**XII Construction Delivery**

**a) Asbestos/Abatement**

**What Is It?**

* **Asbestos:** A fibrous mineral, either amphibole or chrysotile, formerly used for making incombustible or fireproof articles and in building insulation. A fabric woven from asbestos fibers, formerly used for theater curtains, firefighters' gloves, formerly widely used in the form of fabric or board as a heat-resistant structural material
* **Asbestos Abatement:** The size and scope of the overall project, with particular reference to the total amount of asbestos-containing material that will be disturbed determines the reporting or filing requirements established in the Asbestos Control Program Rules. An asbestos project is defined as any form of work that will disturb more than 25 linear feet or more than 10 square feet of asbestos-containing material.

**Who Is Involved?**

* Every owner of a building where asbestos abatement activity occurs is responsible for the performance of the asbestos abatement activities by his/her agent, contractor, employee, or other representative. Each building owner is responsible for determining the amount of asbestos-containing material that may be disturbed during the course of work.

**How/Process: Before Abatement work**

* Determine the age of the building. Buildings prior to 1980 should be considered to have asbestos.
* Verify whether a full building Asbestos Survey, Inspection, and Testing was performed.
* If there is a report determine if the area of work contains Asbestos/Hazardous material and whether abatement is required.
* Building inspection
* Deconstruction & Non-Deconstructive survey.
* Inspection & Testing
* Obtain Survey/ Inspection/ Testing Building Report Document for WSU DCS archivist to file in the WSU Hazardous Abatement “Red Files”
* Coordinate scope of work & disposal w/ OEHS
* Establish OEHS FO for disposal
* Town Hall meeting/notification
* Issue Right to Know notification to contractor.
* 10 day notification SOM
* Abatement operation
* Air monitoring, PO required
* Clearances
* Obtain Air monitoring Reports for WSU DCS archivist to file in the WSU Hazardous Abatement “Red Files”

**Checklist**

* Common areas to be abated( ceiling tile, pipe insulation, floor mastic, spline ceilings, fireproofing, fume hoods, doors, frames, sinks, concrete, drywall,

**Timeline Considerations**

* 10 day notification to the state

**Forms**

* OEHS
* Right to Know
* Air Monitoring and occupancy clearances
* Town Hall
* Daily Time & Material Tickets

**Filing**

* Full Building Asbestos Inspection /Testing Report
* Red Files
* Air monitoring reports
* Clearances
* Daily time & material sheets

**b) Air Monitoring**

**What Is It?**

* Air monitoring means airborne asbestos fiber sampling that assesses exposures and the effectiveness of control measures. Air monitoring includes exposure, control and clearance monitoring.
* Exposure monitoring involves taking air samples within the breathing zone to determine a person's risk from, or level of exposure to, airborne asbestos fibres. This method is intended to be used for the sampling of airborne asbestos fibres in occupational environments where the airborne fibres are known to predominantly be asbestos. Exposure monitoring is designed to estimate a person's exposure to asbestos, so that it may be compared with the exposure standard.
* Exposure monitoring includes airborne asbestos fibre sampling, analysis, estimation of time-weighted average exposure and interpretation. Samples are taken within the breathing zone and are usually obtained by fastening a filter holder-monitor to the worker's clothing.

**Air Monitoring-** Air monitoring is mandatory for all friable asbestos removal and must:

* include the asbestos removal area, typically inside an enclosure
* performed immediately before commencing removal work except where glove bags are being used
* performed during the removal work and at other times decided by an independent licensed asbestos assessor/consultant
* performed after work on the asbestos has been completed and the area decontaminated
* An air monitoring program is not always necessary for the removal of non-friable asbestos material, or during asbestos related work, however, it is regarded as good occupational hygiene practice.
* An independent licensed asbestos assessor /environmental consultant/ occupational hygienist must carry out the air monitoring functions connected with asbestos removal work. Various functions include baseline testing, control air monitoring, air monitoring reports, clearance inspections, and issuing a clearance certificate.
* However, air monitoring must be carried out during asbestos related work if the person conducting the business or undertaking is uncertain as to whether the exposure standard for asbestos is likely to be exceeded.

**Who Is Involved?**

* Every owner of a building where asbestos abatement activity occurs at the premise must ensure that an independent licensed asbestos assessor / consultant undertakes air monitoring of the asbestos removal area.
* Owners Health and Safety representatives: WSU-OEHS- Environmental Health & Safety
* Disposal & Landfill requirements governed by local authorities and WSU-OEHS
* WSU-Purchasing if the work is publically bid.
* Air Monitoring consultant /environmentalist along with their trained and certified staff.
* Air monitoring samples should be analyzed by an accredited laboratory accredited for the relevant test method.
* General Contractor, Workers in the work place, Abatement Contractor
* Building Occupants and general public entering the building.

**How/Process: Before Air Monitoring Work**

* Determine the age of the building. Buildings prior to 1980 should be considered to have asbestos.
* Obtain Air monitoring Reports for WSU DCS archivist to file in the WSU Hazardous Abatement “Red Files”
* Verify whether a full building Asbestos Survey, Inspection , and Testing was performed.
* If there is a report determine if the area of work contains Asbestos/Hazardous material and whether abatement is required.
* Building inspection
* Deconstruction & Non-Deconstructive survey.
* Inspection & Testing
* Obtain Survey/ Inspection/ Testing Building Report Document for WSU DCS archivist to file in the WSU Hazardous Abatement “Red Files”
* Coordinate scope of work & disposal w/ OEHS
* Establish OEHS FO for disposal
* Town Hall meeting/notification
* Coordination with the General Contractor, abatement contractor, Owner.
* Pre-Construction meeting
* Air monitoring, RFP & PO requirements
* Sampling, monitoring, testing, clearences,

**Checklist**

* Common areas to be abated ( ceiling tile, pipe insulation, floor mastic, spline ceilings, fireproofing, fume hoods, doors, frames, sinks, concrete, drywall,

**Timeline Considerations**

* 10 day notification to the state

**Forms**

* OEHS
* Right to Know,
* Air Monitoring and occupancy clearances
* Town Hall
* Daily Time & Material Tickets

**Filing**

* Full Building Asbestos Inspection /Testing Report
* Red Files
* Air monitoring reports
* Clearances
* Daily time & material sheets

XIV Other Primary Contracts

a) Asbestos/Abatement