

Optional Information

Name of School:

Date of Inspection:

Vocational Program/Course/Room:

Signature of Inspector:

Asbestos During Brake and Clutch Service Work Self Inspection Checklist

Guidelines: This checklist covers some of the Occupational Safety and Health Administration (OSHA) asbestos regulations (29 CFR 1910.1001) adopted by reference by the New Jersey Department of Labor, Public Employees Occupational Safety and Health program. These regulations are enforced by the New Jersey Department of Health and Senior Services. Since these regulations were adopted by reference by the New Jersey Department of Education (N.J.A.C. 6:53-1.2(a)), the regulations also apply to students in vocational programs. It applies to both school district employees and students, who through their work or instructional activities, have potential exposure to asbestos fibers from *asbestos-containing materials*. The most common potential exposure situation in schools involves brake and clutch service work on motor vehicles. This checklist focuses on this situation. Since asbestos can also be found in numerous materials such as floor tiles, textured paint, soundproofing compound, insulation, joint compound, spackle, oven-door gaskets, lab bench tops, cement board (Transite), shingles, siding and heat resistant gloves, the teacher should be constantly on guard against accidentally handling of any *asbestos-containing materials*. Definitions of italicized terms are provided at the end of the checklist to help you understand some of the questions. This checklist does not cover asbestos abatement work, asbestos exposures other than encountered during brake and clutch service work or the Asbestos Hazard Emergency Response Act (AHERA) regulations. The questions that are most likely not the responsibility of the individual teacher are marked with an asterisk (*) next to the number of the question.

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Engineering Controls and Work Practices

Please Circle

1. Are one of the following methods used during automotive brake and clutch inspection, disassembly, repair, and assembly operations? [29 CFR 1910.1001(f)(3)] (See Definitions for descriptions of methods) Y N N/A DK
- a) *Negative pressure enclosure/HEPA vacuum system method.* [Recommended method]
- b) *Low pressure/wet cleaning method.* [Recommended method]
- c) *An equivalent method* clearly documented to be as good as or better than the *negative pressure enclosure/HEPA vacuum system method* for controlling asbestos exposure.
- Note: OSHA has accepted the *solvent spray method* as an *equivalent method* that may be used when proper work practices are followed.
- d) *Wet method*, if no more than 5 pairs of brakes or 5 clutches are inspected, disassembled, reassembled and/or repaired per week.
2. Are all hand-operated and power-operated tools which would produce or release fibers of asbestos, such as, but not limited to saws, abrasive wheels, and drills provided with local exhaust ventilation systems? [29 CFR 1910.1001(f)(1)(v)] Y N N/A DK

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| 3. | Is compressed air prohibited for use in cleaning asbestos dust unless the compressed air is used in conjunction with a ventilation system which effectively captures the dust cloud created by the compressed air? [29 CFR 1910.1001(f)(1)(ix)] | Y N N/A DK |
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Protective Equipment

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| 4. | Where the possibility of eye irritation exists, are face shields, vented goggles or other appropriated protective equipment provided? [29 CFR 1910.1001(h)(1)(iii)] | Y N N/A DK |
| 5. | Is the protective equipment cleaned, laundered, and/or repaired as necessary in order to maintain its effectiveness? [1901.1001(h)(3)(I)] | Y N N/A DK |
| 6. | Is clean protective equipment provided at least weekly to each affected person? [1901.1001(h)(3)(I)] | Y N N/A DK |

Warning Labels

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| 7. | Are warning labels affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers, or to their containers? [29 CFR 1910.1001(j)(4)(i)] | Y N N/A DK |
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Note: If the manufacturer of an asbestos-containing product can demonstrate that during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, that no airborne concentrations of fibers of asbestos will be released above the allowable limits, warning labels are not required.

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8. Do warning labels include the following information? [29 CFR 1910.1001(j)(4)(ii)] Y N N/A DK

Danger
 Contains Asbestos Fibers
 Avoid Creating Dust
 Cancer and Lung Disease Hazard

Information and Training

9. Is training on the hazards of asbestos provided to people who are potentially exposed to asbestos-containing materials (ACM) in accordance with the New Jersey Worker & Community Right to Know regulations? [N.J.A.C. 8:59-6] (See Right to Know Self Inspection Checklist) Y N N/A DK
10. Is asbestos awareness training provided to people who do housekeeping operations in area(s) that have ACM? [29 CFR 1910.1001(j)(7)(iv)] Y N N/A DK
11. Does asbestos awareness training that is provided to people who do housekeeping operations in the areas(s) that have ACM contain the following elements? [29 CFR 1910.1001(j)(7)(iv)] Y N N/A DK

- Health effects of asbestos;
- Locations of ACM in the building/facility;
- Recognition of ACM damage and deterioration;
- Requirements of the OSHA asbestos standard;
- Housekeeping requirements; and
- Proper response to fiber release episodes.

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| 12. | Do people who do housekeeping operations in the area(s) that have ACM have asbestos awareness training at least once per year? [29 CFR 1910.1001(j)(7)(iv)] | Y N N/A DK |
| 13. | Is a copy of the OSHA asbestos standard (29 CFR 29 CFR 1910.1001) and its appendices made available to people who do housekeeping operations in the area(s) that have ACM? [29 CFR 1910.1001(j)(7)(v)(A)] | Y N N/A DK |
| 14. | Are people who do housekeeping operations in the area(s) that have ACM informed that self-help smoking cessation program materials are available on request? [29 CFR 1910.1001(j)(7)(v)(C)] | Y N N/A DK |

Note: Materials such as NIH Publication No. 89-1647, or equivalent self-help materials must be provided on request.

