMENTATION: Maintain on-site manufacturer's data for all equipment and supplies proposed to be used for the work.
  - A. Equipment: Show the model, style, operations, and maintenance for the following, as applicable.
    - 1. Respirators: PAPR and canister types.
    - 2. Decontamination facilities.
    - 3. Specialized hazards handling equipment.
  - B. Expendable Supplies: Maintain the manufacturer's safety data, and use the data for the following supplies:
    - 1. Coveralls and headgear.
    - 2. Boots, aprons, and gloves.
    - 3. Disposal containers.
    - 4. Solvents and degreasers.

Chemical Hazard Removal and Disposal

- C. Material Safety Data Sheets (MSDS): Maintain on-site Material Safety Data Sheets for each chemical and other material proposed to be used.
- D. Respirator Program: The Contractor's written respirator program shall be onsite.

**PART 2 – PRODUCTS**

- 2.01 PERSONAL PROTECTIVE EQUIPMENT: Provide personal protective clothing as approved and selected by the IH. Two sets of personal protective equipment shall be made available daily to the Owner and other authorized visitors for entry to hazardous material work areas.
  - A. Respirators: Provide personally issued and marked respirators approved by the National Institute of Occupational Safety and Health (NIOSH). Provide sufficient replacements for respirators with disposable canisters.
  - B. Provide filter cartridges approved for each airborne contaminant which may be present. NIOSH approved filter cartridges may be used. At no time shall the permissible exposure limit (PEL) for the contaminant exceed the PEL listed in 29 CFR 1910.1001 Subpart Z.
  - C. Whole Body Protection: Provide approved aprons, gloves, goggles, face shields, and hard-hats, and other protective clothing as required to meet applicable safety regulations to all workers engaged in hazardous materials removal. The Contractor's industrial hygienist shall select and approve the protective clothing.
  - D. Provide protective personal equipment and clothing at no cost to the workers.
- 2.02 DECONTAMINATION UNIT: Provide a decontamination station in accordance with the Contractor's accepted work plan and applicable regulations.
- 2.03 WARNING SIGNS AND TAPE: Post warning signs and tape at the boundaries and entrance to chemical hazards removal areas. Signs required by other statutes, regulations, or ordinances may be posted in addition to, or in the combination with this warning sign.
- 2.04 WARNING LABELS: Affix warning labels to all hazardous waste disposal containers as described in the Contractor's approved Solid Waste Disposal Plan.
- 2.05 SPECIALIZED EQUIPMENT: Specialized equipment to consolidate, reduce or treat hazardous materials shall be specifically manufactured for the intended use and utilized in accordance with the manufacturer's recommendations.

Chemical Hazard Removal and Disposal

- 2.06 EXPENDABLE SUPPLIES: Provide flame resistant 6-mil thick polyethylene sheet plastic in widths necessary to minimize seams.
- 2.07 MATERIAL SAFETY DATA SHEETS (MSDSs): Provide MSDSs for all chemical materials brought onto the work-site.
- 2.08 OTHER ITEMS: Provide other items, such as consumable materials, disposable and/or reusable cleaning equipment and hand tools, or miscellaneous construction equipment and materials, in sufficient quantity as necessary to fulfill and complete the requirements of the contract. Electrical equipment and supplies shall be UL listed.
- 2.09 ENCAPSULANTS: Encapsulants shall contain no toxic or hazardous substances. Encapsulants shall be compatible with the products to which they are applied and be compatible with any replacement products.

**PART 3 – EXECUTION**

3.01 WORK AREAS:

- A. Electrical Power: Verify that the electrical power to any equipment being removed is deactivated, disconnected, and locked-out.
- B. Loaded Disposal Drums: The Contractor shall provide handling equipment to move disposal drums loaded with hazardous wastes.

3.02 PERSONNEL PROTECTION PROCEDURES

- A. All personnel entering the work area shall sign the daily log and put on clean protective clothing.
- B. Basic protective clothing shall consist of aprons, gloves, goggles, face shields, and hard hats—with the addition of approved full body coveralls, bib-type aprons, and respirators as conditions warrant.
- C. Make available a contaminated material disposal drum, 6-mil. Plastic wrapping and tape, or appropriate bagging materials.
- D. Decontamination Procedures: All personnel handling or removing hazardous materials will comply with the decontamination procedures as described in the approved work plan.

3.03 HAZARDOUS MATERIAL REMOVAL PROCEDURES: Remove hazardous materials in accordance with the Contractor's approved work plan.

Chemical Hazard Removal and Disposal

3.04 MONITORING AND TESTING: Conduct daily sampling in accordance with the Contractor's accepted Sampling and Analysis Plan and the Specification. The Owner may conduct air monitoring in the Contractor's work areas and on the Contractor's employees.

- A. Personal, work area, and environmental monitoring for airborne contaminants shall be performed by industrial hygiene technicians who are employees of the Contractor's Independent Testing/Laboratories Firm
- B. Perform air monitoring in accordance with 29 CFR 1926, current EPA guidance, appropriate NIOSH testing methods, and as specified herein. Calibrate all sampling pumps on-site with a calibrated transfer standard before and after each sample. Built-in rotometers on pumps are not acceptable for calibration.
- C. Monitor for all airborne contaminants listed in 29 CFR 1926.55 and 8 AAC 61.1100, which are produced by the Contractor's operations.
- D. Contractor shall test waste materials as required by 40 CFR 261, the disposal site's permit, and its approved work plan.

