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| <i>HEALTH AND SAFETY MANUAL</i> | |  |
| Title: Asbestos Exposure Control Program | | |
| Approved by: Greg Savoy | | Rev. 8/30/11 |

1 Purpose/Scope:

To provide basic precautions and protections for employees to avoid exposure to asbestos containing material (ACM) or presumed asbestos containing material (PACM). Exposure to asbestos has been shown to cause lung cancer, asbestosis, mesothelioma, and cancer of the lungs, stomach and colon.

This program applies to all The Company employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers The Company employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

2 Definitions/Responsibilities:

2.1 Definitions:

- 2.1.1 Asbestos – an incombustible, chemical-resistant, fibrous mineral used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters.
- 2.1.2 Asbestos containing material (ACM) – any material containing more than 1% asbestos.
- 2.1.3 Class I -Asbestos work - Activities involving the removal of thermal system insulation (TSI) and surfacing asbestos containing material.
- 2.1.4 Class II - Asbestos work - Activities involving the removal of ACM that is not TSI or surfacing material. This includes removal of asbestos-containing gaskets, packing, wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
- 2.1.5 Class III - Asbestos work - Includes repair and maintenance operations where ACM, including TSI and surfacing material, is likely to be disturbed to the extent that renders ACM friable or generates visible debris. Class III asbestos work is limited to cutting away small amounts of ACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the

- 2.1.6 amount of disturbed ACM exceed that which can be contained in one glove bag or waste bag measuring 60 inches in length and width.
- 2.1.7 Class IV - Asbestos work - Includes custodial activities during which employees are involved in clean-up activities of waste and debris containing asbestos containing material.
- 2.1.8 Competent Person - A designated Company employee who has the authority to take prompt corrective actions and has received training and certification equivalent to the EPA's Model Accreditation Plan and equivalent training as conducted by the National Asbestos Center, at the manager or supervisor level, and thereby is knowledgeable in:
 - Identifying asbestos hazards in the workplace.
 - Selecting appropriate control strategies for asbestos exposure.
 - The contents of the OSHA asbestos regulations.
 - Work practices for safe asbestos removal/clean-up.
- 2.1.9 Presumed asbestos containing material (PACM) – thermal insulation and surfacing material found in buildings constructed no later than 1980.

Surfacing material – material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members or other materials on surfaces for acoustical, fireproofing and other purposes).

- 2.1.10 Thermal system insulation – ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

2.2 Responsibilities:

2.2.1 Managers/Supervisors:

- Ensure owners or operators are notified of PACM.
- Prohibit Company employees from working until material in question is confirmed as non-asbestos or abated.
- Ensure proper employee training is completed.
- Ensure that all requirements of this program are understood and followed by those working under his/her direction.
- Perform duties of the Competent Person for asbestos work.

- 2.2.2 All employees are required to act in strict compliance with the requirements of this program and delay or discontinue work if there is ever an unresolved concern regarding exposure to asbestos.

3 Requirements:

3.1 General:

- 3.1.1 Company employees shall not work or otherwise handle asbestos containing material designated as Class I, III, IV work. Class II work is limited to removal of asbestos containing gaskets and packing materials. All asbestos

abatement work, other than the limited scope of Class II work, shall be awarded to qualified asbestos abatement contractors.

Client owned and/or operated equipment and facilities, where surfacing material or insulation is present, must be confirmed non-asbestos before Company employees disturb that material.

Where surfacing material or insulation cannot be confirmed non-asbestos, the client or owner must test, and where necessary abate, the material before Company employees are permitted to work.

3.2 Approved ACM or PACM Handling:

3.2.1 The following procedures must be followed when removing gasket or packing materials (Class II asbestos work) containing or presumed to contain asbestos.

- All employees must fulfill appropriate training, respiratory protection and medical surveillance requirements to handle ACM or PACM.
- Class II asbestos work, which employees are permitted to perform, is limited to removal of asbestos gasket and packing materials, unless special training for other Class II work as noted in 3.3.2 has been provided.
- Removal of gaskets and/or packing shall only be performed by employees that have been properly trained. When gaskets are visibly deteriorated, they are to be removed via wet methods and/or glove bagging.

3.2.2 Potential locations where company employees may be exposed to asbestos includes: piping insulation and coated beams.

3.2.3 When working on multi-contractor worksites employees shall be protected from exposure (i.e. if employees working adjacent to a Class 1 asbestos job are exposed to asbestos due to inadequate containment of such job, shall be required to leave the work area until the enclosure breach is repaired.

3.3 Training:

3.3.1 Employees who do not work with asbestos, but may indirectly become exposed to friable asbestos in the workplace, shall receive Asbestos Awareness training. Training shall be documented.

