

Idaho National Laboratory

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Subcontractors	Program Requirements Document	eCR Number: 609407
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Manual: INL Subcontractor Requirements

Entire Document Changed

1. PURPOSE

This document provides guidance for the implementation of controls for work with and around asbestos to ensure worker safety and health. This document highlights requirements referenced in the “Source Documents” section, as well as Contractor requirements. Any applicable regulatory or Contractor requirements must be followed, with the most stringent requirement being met.

2. APPLICABILITY

This document applies to all subcontractors working at the INL who perform work with or around asbestos, as specified in their contract with Contractor. Stricter requirements may be imposed by subcontractors upon their employees or subtier contractors. The requirements of this document must be followed by subcontractors; however, the means of implementation may vary as determined by the subcontractor.

3. REQUIREMENTS

All ASBESTOS work shall meet the requirements of 29 CFR 1926.1101 ASBESTOS. Additional helpful information specific to asbestos is in the Appendices.

4. DEFINITIONS

For definitions of terms used throughout the INL Subcontractor Requirements Manual, refer to LST-359.

5. REFERENCES**5.1 Source Documents**

29 CFR 1926.1101, Asbestos

6. APPENDICES

Appendix A, Labels and Signs

Appendix B, Negative Exposure Assessment Information

Appendix C, Job Class Requirements

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Appendix A

Labels and Signs

Asbestos Advisory Sign



**CONTAINS
ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND
LUNG DISEASE HAZARD**

The following materials contain asbestos (including Presumed Asbestos-Containing Materials) at this facility/in this area:

(List materials)

Contact building owner or responsible IH and consult applicable company procedures/work practices before disturbing these materials. Inhalation of airborne asbestos fibers is hazardous to your health.

ASBESTOS ADVISORY SIGN REQUIREMENTS

Signs shall be made of a durable material (metal, heavy plastic, etc) and shall be attached to or near the entry. The size and lettering of the sign shall be large enough to be readily visible and conspicuous to comply with the latest revision of ANSI Z35.4. The word *danger* shall be printed as white letters on a red background surrounded by a black background. The other words shall be printed as black lettering on a white background

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Appendix A

Regulated Area Demarcation Sign



**ASBESTOS
 CANCER AND LUNG
 DISEASE HAZARD
 AUTHORIZED PERSONNEL ONLY
 RESPIRATORS AND PROTECTIVE
 CLOTHING ARE REQUIRED IN THIS AREA**

Contact building owner or responsible IH and consult applicable company procedures/work practices before disturbing these materials. Inhalation of airborne asbestos fibers is hazardous to your health.

REGULATED AREA DEMARCATION SIGN REQUIREMENTS

Signs shall be made of a durable material (metal, heavy plastic, etc) and shall be attached to or near the entry. The size and lettering of the sign shall be large enough to be readily visible and conspicuous to comply with the latest revision of ANSI Z35.4. The word *danger* shall be printed as white letters on a red background surrounded by a black background. The other words shall be printed as black lettering on a white background.

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Appendix B

Negative Exposure Assessment Information

For any one specific asbestos job that will be performed by employees who have been trained in compliance with the standard, the employer may demonstrate that employee exposures will be below the PELs by data that conform to one of the following three criteria:

1. Objective data demonstrating that the product or material containing asbestos or the activity involving asbestos cannot release airborne fibers in concentrations exceeding the 8-hr TWA and excursion limit under the work conditions demonstrating the greatest potential for release; or
2. Where monitoring has been performed on past asbestos jobs for the PEL and excursion limit within the past 12 months of the job; the monitoring and analysis were performed in compliance with the asbestos standard in effect; and the data were obtained during work operations conducted under workplace conditions *closely resembling* (see def.). The processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations; the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the work; and these data show that under the conditions prevailing and which will prevail in the current workplace there is a high degree of certainty that the employee exposures will not exceed the PEL and excursion limit; or
3. The results of the initial exposure monitoring of the current job made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee covering operations that are most likely to result in exposures over the PELs.