3.05 DISPOSAL:

- A. Dispose of hazardous wastes in an EPA permitted hazardous waste disposal site as required by 40 CFR 260 and 40 CFR 761, the Contractor's approved plan, and the disposal site operator.
- B. Comply with current waste disposal, handling, labeling, storage, and transportation requirements of the wastes disposal facility, U.S. Department of Transportation, and EPA regulations.

3.06 CLEANING OF WORK AREA:

- A. Remove all hazardous materials and debris within a work area. Wet clean all work area surfaces.
- B. Notify the Owner that hazardous materials removal has been completed and the work area is ready for visual inspection. Include a statement that all hazardous material and debris in the work area have been removed as required by the contract.

**End of Section**

LEAD REMOVAL /DISTURBANCE

**LEAD REMOVAL / DISTURBANCE AND DISPOSAL**  
**Section 02 83 33**

**PART 1 - GENERAL**

**1.1 DESCRIPTION OF WORK**

- A. The work may require the disturbance (including cleanup of existing loose paint), demolition, or removal, and disposal of lead painted and/or lead-containing materials related to the Valdez High Gymnasium Floor Replacement Project as specified herein. Items to be disturbed may include, but are not limited to:
  - 1. Painted interior building components (doors, door frames, wall systems)
- B. The work includes all air monitoring, dust sampling, waste testing and disposal as specified herein. Materials listed are not necessarily hazardous waste or hazardous to handle. Lead-containing paints or materials identified for demolition and disposal shall be tested by the Toxicity Characteristics Leaching Procedure (TCLP) to determine if they are hazardous waste prior to disposal. Metal waste shall be recycled where practical.
- C. Asbestos, lead and other hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. This notification is provided in accordance with EPA and OSHA requirements. No asbestos is to be disturbed during this specific project scope.
- D. All work disturbing lead-containing materials shall comply with 29 CFR 1926.62 and other applicable regulations.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

- A. Section 13285 Chemical Hazards
- B. White Environmental Consultants Inc. Laboratory Report # 627632 Asbestos Results
- C. White Environmental Consultants Inc. Laboratory Report # 6276277 Lead in Paint Results

**1.3 DEFINITIONS AND ABBREVIATIONS:** Definitions and abbreviations are provided in the applicable publications listed in Paragraph 1.4 of this section.

**1.4 APPLICABLE PUBLICATIONS**



## LEAD REMOVAL /DISTURBANCE

The publications listed below form a part of this specification to the extent referenced.

- A. General Requirements: All work shall be performed in compliance with the International Building, Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Code; Uniform Plumbing Code; the National Electrical Code; and the publications listed in this section that are in effect at the time of the bidding of this contract.
- B. Title 29 Codes of Federal Regulations (CFR), Department of Labor (USDOL)  
Part 1910 General Occupational Safety and Health Standards  
Part 1926 Safety and Health Regulations for Construction
- C. Title 40 CFR, Environmental Protection Agency (EPA)  
Part 61 National Emission Standards for Hazardous Air Pollutants  
Part 311 Worker Protection Part 763 Asbestos
- D. Title 49 CFR, Department of Transportation (DOT)  
Part 171 General Information, Regulations and Definitions  
Part 172 Hazardous Materials Communication and Regulations  
Part 173 General Requirements for Shipments and Packaging  
Part 177 Carriage by Public Highway  
Part 178 Specifications for Packaging  
Part 382 Requirements for Drug Testing  
Part 383 Commercial Driver's License Standards
- E. State of Alaska Administrative Codes (AAC)  
8 AAC 61 Occupational Safety and Health Standards  
18 AAC 60 Solid Waste Management
- F. State of Alaska Statutes  
AS 18.31 Health and Safety –Asbestos  
AS 45.50.477 Titles Relating to Industrial Hygiene
- G. Public Law 101-637  
Asbestos School Hazard Abatement Reauthorization Act
- H. Federal Standards  
313D Material Safety Data Sheets
- I. American National Standard Institute (ANSI)  
Z9.2 Local Exhaust Systems  
Z87.1 Eye and Face Protection  
Z88.2 Practices for Respiratory Protection
- J. American Society for Testing and Materials (ASTM)  
D-4397 Polyethylene Sheeting
- K. International Code Institute International Building (IBC), Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Codes Current Standards

## LEAD REMOVAL /DISTURBANCE

- L. National Fire Protection Association (NFPA) NFPA 701 Fire Tests for Flame Resistant Textiles and Films
- M. National Institute of Occupational Safety and Health (NIOSH) Manual of Analytical Methods, Current Edition
- N. Underwriters Laboratories (UL)  
UL 586 High-Efficiency, Particulate, Air (HEPA) Filter Units

