

ASBESTOS SPECIFICATIONS

Attachment K

PART 1--GENERAL INFORMATION

PLAINTIFF'S EXHIBIT

MBL-344

1.1 Bidding Requirements

- 1.1.1
- 1.1.2 No bid will be accepted from any contractor who has not inspected the job site.
- 1.1.3 No bid will be accepted from any contractor who has not received the results of representative samples of the material to be removed or who has not collected representative samples independently. The contractor must be aware of the type, percentage, and total amount of asbestos-containing material to be removed.
- 1.1.4
- 1.1.5 No bid will be accepted from any contractor who does not meet the following qualifications:
 - 1.1.5.1 [Recommended, but not mandatory: Bidders shall demonstrate prior experience on a minimum of three (3) previous asbestos abatement projects of similar nature and scope.]
 - 1.1.5.2 [Recommended, but not mandatory: Bidder must have successfully completed EPA approved abatement training.]
 - 1.1.5.3 Contractor personnel who perform the removal must be trained in accordance with OSHA 29 CFR 1926.58(k)(3).
 - 1.1.5.4 Competent persons who supervise the asbestos work must meet the training requirements/qualifications in OSHA 29 CFR 1926.58(b).
- 1.1.6 Bidders shall submit the following as part of the initial bid package:
 - 1.1.6.1
 - 1.1.6.2
 - 1.1.6.3
 - 1.1.6.4
 - 1.1.6.5
 - 1.1.6.6
 - 1.1.6.7
 - 1.1.6.8
 - 1.1.6.9 Plans for:
 - o decontamination areas and employee hygiene facilities,
 - o establishment of removal or regulated area,
 - o isolation and demarcation of the removal or regulated area,
 - o area and personal air monitoring,
 - o placement of warning signs, and
 - o area security to keep the number of people in the removal area to a minimum number.
 - 1.1.6.10
 - 1.1.6.11 Submit plans for wetting of material to be removed or for alternative control procedure (e.g. glovebags).

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11/06/86

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- 1.2
 - 1.2.1
 - 1.2.2

1.3 Description of work

- 1.3.1
- 1.3.2
- 1.3.3
- 1.3.4 The Contractor shall restore the cleanliness of the work/removal area and any other areas contaminated with asbestos-containing materials as a result of the work ([removal] [and] [encapsulation] [and] [enclosure]) specified herein. All visible contamination must be removed. Contaminated surfaces must be thoroughly cleaned [then sprayed with an encapsulant]. Air monitoring must be conducted following the work and subsequent cleanup [and encapsulation]. Cleanup shall continue until air asbestos levels are [insert either: (below levels measured prior to commencement of the work), (below 0.01 asbestos fibers per milliliter of air), or (insert level required)].

1.3.5

1.4 Applicable Standards and Guidelines

- 1.4.1 All work under this contract shall be done in strict accordance with the most recent edition of all applicable federal, state, and local regulations, standards, and codes governing asbestos abatement. Where conflict among these regulations or with these specifications exists, the most stringent requirements shall be followed.
- 1.4.2 Specific requirements
 - 1.4.2.1 Occupational Safety and Health Administration (OSHA)
 - 1.4.2.1.1 Title 29 Code of Federal Regulations Section 1926.58 - Construction Industry Standard for Asbestos.
 - 1.4.2.1.2 Title 29 Code of Federal Regulations Section 1910.134 - General Industry Standard for Respiratory Protection.
 - 1.4.2.1.3 Title 29 Code of Federal Regulations Section 1910.2 - Access to Employee Exposure and Medical Records.
 - 1.4.2.1.4 Title 29 Code of Federal Regulations Section 1910.1200 - Hazard Communication.
 - 1.4.2.2 Environmental Protection Agency (EPA)
 - 1.4.2.2.1 Title 40 Code of Federal Regulations Part 61 Subparts A and M (Revised Subpart B) - National Emission Standard for Asbestos.
 - 1.4.2.3
 - 1.4.2.4

1.5 Submittals and Notices

- 1.5.1 Contractor shall submit the following to Exxon:
 - 1.5.1.1 Prior to commencement of the removal:
 - 1.5.1.1.1
 - 1.5.1.1.2 [Insert if conducted by contractor: Submit prework air sampling results.]
 - 1.5.1.1.3 [Insert if conducted by contractor: Submit results of bulk samples collected to characterize the type, percentage, and amount of asbestos to be worked.]