3.3.2 Employees who are assigned Class II work (which is limited to removal of asbestos gasket and/or packing materials) shall receive training compliant with 29 CFR 1926.1101(k)(9) on an annual basis.

Note: Any Class II work as defined in 2.1.4 that goes beyond working with gasket and packing materials shall require specialized training. The Regional Safety Coordinator shall be notified of the need of such training.

3.4 Sub-Contractors:

3.4.1 Asbestos contractors shall be pre-screened and approved by the group responsible for contracting the work.

- 3.4.2 Contractors performing work shall comply with the requirements of this standard and all applicable OSHA and environmental regulatory requirements.
- 3.4.3 The following documents must be obtained at least 10 working days (or as soon as possible) prior to beginning the asbestos abatement work:
- Copy of the contractor's State Contractor's License (renewed annually)
 - MSDS for material used for the abatement process
 - Copy of all asbestos Notifications (if required)
 - Copies of asbestos sample analysis (if performed by contractor)
- 3.4.4 The following are required upon completion of work by the contractor (If an asbestos project completion report is provided by the contractor, these items are often a part of it.):
- Work Summary Report, including daily work summaries.
 - Results of all independent third party air sampling, including asbestos material sampling, personnel air monitoring, clearance sampling results.
 - Waste Shipment Records.
- 3.4.5 Every contracted asbestos job must have assigned a competent person to monitor asbestos work and to assure compliance with all applicable regulations and requirements.
- 3.4.6 An independent third party shall be contracted to perform all required air sampling for contracted asbestos removal.
- 3.4.7 Contractors who are not involved in ACM work, but who may be inadvertently exposed to ACM on Company property are to be informed of this potential and advised on proper methods to avoid exposure.
- 3.5 Asbestos Exposure Control:
- 3.5.1 Asbestos exposure controls are designed to eliminate or minimize an employee's exposure to airborne asbestos fibers through the use of work practices and engineering controls.
- 3.5.2 Prior to initiating any asbestos work the Competent Person must perform an asbestos exposure assessment.
- Subsequent to the exposure assessment, the engineering controls and work practices to be employed shall be identified.
- 3.5.3 Prior to commencement of work, the affected employees shall be briefed on the engineering controls and work practices designed for the asbestos work. This briefing shall be documented and maintained with the job documentation.
- 3.5.4 Wet methods will be employed for all asbestos work as a means to minimize potential airborne exposure wherever possible.
- ACM shall be wetted from the initiation of the maintenance or renovation operation and wetting agents shall be used continually

throughout the work period to ensure that any dry ACM exposed in the course of the work is wet and remains wet until final disposal.

- ❑ Wetting agents, usually a surfactant (dish soap), are generally prepared by mixing 1 to 3 ounces of wetting agent to 5 gallons of water.

3.6 Personnel Air Monitoring:

- 3.6.1 An independent/third party air sampling person shall perform all required air sampling during contractor asbestos work and provide the results to the Company Competent Person.

Note: Air sampling is not required for glove bag activities that are covered under a Negative Exposure Initial Assessment.

- 3.6.2 Affected employees and/or their designated representatives are to be provided the opportunity to observe asbestos exposure monitoring.
- 3.6.3 Air sampling analysis shall be performed by an American Industrial Hygiene Association (AIHA) accredited laboratory.
- 3.6.4 Where the asbestos exposure assessment (in the absence of quantitative personnel monitoring results) does not present objective, convincing data that indicates the ACM to be handled will not (under the worst circumstances) release airborne fibers, personnel air monitoring shall be performed to quantify exposure.
- 3.6.5 If personnel monitoring is considered necessary during the asbestos exposure assessment, in an effort to verify exposures would be maintained below the PEL/excursion limit, respiratory protection shall be utilized until such time that sufficient sampling results verify that respiratory protection is not required.
- 3.6.6 Branch Safety Coordinators may be consulted for advice and assistance in performing personnel air sampling activities.
- 3.6.7 The number of samples necessary to be considered "representative" is dependent upon many factors and must be determined in consultation with the Branch Safety Coordinator, certified Industrial Hygienist consultant, or a third party air sampling professional.
- 3.6.8 Affected employees shall be notified of monitoring results, which represent the employee's exposure, as soon as possible following receipt of the monitoring results.
 - ❑ Employees shall be notified in writing either individually or by posting at a centrally located place that is accessible to affected employees.
- 3.6.9 Once representative sampling indicates that exposure levels for that particular activity are consistently below the OSHA established permissible limit and/or excursion limit, the requirement for respiratory protection may be waived.

3.6.10 It is imperative that accurate personnel air sampling records are maintained in order to justify any relaxation of respiratory protection requirements.