**1.5 QUALITY ASSURANCE**

- A. On-site Observation:
  - 1. The safety and protection of the Contractor's employees, Subcontractor's employees, Owner's employees, the facility, and the public is the sole responsibility of the Contractor.
  - 2. The Owner, the Owner's Representative, or representatives of State or Federal agencies may make unannounced visits to the site during the work. The Contractor shall make available two complete sets of clean, protective clothing for such visitor use. If the work requires the use of PAPR or Supplied Air Respirators, the contractor shall provide respirators to the visitor to ensure compatibility with fresh batteries or supplied air system. It is the visitor's responsibility to ensure medical qualification, training, and current "fit test" prior to using any respirator provided by the Contractor.
  - 3. If the Owner or agency visitor determines that practices are in violation of applicable regulations, they will immediately notify the Contractor that operations must cease until corrective action is taken. Such notification will be followed by formal confirmation.
  - 4. The Contractor shall stop work after receiving such notification. The work may not be restarted until the Contractor receives written authorization from the Owner.
  - 5. All costs resulting from such a stop work order shall be borne by the Contractor and shall not be a basis for an increase in the contract amount or an extension of time.
- B. Monitoring and Testing: Monitoring and testing during the work shall be performed as follows:
  - 1. The Contractor shall hire Independent Testing Laboratories to collect and evaluate all air, dust, bulk, and toxicity characteristic leaching procedure (TCLP) samples that are the responsibility of the Contractor. The Contractor shall direct its laboratories, in writing, to release monitoring and testing data, and all other pertinent data and records, to the Owner.
  - 2. The Contractor shall be responsible for monitoring its employees for potential exposure to airborne contaminants as required by this specification and all applicable regulations.
  - 3. The Contractor shall be responsible for work area monitoring and environmental monitoring outside the work area as required by this specification.
  - 4. The Owner may perform monitoring and testing inside the building, inside the work areas, and on the Contractor's employees while work is underway and at any time during the work.
  - 5. Final inspection and clearance testing shall be conducted by the Contractor.
  - 6. The Contractor shall have its Independent Testing Laboratories archive all samples

LEAD REMOVAL /DISTURBANCE

until the successful completion of the project.

C. Additional Sampling of Suspect Materials:

1. The Contractor and all Subcontractors shall be vigilant during demolition and construction in the event additional suspect lead or hazardous materials are encountered. If suspect lead or hazardous materials not previously identified are encountered, the contractor shall stop work that may be affected by this material and immediately notify the Owner. The Owner or the Owner's Representative will provide recommendations and additional testing if necessary.
2. The Contractor and all Subcontractors shall notify the Owner prior to any bulk sampling of suspect lead-containing material or other hazardous materials to allow the Owner or Owner's Representative to be present during such sampling.

**1.6 PROTECTION OF EXISTING WORK TO REMAIN:** Perform lead removal in the project work areas without damage or contamination of adjacent work or the facility.

**1.7 MEDICAL REQUIREMENTS**

- A. Institute and maintain a surveillance program in accordance with 29 CFR 1926.62 and 29 CFR 1910.134.
- B. Institute and maintain a random drug testing program, as required by 49 CFR 382, for all drivers of vehicles transporting hazardous materials.

**1.8 TRAINING:** Employ only workers who are trained and certified as required by 29 CFR 1910, 29 CFR 1926, 40 CFR 311, 40 CFR 745 and 49 CFR 383 to remove, encapsulate, barricade, transport, or dispose of lead-containing materials.

**1.9 PERMITS, IDENTIFICATION NUMBERS AND NOTIFICATIONS:** Secure necessary permits for hazardous material removal, storage, transport and disposal and provide timely notification as required by federal, state, and local authorities.

**1.10 SAFETY AND ENVIRONMENTAL COMPLIANCE:** Comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding handling, storing, transporting, and disposing of hazardous materials and all other construction activities.

**1.11 RESPIRATOR PROGRAM:** Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134.

**1.12 HAZARD COMMUNICATION PROGRAM:** Implement a hazard communication program in accordance with 29 CFR 1910.1200.

**1.13 SUBMITTALS**

- A. Submit the following documentation to the Owner for review, approval or rejection. Work shall not begin until submittals are approved.
  1. Shop drawings.

LEAD REMOVAL /DISTURBANCE

2. Work plan.
  3. Liability insurance policy and performance bond.
  4. Schedule.
  5. Independent testing laboratory and laboratory personnel.
  6. Disposal site designations.
  7. Waste transporter designations.
  8. Representations.
  9. "Competent Person" designation and experience.
  10. EPA Training certifications and notification plan, if required.
  11. Request for substitutions.
- B. Shop drawings shall show:
1. Boundaries of each lead work area, if required.
  2. Location and construction of decontamination stations, if required.
  3. Location of temporary site storage facilities.
  4. Location of air monitoring stations, both in and outside of the work area.
  5. Emergency egress route(s).
  6. Location of negative pressure exhaust systems, if required.
- C. The work plan shall include procedures for:
1. Work area set-up and protection.
  2. Worker protection and decontamination.
  3. Initial exposure determination(s).
  4. Lead removal procedures.
  5. Waste testing, transport, and disposal procedures.
  6. Monitoring and testing procedures (Sampling and Analysis Plan).
  7. Spill clean-up emergency procedures.
- D. Insurance Policy and Bond: Submit copies of the Contractor's or Subcontractor's insurance policy and performance bond. Submittal requirement is only to ensure that the insurance certificate(s) show specific coverage for the potentially hazardous materials being handled by this project. The insurance and bond amounts and certificate holder requirements are addressed in other portions of the contract documents and are not covered as part of this submittal requirement.
- E. Schedule: Submit construction schedule by work area.
- F. Independent Testing Laboratories and Laboratory Personnel: Submit the name, location, and phone number of proposed independent testing laboratories, and the names and certifications of the industrial hygiene technicians. Include the laboratory's accreditation. Not all laboratories will require all accreditations.
1. The Independent Testing Laboratories shall be acceptable to Owner.
  2. Submit evidence that the laboratory is currently judged proficient in lead analysis, as determined by the Environmental Lead Proficiency Analytical Testing (ELPAT) Program, of the American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) for lead in paint chip, soil, and dust wipe samples.