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Appendix C

Job Class Requirements (OSHA CPL 202.63, Appendix A)

METHODS OF COMPLIANCE

1. Required for all jobs except when dry removal is approved by a qualified industrial hygienist and the Environmental Organization Asbestos Coordinator (regardless of air monitoring results):
 - Wet methods
 - High efficiency particulate air (HEPA) filtered vacuum
 - Prompt cleanup/disposal.
- A. Required to achieve compliance with PEL and excursion limits:
 - HEPA local exhaust
 - Enclosure
 - Directed ventilation away from breathing zone
 - Other work practices deemed feasible
 - Supplementation of feasible work practices with respirators.
- B. Prohibited on all jobs:
 - High speed abrasive disc saws without a point-of-cut ventilator with a HEPA filter
 - Asbestos removal using compressed air without a HEPA filter capture device
 - Dry cleanup of dust and debris
 - Employee rotation.

Engineering controls and work practices for all operations under the classes of work (I through IV) must be reviewed by the assigned industrial hygienist and the project designer as a minimum, regardless of the levels of exposure. Class of work requirements are given in the following table.

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Job Class Requirements			
Class 1	Class 2	Class 3	Class 4
Regulated Area • Signs	Regulated Area • Signs	Regulated Area • Signs	Regulated Area >PEL • Signs
Competent person (CAS) • Inspect once per shift & at employee's request • frequent regular inspections	Competent person (CAS) • Frequent regular inspections to assess conditions and at employee's request	Competent person (O&M) • Frequent regular inspections to assess conditions and at employee's request	Competent person (O&M) • Frequent regular inspections to assess conditions and at employee's request
Critical barriers/isolation barriers • > 25/10 required • < 25/10 required	Critical barriers/isolation barriers (indoor work only) • If no NEA • If likely > PEL • If not intact removal	Critical barriers/drop cloth • If no NEA • Or > PEL	
HVAC isolation	Intact removal if possible	Local HEPA exhaust	
Drop cloths/plastic	Drop cloths	Drop cloths, if TSI/SM and: • Drilling, cutting, sanding • Abrading, chipping, sawing • Chipping	
Directed ventilation • If > PEL • Local HEPA exhaust • Process isolation • Directed ventilation • Other work practices • Eng. control/suppl. resp.	If > PEL: • Local HEPA exhaust • Process isolation • Directed ventilation • Other work practices • Eng. control/suppl. resp.	• Local HEPA exhaust • Directed ventilation • Other work practices • Eng. control/suppl. Resp. • Process isolation	• Local HEPA exhaust • Directed ventilation • Other work practices • Eng. control/suppl. resp. • Process isolation
NPE • 4 air changes • -0.02-in. H ₂ O gauge • Neg. throughout • Directed air • Smoke test • Power lockout-gfci	NPE • 4 air changes • -0.02-in. H ₂ O gauge • Neg. throughout • Directed air • Smoke test • Power lockout-gfci	(May use Class 1 methods)	

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Job Class Requirements			
Class 1	Class 2	Class 3	Class 4
GLOVE BAG <ul style="list-style-type: none"> • 6-mil seamless • Covers completely • Smoke test • 1 use, no moving • < 150° surface • HEPA collapse disposal • Preremoval pipe wrap • Attached waste bag integ. • Sliding valve separation • Two person 	GLOVE BAG <ul style="list-style-type: none"> • 6-mil seamless • Covers completely • Smoke test • 1 use, no moving • < 150° surface • HEPA collapse disposal • Preremoval pipe wrap • Attached waste bag integ. • Sliding valve separation • One person 	GLOVE BAG <ul style="list-style-type: none"> • If TSI or SM and is: <ul style="list-style-type: none"> • Drilled • Cut • Abraded • Sanded • Sawed • Chipped • (Method same as class 1 procedure) • One person 	
NP GLOVE BAG (Pipe runs) <ul style="list-style-type: none"> • Attached HEPA • GB work practices the same • Separate waste bag reuse • Two persons 	NP GLOVE BAG (Pipe runs) <ul style="list-style-type: none"> • Attached HEPA • GB work practices the same • Separate waste bag reuse • One person 	NP GLOVE BAG (Pipe runs) <ul style="list-style-type: none"> • If TSI or SM and is: <ul style="list-style-type: none"> • Drilled • Cut • Abraded • Sanded • Sawed • Chipped • One person • (Method same as class 1 procedure) 	
NP GLOVE BOX <ul style="list-style-type: none"> • Rigid construction • Neg. pressure generator • Air filter unit attached • ACM outlet • Backup generator • 6-mil waste bags • Two persons • Smoke tested • Preremoval pipe wrap • HEPA filtration 	NP GLOVE BOX <ul style="list-style-type: none"> • Rigid construction • Neg. pressure generator • Air filter unit attached • ACM outlet • Backup generator • 6-mil waste bags • One person • Smoke tested • Preremoval pipe wrap • HEPA filtration 	NP GLOVE BOX <ul style="list-style-type: none"> • If TSI or SM and is: <ul style="list-style-type: none"> • Drilled • Cut • Abraded • Sanded • Sawed • Chipped • One person • (Method same as class 1 procedure) 	