3.6.11 Results of air sampling data must be maintained in the asbestos job documentation.

3.7 Medical Surveillance Program:

3.7.1 All Company employees who for a combined total of 30 or more days per year are engaged in Class II asbestos work or who are exposed at or above the permissible exposure limit for a combined 30 days or more per year shall be included in the company medical surveillance program.

Note: For purposes of this requirement, any day in which an employee is engaged in Class II or Class III work or a combination thereof for one hour or less and, while doing so, adheres fully to the work practices specified in this standard, shall not be counted.

3.7.2 The medical surveillance program shall be made available according to the following schedules:

- Prior to assignment of an employee to an asbestos area where negative pressure respirators are worn.
- Where exposure to asbestos may be at or above the permissible exposure level for 30 or more days per year, or where employees are engaged in Class II asbestos work for 30 or more days per year, at least annually thereafter, as long as exposures exist.
- Asbestos medical examination must be given within ten (10) working days following the thirtieth day of exposure.
- If an examining physician determines that any of the examinations should be provided more frequently than specified, they shall be provided at the periodicity specified by the physician.

3.7.3 No asbestos medical examination is required when complete records of such examination, performed less than twelve months prior to commencement of asbestos work are available.

3.7.4 As part of the medical surveillance, the attending physician shall provide a written opinion of the results of the medical examination to AJC and the Contract Medical Surveillance Provider, who in turn will provide a copy to the affected employee within 30 days.

3.7.5 In accordance with OSHA regulations, once employees are no longer exposed to asbestos as defined in 3.7.1, their inclusion in the medical surveillance program is no longer required.

3.8 Respiratory Protection:

3.8.1 The only circumstances that will necessitate Company employees using respiratory equipment for protection against asbestos is during the asbestos exposure assessment process, while confirming (via personnel monitoring) that the engineering controls and work practices designed and employed for a particular work activity are adequate to maintain exposure levels below the PEL/excursion limit. Asbestos work that requires respiratory equipment beyond the noted exception above, should be performed by a qualified contractor.

3.8.2 Prerequisites for use of respiratory equipment, regarding asbestos, include:

- Successfully passing a respiratory physical (annually).
- Successfully completing respiratory protection training (annually).
- Successfully passing a respirator fit test (**semi-annually**).

3.9 Signs and Labels

3.9.1 Employees shall abide by warning signs and labels and will not disturb asbestos containing materials.

3.9.2 By following signs and labels employees will ensure that asbestos containing materials (ACM) and/or presumed asbestos containing materials (PACM) will not be disturbed.

3.10 Waste Disposal:

3.10.1 Asbestos waste, scrap, debris, bags, containers, equipment, and contaminated clothing shall be collected and disposed of in sealed, labeled impermeable bags of greater than 6 mils thickness or other closed, labeled, impermeable containers.

3.10.2 Bags or containers shall be imprinted and clearly labeled with the following OSHA asbestos hazard warning and address:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
Site Address
Contractor's Name
Contractor's Address

3.10.3 Bags/containers shall be clearly labeled, for DOT, as:

RQ, Asbestos, 9, NA2212, PG III

Containers shall have a DOT number 9 diamond label on the container if the shipping container is greater than 66 pounds. For assistance with DOT labeling requirements, contact the Safety Director.

3.10.4 An Asbestos Waste Shipment Record shall be utilized. Check with the landfill prior to shipping to see if they require their own shipping record or use a Waste Manifest – contact the Safety Director for copies.

3.10.5 Asbestos shall be transported to an approved landfill that accepts asbestos.

- A licensed waste hauler may be used to transport the packaged ACM.
- Transport vehicles shall either be enclosed or covered.
- Do not use vehicles with compactors to transport ACM.

3.10.6 A shipping form shall accompany the ACM, during transport, to the landfill.

3.11 Record Keeping:

3.11.1 All records relating to any asbestos activity shall be maintained by the Company permanently.

3.11.2 The following records shall be maintained:

- Exposure Assessments that are being relied upon to support a location's position that asbestos work (specific or generic) will not result in exposures above the PEL or excursion limit.
- Employee asbestos exposure records (personnel air monitoring).
- Medical Surveillance records.
- Training records.
- Shipping papers and disposal records.
- Copies of notification letters sent to Governmental agencies.
- Pre-project asbestos sampling results.
- Post-project clearance sampling results.
- Daily Work Summaries.
- Project Completion Closure Report, if provided.

4 References:

4.1 29 CFR 1910.1001, OSHA Asbestos Regulations

4.2 29 CFR 1926.1101, OSHA Asbestos Regulations

4.3 49 CFR 172.101 and 173.1090, DOT Hazardous Materials Regulations

5 Exhibits:

None.