## LEAD REMOVAL /DISTURBANCE

3. Submit evidence that the laboratory is currently certified by OSHA to perform blood lead analysis.
  4. Submit evidence that the laboratory has demonstrated proficiency as determined by ELPAT or ELLAP performance for NIOSH Method 7082 and/or NIOSH Method 7105 analytical method for the determination of lead in air.
  5. Submit evidence that the laboratory has demonstrated proficiency in performing analyses according to Method 1311 TCLP, corresponding to the current version of Test Methods for Evaluating Solid Wastes (Chemical Physical Methods), SW-846. Evidence may include successful participation in a recognized inter-laboratory quality control program such as a laboratory certified by the California Health and Welfare Agency, Department of Health Services, or a more informal inter-laboratory quality control program.
  6. Submit evidence that the laboratory is currently accredited by the American Industrial Hygiene Association (AIHA).
  7. Submit the name, address, telephone number, and résumé of the Contractor's Industrial Hygienist (IH) or competent person who prepared the Sampling and Analysis Plan and will oversee the on-site monitoring, visual inspections and clearance testing. Submit the names, addresses, and résumés of industrial hygiene technicians who may assist the IH for on-site tasks. Submit documentation that the IH has all the qualifications for the assigned duties as required by the Contractor's liability insurance policy.
  8. Submit copies of the Contractor's letter to each of the independent testing laboratories, directing each to release all the results for this project to the Owner, as these results become available and as specified herein.
- G. Disposal Site: Submit the name and location of the proposed Environmental Protection Agency (EPA) permitted disposal site.
- H. Waste Transporter: Submit the name and address of the proposed waste transporter.
- I. Representations: Submit statement by the Contractor that records of employees' work assignments, certifications, respirator fit tests, and medical records are accurate, up-to-date, and available for inspection.
- J. Competent Person: Submit the name and certifications of the Contractor's proposed Competent Person and a list of his/her previous projects. Certify that the Competent Person has the knowledge and training to supervise the work in compliance with the publications listed in Paragraph 1.4 above.
- K. Substitutions: Submit requests for substitutions of materials, equipment and methods.
- L. Updated Project Information: Submit changes to the submitted project information at least 24 hours prior to the effective time of change for the following:
1. Updated schedules for lead removal.
  2. Change in Competent Person.
  3. Changes to work plan.

**1.14 TEST REPORTS:** Submit the following documentation produced during the work as soon as

## LEAD REMOVAL /DISTURBANCE

received:

- A. Project Daily Logs: Submit the previous day's Daily Logs. Logs shall include regulated area sign-in sheets and list of lead-containing materials removed, including quantities and locations of those materials, in the units used on the drawings. Claims for additional quantities will not be addressed unless daily quantities are submitted.
- B. Monitoring and testing data sheets and laboratory reports.

**1.15 PROJECT COMPLIANCE DOCUMENTS:** Submit the following documents to the Owner with application for final payment:

- A. Contractor's actual project "Start and Finish" dates.
- B. Waste testing results per Paragraph 3.5 (A).
- C. Waste Shipment Records (Manifest EPA form 8700-22) if required.
- D. Clearance sampling and soil sampling data sheets (if required) and laboratory reports.
- E. Disposal site receipts.
- F. Final clearance submittals as outlined in 3.7 (if required).
- G. Evidence that each employee who was engaged in lead disturbance/removal work or who was exposed to lead completed training on lead covering the requirements of 29 CFR 1926.62.

**1.16 SANITARY FACILITIES:** Provide adequate toilet and hygiene facilities.

**1.17 MATERIAL STORAGE:** Store all materials subject to damage off the ground and secure from damage, weather, or vandalism.

**1.18 ON-SITE DOCUMENTATION:** Maintain on the job site, copies of the following data for safety procedures, equipment, and supplies used for the work.

- A. Equipment: Show the model, style, capacity and the operation and maintenance procedures for the following, as applicable:
  - 1. High-Efficiency, Particulate, Air (HEPA) Filtration units.
  - 2. HEPA Vacuum cleaners.
  - 3. Pressure differential recording equipment.
  - 4. Heat stress monitoring equipment.
- B. Material Safety Data Sheets (MSDSs): Maintain MSDSs for each encapsulant, surfactant, solvent, detergent, and other material proposed to be used.
- C. Respiratory Protection Plan: The Contractor's written respirator program.



## LEAD REMOVAL /DISTURBANCE

**PART 2 - PRODUCTS**

**2.1 PERSONAL PROTECTIVE EQUIPMENT:** Provide personal protective clothing as approved and selected by the IH.

- A. Respirators: Provide personally issued and marked respirators approved by the National Institute of Occupational Safety and Health (NIOSH). Provide sufficient replacements for respirators with disposable canisters. Use respirators equipped with dual cartridges whenever both lead hazards and other respiratory hazards exist in the work area.
- B. Provide filter cartridges approved for each airborne contaminant which may be present. NIOSH approved filter cartridges may be used. At no time shall the permissible exposure limit (PEL) for the contaminant exceed the PEL listed in 8 AAC 61.1100.
- C. Whole Body Protection: Provide approved aprons, gloves, eye protection, and hard-hats, and other protective clothing as required to meet applicable safety regulations to personnel potentially exposed to lead dust or fumes above the permissible exposure limit (PEL). Wear this protection properly. Full facepiece respirators shall meet the requirements of ANSI Z87.1.
- D. Provide protective personal equipment and clothing at no cost to the workers.

