COMPREHENSIVE ASBESTOS CONTAINING BUILDING MATERIALS SURVEY

Project Name:
Asbestos Sequence and Removal
National Forest Products Industry Site
Navajo, New Mexico

Prepared for:
Mr. Peter Lawrence
Environmental Quality Management, Inc.
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Cincinnati, Ohio, 45240

Prepared by:

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August 23, 2018

Mr. Peter Lawrence
Environmental Quality Management, Inc.
1800 Carillon Blvd.
Cincinnati, Ohio, 45240

Re: **National Forest Products Industry Site**
Navajo, New Mexico

Dear Mr. Lawrence,

Envision Environmental Solutions, LLC has prepared the following potential "Sequence of Removal operations for the decommissioned Drying Kiln Building located upon the former National Forest Industry Site near Red Lake, Arizona.

The subject project involves the removal of Asbestos Containing Materials (ACM) from the decommissioned drying kiln which was designed and used for a lumber processing plant. The structure measures approximately 105' x 180' feet. The structure has not been in use for many years, and is in very poor repair.

Asbestos materials were identified in the tar-like material applied to all interior walls which has delaminated in many areas and has fallen into the debris on the floors. The delaminated material has been able to migrate to the soils along the building's exterior. Asbestos content has also been confirmed in the corrugated concrete material used as underlayment on the roof. Additionally, asbestos content is also assumed in roofing sealants applied to seams and penetrations located on the roof.

Sequence of Removal Operations

The first step in the removal process should be the clean-up of the soils along the perimeter of the building, possibly to a distance of up to 50 feet. As mentioned, the sealant material originally applied to wall surfaces has delaminated in places and has been scattered by the elements to beyond the building footprint.

Photo 1 – Example of potential contamination on
soil beyond the building's footprint

Photo 2 – Example of potential contamination on
soil beyond the building's footprint

The distance from the buildings perimeter walls, as well as a determination of how much and to what depth the soils should be removed could be determined by additional bulk sample collection and analysis of the soil. Prior to soils clean-up, penetrations and doorways in the building should be sealed to ensure that ACM within the structure cannot re-contaminate the soil.

A likely second step in the clean-up process would most likely be the clean-up and disposal of debris on floor surfaces within the building. Presently, floors are littered with debris, "blown-in" soils and dead vegetation.

Photo 3 – Example of potential contamination
on floor surfaces within the structure.

Clean-up must be accomplished within a "negative pressure enclosure" complete with three compartment personnel decontamination enclosure located at each entrance.

Once floors within the structure are clean and HEPA vacuumed, they should be protected from likely future contamination with a minimum of two layers of 6 mil polyethylene sheeting, held in place by duct tape.

Once clean-up and surface protection is in place, removal of the tar-like material on interior concrete wall surfaces could be accomplished. The use of any type of abrasive power tools is prohibited by the Occupational Safety and Health Administration (OSHA). Some contractors have had success using a "Hydo-Jet" high pressure spray inside an enclosed vessel that is placed against the wall. The system is totally enclosed and all water from the system is captured, filtered and re-used. Resulting solid wastes are double bagged and land-filled as asbestos containing waste material (ACWM).

Photo 4 – Example of delaminating "Tar like" material on wall surfaces within the structure.

Photo 5 – Close-up of delaminating "tar like" material on wall surfaces within the structure.

Once removal of tar-like materials from wall surfaces is complete, “final clearance samples” should be obtained in each work area. This needs to be accomplished prior to the removal of critical barriers over doors and other penetrations into the work areas.

Roof sealants are commonly found to contain ACM. This particular roof has numerous small structures that are likely coated with asbestos containing sealants. This material, if confirmed to contain asbestos must be removed to expose the corrugated cement asbestos board. The removed material must be disposed of as ACWM.

Once the “built-up” roofing material is removed the exposed corrugated concrete panels could then be removed mmediately after being exposed, as the fastening system holding the panels in place is most likely deteriorated, and the panels could likely blow off in the wind, or become dislodged and fall. All removed panels must be wrapped in two layers of six mil polyethylene sheeting and disposed as asbestos contaminated waste material.

Some removal operations will require fall protection equipment, adequate railings and other OSHA mandated worker protection. A "Job Safety Assessment" or similar work plan should be developed for each sequence in the removal operation.

Respectfully Submitted,

Peter Fling
ENVISION ENVIRONMENTAL SOLUTIONS, LLC