From: Asbestos Control Program
To: DEQ Asbestos Online Submission Notice;
Subject: Asbestos Handling Requirements at Refineries
Date: Friday, July 20, 2012 2:02:52 PM

This week, the Asbestos Control Program discussed asbestos handling requirements at refineries. The following scenarios and responses are provided for your information. The scenarios fall under two categories: Training Requirements and Inspection Requirements.

Training Requirements:

Scenario 1:
During a large maintenance Turnaround a tower/reactor/vessel will be taken permanently out of service. The tower/reactor/vessel has ACM insulation on the entire outside and will need to be lifted out of the process area with a crane. There will be an area of insulation that will be completely abated/removed from the tower and then metal lift points welded to the bare metal. Once the lift points are in place, slings will be rigged to the lift points to allow the crane to lower the piece of equipment. What training requirements are needed to perform this task?

Response 1:
To remove/abate the ACM insulation, the workers touching the ACM must have 32-hour training and be accredited by the state of Montana. The removal/abatement activity must be overseen by a 40-hour trained contractor supervisor also accredited by the state of Montana. The welder is not required to have asbestos training or be accredited by the state of Montana. The workers rigging the equipment to the crane are not required to have training or accreditation by the state of Montana. The crane operator is not required to have training or be accredited by the state of Montana. If at any point the welder, rigger(s), or crane operator "touch" the ACM insulation as part of the demolition, training and accreditation will be required.

Scenario 2:
Demolition of out of service piping will take place in an elevated pipe rack. The pipe contains ACM insulation and will be lowered to the ground with a crane, forklift, or chain come-a-longs. There will be areas of insulation that will be completely abated/removed from the pipe. The remaining insulation will be encapsulated, typically in plastic. The pipe will be rigged

with slings at the location where the insulation has been removed/abated and will only contact bare metal. The pipe will be cut at locations where the insulation has been abated/removed and there is bare metal. What are the training requirements to perform this task?

Response 2:
To remove/abate and encapsulate the insulation, the workers touching the ACM must have 32-hour training and be accredited by the state of Montana. The removal/abatement/encapsulation activity must be overseen by a 40-hour trained contractor supervisor also accredited by the state of Montana. The workers rigging the equipment to the crane are not required to have training and accreditation by the state of Montana. The worker(s) cutting the pipe is not required to have asbestos training and accreditation by the state of Montana. The crane and forklift operator(s) is not required to have training or accreditation by the state of Montana. If at any point the rigger(s), pipe cutter, or crane ad forklift operator "touch" the ACM insulation, training and accreditation will be required.

Scenario 3:
Equipment and piping that has been taken out of service that has ACM on it will be transported to an asbestos abatement lay down yard before offsite disposal takes place. What training is required to transport the equipment and piping?

Response 3:
The workers touching the ACM on the equipment and piping must have 32-hour training and be accredited by the state of Montana. The worker(s) driving the vehicle or truck transporting the piping and equipment is not required to have asbestos training or accreditation by the state of Montana. The driver must be overseen by at least a 32-hour trained worker accredited by the state of Montana. To remove/abate/encapsulate the insulation, the workers touching the ACM must have 32-hour training and be accredited by the state of Montana. The removal/abatement activity must be overseen by a 40-hour trained contractor supervisor also accredited by the state of Montana.

Inspection Requirements:

Scenario 4:
Historically ACM throughout the refinery has been inspected by an

accredited inspector or assumed-ACM and labeled with red banding. Is the physical labeling in the refinery adequate to demonstrate inspection has taken place?

Response 4:
There is no time limit on inspections; however, the old inspection must meet current criteria for an asbestos inspection. The material must be in the same condition as when inspected in order to rely on historical inspections. An inspection report must be available at the facility. Existing labeling and banding must be verified by an asbestos inspector. Material that has existing labeling and banding, which is not based on the present inspection criteria, must be inspected by a MT-accredited inspector.

Scenario 5:
Historically, assumption of ACM has been performed by non-accredited inspectors and then abated/removed by 32 hour trained MT accredited workers and overseen by a 40 hour trained contractor supervisor also accredited within MT. Is this still allowed?

Response 5:
Only MT-accredited inspectors can assume materials to be ACM. Workers must still be 32-hour trained and accredited, and supervised by a 40-hour contractor supervisor accredited by the state of Montana.

Scenario 6:
Maintenance activities on a valve require that insulation be removed before the work can begin. What inspection requirements apply?

Response 6:
All material to be impacted or removed from the above valve would need to have been characterized by a MT-accredited asbestos inspector. If the material is friable asbestos, and the removal or maintenance involves more than three square or linear feet of material, it constitutes an asbestos project. If it involves less than three square or linear feet of either friable or non-friable asbestos material, OSHA regulations would apply. The MT rules requiring an inspection by a MT-accredited asbestos inspection would apply. If the friable or non-friable material is less than three square or linear feet, only the inspection rules would apply.

Scenario 7:

Several process areas in the refinery were constructed in the 50′s, 60′s and 70′s. It is common knowledge that the piping and equipment insulation from the original construction is ACM. Can a general assumption be made for all these areas instead of performing the other more detailed inspection techniques?

Response 7:
All assumptions of materials must be made by a MT-accredited inspector. It is allowable for an inspector to assume ACM without sampling and analysis of the material. Assumptions of material content is allowed by a MT-accredited inspector based on construction records and the sampling and analysis of similar material or the review of construction documentation; or a combination of these methods.

DEQ does not have the authority to waive the inspection criteria and only a MT-accredited inspector can assume the material is asbestos. In a refinery situation, the inspection records can be located in a central location but would need to be made accessible if DEQ conducted a site inspection.

Scenario 8:
New equipment and piping installed in the refinery will be insulated with non-asbestos insulation and an MSDSs available to confirm non-asbestos components. What inspection requirements apply?

Response 8:
Installation of new material does not require an asbestos inspection. Bulk sampling of material prior to subsequent renovations or demolitions may be avoided if a MT-accredited inspector has access to previous sampling analysis, or has adequate documentation to tie a material to a particular MSDS sheet.

Scenario 9:
Do Montana rules apply to the inspection and removal of less than 3 linear feet of ACM? We believe that MT rules do not apply but OSHA rules would, is that correct?

Response 9:
Yes, Montana inspection rules apply, regardless of the amount of removal. The Administrative Rules of Montana state that "the owner or operator

shall ensure that the facility or part of the facility where demolition or renovation actions will occur is thoroughly inspected by a department-accredited asbestos inspector…" See ARM 17.74.354(1)

If you have any questions, please contact the Asbestos Control Program at 406-444-5300 or send an email to deqacponline@mt.gov.

Thank you.

Asbestos Control Program
www.asbestos.mt.gov