**2.2 DECONTAMINATION UNIT**

The following decontamination procedures will be strictly adhered to whenever personnel enter or leave the regulated work area:

- A. Each worker and authorized visitor prior to entering regulated area will, put on the appropriate respirator and clean protective full body clothing and safety equipment as needed.
- B. All workers and authorized visitors will, each time they leave the work area, HEPA vacuum all gross debris from their protective clothing, remove all protective clothing and place into disposal bags and proceed to the decontamination station while continuing to wear respirators. Workers will completely decontaminate and remove respirators while in the decontamination station after washing around the face seal.
- C. The HEPA filters will either be wetted and disposed of as lead waste or tape will be placed over the filters for reuse. Workers will then proceed through the decontamination station to clean and disinfect respirators.
- D. Workers will not eat, drink, smoke, and or chew gum, or tobacco while in the work area or decontamination area.

## LEAD REMOVAL /DISTURBANCE

- E. Imminent threats of life in the work area take precedence over decontamination considerations. In any emergency involving an imminent threat to life, the injured person will be removed from the work area in the quickest way possible. This will be the only exception to these decontamination requirements. Emergency exit will be provided in the work area.

- 2.3 WASTE WATER FILTERS ( if required):** Install the waste water filters in a series of stages with the final filtration stage sufficient to meet discharge standard of 18 AAC 70 and/or any local sewage system discharge limit for lead. Size the waste water pump for 1.25 times the shower head flow-rate. Dispose all filters as lead contaminated waste.
- 2.4 WARNING SIGNS AND TAPE:** Post warning signs and tape at the boundaries and entrances to lead disturbance and removal work areas. Signs required by other statutes, regulations, or ordinances may be posted in addition to, or in combination with, this warning sign. Conform warning signs and tape to the requirements of 29 CFR 1926.62.
- 2.5 WARNING LABELS:** Affix warning labels to all hazardous waste disposal containers as described in the Contractor's approved Solid Waste Disposal Plan. Conform labeling to 29 CFR 1926.62 and 49 CFR 100-199.
- 2.6 TOOLS:** Vacuum cleaners shall be equipped with HEPA filters. Use only approved power tools to remove lead-containing material. Do not use open-flame and electric element heat-gun type tools with temperatures in excess of 700°F to remove lead-containing material. Remove all residual lead contamination from reusable tools being removed from lead disturbance or removal work areas. Electrical tools and equipment shall be UL listed.
- 2.7 AIR MONITORING EQUIPMENT:** The Contractor's IH shall select the air monitoring equipment to be used for the evaluation of airborne lead.
- 2.8 EXPENDABLE SUPPLIES:** Provide flame resistant 6-mil thick polyethylene sheet plastic shall be provided in widths necessary to minimize seams.
- 2.9 MATERIAL SAFETY DATA SHEETS (MSDSs):** Provide MSDSs for all chemical materials brought onto the work-site.
- 2.10 OTHER ITEMS:** Provide other items, such as consumable materials, disposable and/or reusable cleaning equipment and hand tools, or miscellaneous construction equipment and materials, in sufficient quantity as necessary to fulfill and complete the requirements of the contract. Electrical equipment and supplies shall be UL listed.
- 2.11 ENCAPSULANTS:** Encapsulants shall contain no toxic or hazardous substances. Encapsulants shall be compatible with the products to which they are applied and be compatible with replacement products.

**PART 3 - EXECUTION**

## LEAD REMOVAL /DISTURBANCE

**3.1 WORK AREAS**

- A. Lead Control Areas: A control area, structure or containment where lead-containing or contaminated materials are being disturbed. Critical barriers and/or physical boundaries shall be employed to isolate the lead control area and to prevent migration of lead contamination and unauthorized entry of personnel.
- B. Contained Lead Work Area Requirements: Construct contained lead work areas as described in the Contractor's approved work plan. A contained lead work area is required whenever airborne lead levels cannot be maintained below the OSHA action level at the boundary of a lead work area.
- C. Building Ventilation System: Shut down and isolate by air-tight seals all building ventilation systems supplying air into or returning air from a lead control area or contained lead work area.
- D. Building Electrical Systems: Verify that the electrical service is deactivated, disconnected and locked out where necessary for wet washing and/or removal where needed. Provide temporary electrical service, equipped with ground fault protection, where needed.

**3.2 PERSONNEL PROTECTION PROCEDURES**

- A. Initial Determination: An initial determination is required in the absence of acceptable prior exposure data in accordance with 29 CFR 1926.62. Establish an initial lead work area for each material to be disturbed and each disturbance procedure if required. Isolate these lead work areas from the rest of the building. Personnel working in these areas shall wear respiratory protection and personal protective equipment as directed by the IH. Perform personal and work area air monitoring as directed by the IH. Operational decontamination facilities shall be available. Work performed shall be representative of the work to be done during the remainder of the project.
- B. Respirator Evaluation: Upgrading, downgrading, or not requiring respirators shall be recommended by the Contractor's IH based on the measured airborne lead-containing dust concentrations. Immediately implement recommendations to upgrade the respiratory protection shall be implemented immediately, followed by notification to the Owner. NOTE: Submit recommendations in writing to downgrade respirator type or not require respirators to the Owner for review and written approval prior to implementation.
- C. Decontamination Procedures: Worker and material decontamination procedures shall be as described in the Contractor's approved work plan. Worker decontamination shall be as directed by the Contractor's competent person.
- D. Work Stoppage: Stop work if the IH, the Owner, or a representative of a regulatory agency determines that the work is not in compliance with the Contractor's approved work plan, these specifications, or applicable laws and regulations. The Contractor shall stop work and notify the Owner whenever the measured concentrations of lead outside the lead control area equal or exceed 30 µg/m for airborne lead or 200 µg/ft for lead dust

## LEAD REMOVAL /DISTURBANCE

on surfaces that would normally be accessible by building occupants. When such work stoppage occurs, the cause of the contamination shall be corrected and the damaged or contaminated area shall be restored to its original decontaminated condition by the Contractor at no expense to the Owner. The Contractor is responsible for removing dusts and debris that were generated as a result of his work.