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Job Class Requirements			
Class 1	Class 2	Class 3	Class 4
WATER SPRAY PROCESS	WATER SPRAY PROCESS		
MINI ENCLOSURE <ul style="list-style-type: none"> • Holds ≤ 2 people • 6-mil • Neg. Pressure required • Seal holes • Smoke test • Clean before reuse • Directed ventilation • HEPA filtration 	MINI ENCLOSURE <ul style="list-style-type: none"> • Holds ≤ 2 people • 6-mil • Neg. Pressure required • Seal holes • Smoke test • Clean before reuse • Directed ventilation • HEPA filtration 	MINI ENCLOSURE REQ. <ul style="list-style-type: none"> • If TSI or SM and is: <ul style="list-style-type: none"> • Drilled • Cut • Abraded • Sanded • Sawed • Chipped • (Method same as class 1 process) • HEPA filtration 	
RESPIRATORS <ul style="list-style-type: none"> • Mandatory all Class 1 • SAR in pressure demand mode with HEPA egress or PAPR required if no NEA and exposure assessment >1f/cc • Mandatory in emergency • SAR in pressure demand mode with auxiliary positive pressure SCBA if exposure assessment >1f/cc 	RESPIRATORS <ul style="list-style-type: none"> • Mandatory if > PEL/EL • ½ APR if no NEA • Mandatory if dry removal • Mandatory if non-intact removal • Mandatory in emergency 	RESPIRATORS <ul style="list-style-type: none"> • Mandatory if > PEL/EL • ½ APR if no NEA • Mandatory if dry removal • ½ APR if TSI or SM • Mandatory in emergency 	RESPIRATORS <ul style="list-style-type: none"> • Mandatory if > PEL/EL • Mandatory if in a respirator-required regulated area • Mandatory in emergency
PROTECTIVE CLOTHING <ul style="list-style-type: none"> • All jobs > PEL/EL • All jobs no NEA • All jobs > 25/10 	PROTECTIVE CLOTHING <ul style="list-style-type: none"> • All jobs > PEL/EL • All jobs no NEA 	PROTECTIVE CLOTHING <ul style="list-style-type: none"> • All jobs > PEL/EL • All jobs no NEA 	PROTECTIVE CLOTHING <ul style="list-style-type: none"> • All jobs > PEL/EL • All jobs no NEA

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Job Class Requirements			
Class 1	Class 2	Class 3	Class 4
<p>DECONTAMINATION</p> <ul style="list-style-type: none"> • TSI/SM > 25/10 full decontamination (if infeasible or outdoor, vacuum off, remove suits, remote decon) • TSI/SM < 25/10 equip. room/area/ drop cloth • Area must accommodate cleanup • Must decontamination all equip./ppe • Enter reg. area through equip. room/decontamination area • Lunch area • HEPA vacuum clothing before removal • No smoking in work area 	<p>DECONTAMINATION</p> <ul style="list-style-type: none"> • Equip. Room/area drop cloth if no nea, > pel • Area must accommodate cleanup • Must decontamination all equip./ppe • Enter reg. area through equip. room/decontamination area • Lunch area • No smoking in work area • HEPA vacuum clothing before removal 	<p>DECONTAMINATION</p> <ul style="list-style-type: none"> • Equip. Room/area drop cloth if no nea, > pel • Area must accommodate cleanup • Must decontamination all equip./ppe • Enter reg. area through equip. room/decontamination area • Lunch area • No smoking in work area • HEPA vacuum clothing before removal 	<p>DECONTAMINATION</p> <ul style="list-style-type: none"> • Equip. room/area drop cloth if no NEA, > PEL • Area must accommodate cleanup • Must decontamination all equip./ppe • Enter reg. area through equip. room/decontamination area • If in other regulated areas, follow their decontamination procedure • Lunch area • No smoking in work area • HEPA vacuum clothing before removal