Housekeeping

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| 15. | Are all surfaces maintained as free as practicable of ACM waste and debris and accompanying dust? [29 CFR 1910.1001(k)(1)] | Y N N/A DK |
| 16. | Are all spills and sudden releases of material containing asbestos cleaned up as soon as possible? [29 CFR 1910.1001(k)(2)] | Y N N/A DK |

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17. Is HEPA-filtered vacuuming equipment used for vacuuming asbestos containing waste and debris? [29 CFR 1910.1001(k)(4)] Y N N/A DK

Note: The equipment shall be used and emptied in a manner which minimizes the reentry of asbestos into the workplace. [29 CFR 1910.1001(k)(5)]

18. Is shoveling, dry sweeping and dry clean-up of asbestos only permitted where vacuuming and/or wet cleaning are not feasible? [29 CFR 1910.1001(k)(6)] Y N N/A DK

19. Is waste, scrap, debris, bags, containers, equipment, and clothing contaminated with asbestos that is consigned for disposal, collected in sealed impermeable bags, or other closed, impermeable containers? [29 CFR 1910.1001(k)(7)] Y N N/A DK

Definitions:

Asbestos-containing material (ACM) means any material which contains more than 1% asbestos.

Equivalent Methods

An equivalent method is one which has sufficient written detail so that it can be reproduced and has been demonstrated that the exposures resulting from the equivalent method are equal to or less than the exposures which would result from the use of the *Negative Pressure Enclosure/HEPA Vacuum System Method*. For purposes of making this comparison, the employer shall assume that exposures resulting from the use of the *Negative Pressure Enclosure/HEPA Vacuum System Method* shall not exceed 0.016 f/cc,

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as measured by the OSHA reference method and as averaged over at least 18 personal samples. The solvent spray method is an *equivalent method* that may be used when proper work practices are followed.

HEPA means a high efficiency particulate absolute filter which is 99.97 percent efficient for 1.3 microns.

Low Pressure/Wet Cleaning Method

(1) A catch basin shall be placed under the brake assembly, positioned to avoid splashes and spills.

(2) The reservoir shall contain water containing an organic solvent or wetting agent. The flow of liquid shall be controlled such that the brake assembly is gently flooded to prevent the asbestos-containing brake dust from becoming airborne.

(3) The aqueous solution shall be allowed to flow between the brake drum and brake support before the drum is removed.

(4) After removing the brake drum, the wheel hub and back of the brake assembly shall be thoroughly wetted to suppress dust.

(5) The brake support plate, brake shoes and brake components used to attach the brake shoes shall be thoroughly washed before removing the old shoes.

(6) In systems using filters, the filters, when full, shall be first wetted with a fine mist of water, then removed and placed immediately in an impermeable container, labeled as asbestos waste and disposed of according to regulations.

(7) Any spills of asbestos-containing aqueous solution or any asbestos-containing waste material shall be cleaned up immediately and disposed of according to regulations.

(8) The use of dry brushing during low pressure/wet cleaning operations is prohibited.

Negative Pressure Enclosure/HEPA Vacuum System Method

(1) The brake and clutch inspection, disassembly, repair, and assembly operations shall be enclosed to cover and contain the clutch or brake assembly and to prevent the release of asbestos fibers into the worker's breathing zone.

(2) The enclosure shall be sealed tightly and thoroughly inspected for leaks before work begins on brake and clutch inspection, disassembly, repair, and assembly.

(3) The enclosure shall be such that the worker can clearly see the operation and shall provide impermeable sleeves through which the worker can handle the brake and clutch inspection, disassembly, repair and assembly. The integrity of the sleeves and ports shall be examined before work begins.

(4) A HEPA-filtered vacuum shall be employed to maintain the enclosure under negative pressure throughout the operation. Compressed-air may be used to remove

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asbestos fibers or particles from the enclosure.

(5) The HEPA vacuum shall be used first to loosen the asbestos containing residue from the brake and clutch parts and then to evacuate the loosened asbestos containing material from the enclosure and capture the material in the vacuum filter.

(6) The vacuum's filter, when full, shall be first wetted with a fine mist of water, then removed and placed immediately in an impermeable container, labeled as asbestos waste and disposed of according to regulations.

(7) Any spills or releases of asbestos containing waste material from inside of the enclosure or vacuum hose or vacuum filter shall be immediately cleaned up and disposed of according to regulations.

Solvent Spray Method (from OSHA Directive Number CPL 2-2.63 (REVISED), Inspection Procedures for Occupational Exposure to Asbestos Final Rule 29 CFR Parts 1910.1001, 1926.1101, and 1915.1001, November 3, 1995).

(1) The solvent shall be used to first wet the brake and clutch parts.

(2) The brake and clutch parts shall be wiped clean with a cloth.

(3) The contaminated cloth shall be placed in an impermeable container, and then either disposed of properly or laundered in a way that prevents the release of asbestos fibers.

(4) Any spilled solvent or dispersed asbestos shall be cleaned up immediately and not allowed to dry, either with a cloth or a HEPA vacuum.

(5) Dry brushing during solvent spray operations is prohibited.

Wet Method

(1) A spray bottle, hose nozzle, or other implement capable of delivering a fine mist of water or amended water or other delivery system capable of delivering water at low pressure, shall be used to first thoroughly wet the brake and clutch parts. Brake and clutch components shall then be wiped clean with a cloth.

(2) The cloth shall be placed in an impermeable container, labeled as asbestos waste and then disposed of according regulations, or the cloth shall be laundered in a way to prevent the release of asbestos fibers.

(3) Any spills of solvent or any asbestos containing waste material shall be cleaned up immediately according to regulations.

(4) The use of dry brushing during the wet method operations is prohibited.

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