- E. The Contractor shall adhere to all applicable regulations regarding entry into confined spaces.

### 3.3 LEAD DISTURBANCE AND REMOVAL PROCEDURES

- A. General: Perform lead disturbance or removal work in accordance with the Contractors approved work plan, applicable regulations and this specification.
- B. Pre-Cleaning: Removal of existing loose paint chips is included in the scope of work. Pre-clean surfaces by HEPA vacuum and wet washing/wiping prior to the establishment of a work area.

### 3.4 MONITORING AND TESTING: Conduct daily sampling in accordance with the Contractor's accepted Sampling and Analysis Plan and this specification. The Owner may conduct air monitoring in the Contractor's work areas and on the Contractor's employees.

- A. Perform environmental air monitoring outside the lead work area for each lead work area without a negative initial determination. Include at least one sample immediately outside the entrance to the lead work area.
- B. Perform dust wipe sampling for each lead work area without a negative initial determination. Include at least one sample immediately outside the entrance to the work area daily.
- C. Take personnel samples in accordance with 29 CFR 1926.62. Personal samples for an employee will include a minimum of two samples per 8 hour shift. Employees will be monitored at the rate of at least one employee for every eight people performing each task in each work area. Persons performing separate tasks or in separate lead work areas shall be sampled separately.
- D. Reduction of monitoring: For each operation for which the Negative Initial Determination established workers' exposure will be below the action level, the Contractor's IH may petition the Owner's Representative to recommend that the monitoring as required above be reduced for the specific task or operation.

### 3.5 DISPOSAL

- A. Sampling of Waste Materials: The Contractor shall test waste materials according to 40 CFR 261 and the disposal site's permit to determine if they are hazardous waste and to dispose of them accordingly. Collect, package and transport to an EPA approved Hazardous Waste Disposal Site all bulk debris, loose paint chips, fines, dust from HEPA filters and vacuum bags, unfiltered waste water, water filter cartridges, disposable

## LEAD REMOVAL /DISTURBANCE

personal protective equipment (including respirator filters, poly, and tape) which do not have TCLP test results that classify the material as non-hazardous for lead. Lead-acid batteries and other batteries are classified by the EPA as Universal Wastes. The EPA encourages that all Universal Wastes be recycled in accordance with 40 CFR 273, or in the case of lead-acid batteries, in accordance with 40 CFR 266, subpart G.

- B. Hazardous Waste Disposal: Dispose of hazardous project wastes as required by 40 CFR 260 and the Contractor's approved work plan.
  - C. Construction (Non-Hazardous) Waste Disposal: Dispose of solid (non-hazardous) waste in a permitted waste facility, in accordance with applicable federal, state, and local laws and regulations. Burning of waste is prohibited.
  - D. Salvageable Materials: The Contractor may salvage metallic lead, lead-acid batteries and other materials to keep such materials from entering the project waste stream. Sell or transfer salvage with a document of exempt status as provided by 40 CFR 261.
  - E. Waste Storage: Temporarily store solid wastes as described in the approved work plan.
- 3.6 FINAL CLEANING AND VISUAL INSPECTION:** Perform a final cleaning and visual inspection of each lead control area prior to release to unprotected workers in accordance with the Contractor's approved work plan. Clean the lead control area by vacuuming with a HEPA filtered vacuum cleaner, wet mopping or wet wiping. Do not dry sweep or use pressurized air to clean up the area. A final visual inspection report shall be provided by the Owner's Representative verifying that all lead disturbance required by the contract has been completed and that all visible dust and debris subject to disturbance by the planned work under this contract have been removed and the area HEPA vacuumed, wet mopped or wet wiped.
- 3.7 WORK AREA CLEARANCE TESTING:** Work area clearance testing by the Contractor is required for each lead control area where the lead action level has been exceeded. Clearance testing shall be performed only after a visual inspection report by the IH Technician has documented that the work area is clean and that all lead disturbance required by the contract has been completed. Clearance testing shall include the following:
- A. A visual inspection report by the Contractor's IH Technician verifying that all lead disturbance required by the contract has been completed and that all visible dust and debris subject to disturbance by the planned work under this contract have been removed and the area HEPA vacuumed, wet mopped or wet wiped.
  - B. Three (3) lead wipe and/or lead soil sample results from within the lead control area per the Contractor's approved work plan and in accordance with NIOSH method 9100.
  - C. Dust clearance levels shall be below 40 µg/ft for floors, 250 µg/ft for interior window sills and 400 µg/ft for window troughs.
  - D. The Owner may conduct concurrent clearance testing.
  - E. Work area barriers or containments shall not be removed until clearance testing results

LEAD REMOVAL /DISTURBANCE

are reviewed and approved by the Owner.