11/06/86

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- 1.5.1.2 During the abatement:
 - 1.5.1.2.1
 - 1.5.1.2.2
 - 1.5.1.2.3 Submit results of any sulk or air samples collected during the work.
 - 1.5.1.2.4
- 1.5.1.3 Following the abatement:
 - 1.5.1.3.1 Submit certification of cleanliness of the work area and any other areas contaminated by the work.
 - 1.5.1.3.2 Submit the results of air monitoring conducted following the work.
- 1.5.2 Exxon submittals
 - 1.5.2.1 Prior to commencement of abatement:
 - 1.5.2.1.1 If work involves removal of greater than 160 linear feet of pipe insulation or 260 square feet of sprayed, troweled, or otherwise applied material; or covering or composing building structures or components, send written notification in accordance with 40 CFR Part 61.146 or Subpart M, to the appropriate state, federal or local air pollution control agency responsible for the enforcement of the National Emission Standard for Asbestos at least ten (10) days prior to the commencement of the work.
 - 1.5.2.1.2
 - 1.5.2.1.3

PART 2--MATERIALS AND EQUIPMENT

- 2.1 Polyethylene plastic sheeting will be of 6 mil thickness.
- 2.2 Disposal bags will be of 6 mil polyethylene plastic labeled in accordance OSHA 29 CFR 1926.58(k)(2).
- 2.3 All disposal containers shall be labeled and impermeable to asbestos. Labels shall meet the requirements of OSHA 29 CFR 1926.58(k)(2).
- 2.4 Warning signs shall meet the requirements in OSHA 29 CFR 1926.58(k)(1)(ii).
- 2.5 [Recommended, but not mandatory: Wetting agents shall contain a surfactant.]
- 2.6
- 2.7 Negative pressure ventilation units must have sufficient capacity to maintain negative pressure of at least 0.02 inches of water inside the removal enclosure and be equipped with HEPA filters.
- 2.8 Respirators used during the work shall be selected in accordance with OSHA 29 CFR 1926.58(h). Selection of the appropriate respirator should

18-0000504

11/06/86

001023

be based on the concentration of asbestos fibers in the work area. If the concentration is unknown, employees should be provided with respirators that will provide protection against the highest concentration of asbestos fibers that can reasonably be expected to exist in the work area.

- 2.9 Full body disposable protective clothing, including head, body and foot coverings, shall consist of material impermeable to asbestos and resistant to tearing.
- 2.10 When provided, hygiene facilities such as clean change areas, decontamination areas, and shower area or portable shower, must meet the requirements of OSHA 29 CFR 1926.58(j).
- 2.11 If high speed abrasive disk saws are used, they shall be equipped with appropriate engineering controls.
- 2.12 Compressed air shall not be used to remove asbestos or during cleanup.
- 2.13 When vacuums are used, they shall be HEPA filtered.
- 2.14 Where used, glove bags should be made of transparent, 6 mil thick polyethylene plastic with arms of tyvek. Where alternative materials are used, the contractor shall justify these alternative materials.

PART 3 PROCEDURES

3.1. Procedures

- 3.1.1 The Contractor shall establish a removal area(s) at the worksite(s) which isolates the asbestos-containing material to be worked. (Removal areas will consist of areas within which asbestos work operations occur, but air asbestos concentrations are not expected to exceed the OSHA permissible exposure limit, 29 CFR 1926.58(c).)
- 3.1.2 The Contractor shall establish "regulated areas," as defined in OSHA 29 CFR 1926.58(e), as appropriate (regulated areas will consist of areas within which asbestos work operations occur, but air asbestos concentrations are expected to exceed the OSHA permissible exposure limit, 29 CFR 1926.58(c). Regulated areas are differentiated from removal areas due to: a) air monitoring requirements of the OSHA asbestos standard for regulated areas, 29 CFR 1926.58(f)(3), and b) hygiene facility requirements for regulated areas, 29 CFR 1926.58(g).)
- 3.1.3 Removal and regulated areas shall be demarcated and access to them restricted in accordance with OSHA 29 CFR 1926.58(f) and (g).
- 3.1.4 Appropriately selected respirators shall be utilized by all persons entering either the removal or the regulated area. [Optional: Specify specific type of respirator required.] As a minimum, half mask nondisposable air-purifying respirators equipped with high efficiency filters shall be worn at all times while entering or working in removal or regulated areas.

facilities must meet the requirements of OSHA 29 CFR 1926.58(j). The contractor shall specify plans for provision of these facilities prior to the work in accordance with section 1.1.6.8 of this specification.

Where regulated areas are established based on the expectation that air concentrations will exceed the OSHA permissible exposure limits, these hygiene facilities shall be located adjacent and connected to or as close as possible to the demarcated regulated area. Employees shall enter and exit the regulated area through the decontaminated area.

- 3.1.17 The Contractor shall provide and display warning signs that demarcate the regulated or removal area. The warning signs shall bear the information specified in OSHA 29 CFR 1926.58(k)(ii).
- 3.1.18 The Contractor shall affix labels that meet the requirements of OSHA 29 CFR 1926.58(k)(2) to all asbestos waste containers.

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