**3.8 SUBSTANTIAL COMPLETION**

- A. After the work area barriers and temporary construction and equipment have been removed, the Contractor shall inspect the work area to verify that no lead debris, contaminated water, or other residue remains. Any remaining residue shall be cleaned up using HEPA vacuum cleaners and wet wiping methods.
- B. The Contractor shall certify that the work area has been cleaned of all lead in compliance with the contract, and that there is no unrepaired damage to walls, ceilings, doors or surfaces or finishes other than that called for by the scope of work.
- C. Costs of restoration of damaged finishes shall be borne by the Contractor.

**END OF SECTION**



**Bulk Sample Analysis for Asbestos**

WL Project #: LA-022364

Client Project #: 068-17

Report #: 627632

Report By: G. Caudill

Report Date: 02/28/2017

Client: City of Valdez

PO Box 307

Valdez, AK 99686

Billing Number: 26008

Collected By: B. O'Bray

Collection Date: 02/24/2017

Analysis By: J. Hicklin

Analysis Date: 02/28/2017

Received By: G. Caudill

Received Date: 02/27/2017

TAT: 24 Hour

Sample Count: 6 Layer Count: 10

Project Name/Location: WEC: Valdez High School Gymnasium Floor  
Replacement

Client ID #	WL ID#	Location:
001	AB17-1386	Gymnasium, Behind Bleacher

Homogenous

Material

Color

Layer

No

Floor Adhesive

Orange

1 of 1

**Asbestos: None Detected**

Other Fibrous Material

Fibrous %

Cellulose

Trace

Other Fibrous Materials: 2%

Synthetic

2%

Non-Fibrous Materials: 98%

Client ID #	WL ID#	Location:
002	AB17-1387	Gymnasium, Behind Bleacher

Homogenous

Material

Color

Layer

No

Floor Adhesive

Orange

1 of 1

**Asbestos: None Detected**

Other Fibrous Material

Fibrous %

Cellulose

Trace

Other Fibrous Materials: TRACE

Non-Fibrous Materials: 100%

Client ID #	WL ID#	Location:
003	AB17-1388	Gymnasium, Behind Bleacher

Homogenous

Material

Color

Layer

No

Floor Substrate

Tan/Yellow

1 of 1

**Asbestos: None Detected**

Other Fibrous Material

Fibrous %

Cellulose

Trace

Other Fibrous Materials: TRACE

Non-Fibrous Materials: 100%

**Bulk Sample Analysis for Asbestos**

WL Project #: LA-022364

Client Project #: 068-17

Report #: 627632

Report By: G. Caudill

Report Date: 02/28/2017

Client ID #      WL ID#      Location:  
004      AB17-1389A      Gymnasium @ Elect 192

Homogenous      Material  
No      Cove Base Mastic

Color      Layer  
Brown      1 of 2

**Asbestos: None Detected**

Other Fibrous Material	Fibrous %
Cellulose	Trace

Other Fibrous Materials: TRACE

Non-Fibrous Materials: 100%

Client ID #      WL ID#      Location:  
004      AB17-1389B      Gymnasium @ Elect 192

Homogenous      Material  
No      Cove Base Mastic

Color      Layer  
Tan      2 of 2

**Asbestos: None Detected**

Other Fibrous Material	Fibrous %
Cellulose	2%

Other Fibrous Materials: 2%

Non-Fibrous Materials: 98%

Client ID #      WL ID#      Location:  
005      AB17-1390A      Gymnasium @ Stage 193

Homogenous      Material  
No      Cove Base Mastic

Color      Layer  
Tan      1 of 3

**Asbestos: None Detected**

Other Fibrous Material	Fibrous %
Cellulose	2%
Synthetic	Trace

Other Fibrous Materials: 2%

Non-Fibrous Materials: 98%

Client ID #      WL ID#      Location:  
005      AB17-1390B      Gymnasium @ Stage 193

Homogenous      Material  
No      Cove Base Mastic

Color      Layer  
Brown      2 of 3

**Asbestos: None Detected**

Other Fibrous Material	Fibrous %
Cellulose	Trace

Other Fibrous Materials: TRACE

Non-Fibrous Materials: 100%

**Bulk Sample Analysis for Asbestos**

WL Project #: LA-022364

Client Project #: 068-17

Report #: 627632

Report By: G. Caudill

Report Date: 02/28/2017

Client ID #      WL ID#      Location:  
005      AB17-1390C      Gymnasium @ Stage 193

Homogenous	Material	Color	Layer
No	Unknown	Black	3 of 3

**Asbestos: None Detected**

Other Fibrous Material	Fibrous %
Cellulose	Trace
Synthetic	Trace

**Other Fibrous Materials: TRACE****Non-Fibrous Materials: 100%**

Client ID #      WL ID#      Location:  
006      AB17-1391A      Gymnasium Behind Wood Lattice

Homogenous	Material	Color	Layer
No	Lagging	Black	1 of 2

**Asbestos: None Detected**

Other Fibrous Material	Fibrous %
Synthetic	99%

**Other Fibrous Materials: 99%****Non-Fibrous Materials: 1%**

Client ID #      WL ID#      Location:  
006      AB17-1391B      Gymnasium Behind Wood Lattice

Homogenous	Material	Color	Layer
No	Insulation	Yellow	2 of 2

**Asbestos: None Detected**

Other Fibrous Material	Fibrous %
Cellulose	40%
Mineral Wool	50%

**Other Fibrous Materials: 90%****Non-Fibrous Materials: 10%**  
Joel Hicklin, Laboratory Technical Manager

02/28/2017

Date

02/28/2017

Date

Analysis performed by: EPA Method 600/M4-82-020 or EPA Method 600/R-93/116, at the discretion of the client or WEC. All quantities reported are based on visual estimation by PLM, unless point-counting method is requested and noted for the sample. Test report relates only to items tested and must not be used by client to claim product endorsement by NVLAP or any agency of the U.S. Government. Test reports must not be reproduced without the approval of WEC, Inc., and are subject to WEC, Inc. General Terms and Conditions (available upon request).



**383 Industrial Way, Anchorage, Alaska 99501**  
**Phone (907) 258-8661 Fax (907) 258-8662**

PROJECT NAME Valdez H.S. Gymnasium Floor Replacement  
LOCATION Valdez AK PROJECT NO. 068-17  
CLIENT City of Valdez DATE 2/24/17  
CLIENT PROJECT# \_\_\_\_\_ SHEET NO. 1 OF 1

## CHAIN OF CUSTODY RECORD – ANALYTICAL REQUEST

ANALYSIS REQUESTED (circle): PCM PLM TEM LEAD	TURNAROUND REQUESTED 24h	NO. OF SAMPLES 6	COLLECTION DATE: 02/24/17
RELINQUISHED BY: [Signature]	DATE / TIME 02/27/17	SAMPLES RECEIVED BY	DATE / TIME
SHIPPING METHOD N/A	COURIER (signature) N/A	SAMPLES RECEIVED BY G.C	DATE / TIME 2.27.17
COMMENTS			

LA- 022364

[illegible]

## Lead Analysis in Paint

WL Project #: LA-022365

Client Project #: 068-17

Report #: 627627

Report By: G. Caudill

Report Date: 02/27/2017

Client: City of Valdez  
PO Box 307  
Valdez, AK 99686  
Billing Number: 26008

Collected By: B. O'Bray  
Collection Date: 02/24/2017  
Analysis By: G. Caudill  
Analysis Date: 02/27/2017  
Received By: G. Caudill  
Received Date: 02/27/2017

TAT: 24 Hour

Sample Count: 10

Project Name/Location: WEC: Valdez High School Gymnasium Floor Replacement

Client ID	WLSample	Result	Result Units	Reporting Limit (ppm)
P-001	AL17-685	130	ppm	81
P-002	AL17-686	150	ppm	94
P-003	AL17-687	210	ppm	90
P-004	AL17-688	210	ppm	82
P-005	AL17-689	140	ppm	88
P-006	AL17-690	<85	ppm	85
P-007	AL17-691	170	ppm	75
P-008	AL17-692	170	ppm	100
P-009	AL17-693	280	ppm	86
P-010	AL17-694	98	ppm	80



Grant Caudill, Lab Analyst

02/27/2017

Date



Joel Hicklin, Laboratory Technical Manager

02/27/2017

Date

Preparation is performed according to EPA Method SW-846 3050B (M). Analysis performed according to EPA method SW-846 7420 (M), analysis by flame atomic absorption spectroscopy. The Reporting Limit is at least twice that of the Method Detection Limit (MDL). The MDL (defined as the minimum concentration of an analyte that can be reported with 99% confidence to have a concentration greater than zero) is determined from statistical analysis of replicate samples in a given matrix containing the analyte, as defined in 40CFR Part 136, Appendix B. Field and laboratory blanks are used to assess possible contamination and sensitivity of analysis, and no blank correction is made. Unless otherwise stated, all quality control samples are acceptable. Modifications made to the previously referenced test methods are documented in WEC, Inc. Standard Operating Procedures Manual. Supporting laboratory documentation is available upon request. Unless otherwise stated, samples are received in acceptable condition. Results relate only to the items tested. WEC, Inc. Anchorage is a current proficient participant in the AIHA ELPAT program and is accredited by AIHA LAP, LLC for environmental lead (Lab ID# 102739). Test reports must not be reproduced without the approval of WEC, Inc. and are subject to WEC, Inc. General Terms and Conditions (available upon request).



WHITE  
ENVIRONMENTAL  
CONSULTANTS INC.

383 Industrial Way, Anchorage, Alaska 99501  
Phone (907) 258-8661 Fax (907) 258-8662

PROJECT NAME Valdez H.S. Gymnasium Floor Replacement  
LOCATION Valdez AK PROJECT NO. 008-17  
CLIENT City of Valdez DATE 2/24/17  
CLIENT PROJECT# SHEET NO. 1 OF 1

## CHAIN OF CUSTODY RECORD – ANALYTICAL REQUEST

ANALYSIS REQUESTED (circle) PCM PLM TEM LEAD	TURNAROUND REQUESTED <u>24 hr</u>	NO. OF SAMPLES <u>10</u>	COLLECTION DATE: <u>02/24/17</u>
RELINQUISHED BY: <u>[Signature]</u>	DATE / TIME <u>02/27/17</u>	SAMPLES RECEIVED BY	DATE / TIME
SHIPPING METHOD <u>NA</u>	COURIER (signature) <u>NA</u>	SAMPLES RECEIVED BY <u>GC</u>	DATE / TIME <u>2-27-17</u>

COMMENTS

LA- 022365

SAMPLE ID#	MATERIAL	LOCATION	COMMENTS
P- 001		Storage #194	Floor
P- 002		Storage #194	Door
P- 003		Storage #194	Frame
P- 004		Storage # 196	wall
P- 005		Storage # 196	Door
P- 006		Storage # 196	Frame
P- 007		Storage # 193	Frame
P- 008		Storage # 193	Door
P- 009		Storage # 193	Floor Wall
P- 010		Storage # 193	Floor



**End of Addendum.**