

Asbestos Good Faith Inspection (GFI) Guidance for WSDOT Capital Construction Projects

Purpose

The purpose of this document is to serve as guidance for implementing the asbestos Good Faith inspection (GFI) Policy in Chapter 447 of the WSDOT [Environmental Manual](#). This guidance was written by the WSDOT headquarters Environmental Services Office (ESO) Hazardous Materials & Solid Waste Management (Hazmat) Program Manager (who is an accredited AHERA Building Inspector). This guidance is a living document and future updates will be made as necessary and in consultation with an accredited Asbestos Hazard Emergency Response Act (AHERA) Building Inspector.

The content in this guidance is informed by existing **objective data** such as as-built information, maintenance records, safety data sheets, geology and soil information, design plans and specifications, best professional judgment, and previously written GFI statements and reports documenting hundreds of inspections and thousands of samples taken statewide from all WSDOT regions and modes.

Based on existing WSDOT **objective data**, asbestos containing material (ACM) is most commonly found in components of buildings, bridges, tunnels, and specified asbestos linings or coatings of pipes and culverts, asbestos cement pipes, and specific asbestos fiber bonded metal cribbing walls.

This guidance answers the most commonly asked questions, which are:

- What projects, types of structures, or types of Work require an asbestos GFI, and which do not?
- How much inspection/testing is required to confirm there is no asbestos-containing material?
- What types of culverts and “other structures” need to be inspected and/or sampled?

Projects that may disturb ACM

An asbestos GFI must be conducted by an accredited AHERA Building Inspector for any project that will renovate or demolish any building, bridge, tunnel, asbestos lined or coated pipe or culvert, asbestos cement pipe, or asbestos fiber bonded metal cribbing wall **unless** WSDOT is reasonably certain that no ACM will be disturbed by the Work. WSDOT must use **objective data** to make such a reasonable certainty determination. To ensure statewide consistency in making such a reasonable certainty determination that no asbestos will be disturbed by the Work, first consult a region/mode AHERA Building Inspector or ESO Hazmat Program and consider their input prior to making the reasonable certainty determination.

Buildings – The most common components of buildings that may contain ACM include fireproofing material, insulation wrap on boilers, heaters, vents, water and steam pipes. This material may be sprayed or troweled-on plaster, or any type of material applied on ceilings, walls, fireplaces, flooring, and wall joints. There may be multiple layers of material in the walls, flooring types; countertops, siding, roofing that may contains asbestos and they will each need to be addressed. ACM may be found in materials such as grout, caulking, sealants, epoxy, tape, roofing paper, old electrical wiring and/or conduits. It is important to note that asbestos can fall off materials and onto the soils in crawlspaces where previous renovations occurred.

Bridges and Tunnels – The most common components of bridges and tunnels that may contain ACM include coatings on the inner and outer surface of a tunnel, on asbestos cement (transite) pipes typically

used to convey liquids (e.g., stormwater, wastewater, drinking water, etc.), and some water, sewer and gas utility pipes attached to WSDOT bridges or tunnels. Old railroad bridges were constructed with coal tar epoxy material that was known to contain ACM. ACM may be found in some materials such as felt-like paper beneath the bridge piers and abutments, expansion joints, mechanical rooms (with electric wiring) on drawbridges, and grout, caulking, sealants, epoxy, old electrical wiring and/or conduits.

Asbestos coated or lined metal or pipe-arch culverts constructed prior to the 1990s – The most common components of lined or coated pipes and culverts that may contain ACM are in the lined or coated material used in any repairs and connections between the pipes and culverts. Some metal pipes and pipe-arch culvert designs prior to the 1990s were specified to be coated or lined with protective treatments. Six protective treatment types were available. Treatment types 3, 4, and 6 specified asbestos fibers to be embedded into the coating.

Asbestos cement pipe drains or perforated underdrain pipes constructed prior to the 1990s – In addition to concrete, vitrified clay, aluminum and steel pipe, asbestos cement pipe was a design option.

Asbestos cement storm or sanitary sewer pipes constructed prior to the 1990s – In addition to concrete, vitrified clay, aluminum and steel pipe, asbestos cement pipe was a design option.

Asbestos fiber bonded metal cribbing walls constructed prior to the 1990s – In addition to plain galvanized metal cribbing, asbestos fiber bonded galvanized metal was a design option.

Areas of naturally occurring asbestos – The Washington Department of Natural Resources (DNR) has identified [Potential Zones of Naturally Occurring Asbestos](#). According to the Washington Department of Health (DOH), [naturally occurring asbestos](#) has been found in the geology and soils on Sumas Mountain and along Swift Creek and Sumas River in Whatcom County. Projects in these areas should consult the region/mode AHERA Building Inspector or ESO HazMat Program. WSDOT ESO's GIS data workbench includes a GIS layer from WADNR showing areas of naturally occurring asbestos in Washington state.

An asbestos GFI requires completing up to four steps:

1. **Conduct desktop review of existing objective data** that typically includes the complete project description, as-built information, maintenance records, safety data sheets, geology and soil information, corresponding design plans and specifications, and previously written asbestos GFI reports that use the same (not like) material as constructed or surveyed projects. If the AHERA Building Inspector needs more information, proceed to Step 2. If the AHERA Building Inspector does not need more information, proceed to Step 4.
2. **Conduct site visit to visually inspect suspect materials** that may be disturbed by the project. If the AHERA Building Inspector needs more information, proceed to Step 3. If the AHERA Building Inspector does not need more information, proceed to Step 4.
3. **Collect samples of suspect materials** that will or may be disturbed by the project and submit samples to qualified laboratory for analysis. WSDOT structures mostly consist of miscellaneous material. The judgement of the number of samples collected per material or area is up to the AHERA Building Inspector. The AHERA Building Inspector needs to balance the requirements and guidance of the federal, state, and local air authorities with their professional judgement in determining what represents a homogeneous area on a structure. Typically, two samples are collected. Sample collection can be done concurrently during Step 2. Once laboratory analysis results are received, proceed to Step 4.

4. **Write a concise GFI report that summarizes the inspection and findings** of the presence or absence of ACM. Include methodology and AHERA credentials. If ACM is present or presumed, show location(s), and provide quantity(ies) that a contractor can use for bidding purposes.

Reasonable certainty of non-disturbance of ACM

Per [Chapter 296-62-07721\(2\)\(b\)\(ii\)\(B\) WAC](#), an asbestos GFI is not required if WSDOT is reasonably certain that ACM will not be disturbed by the project. Projects that do not disturb any buildings, bridges, tunnels, specified asbestos linings or coatings of pipes and culverts, asbestos cement pipes, or asbestos fiber bonded metal cribbing walls typically do not disturb ACM.

For example, based upon the standard specifications and sampling results, pavement Work within an existing roadway may not warrant an asbestos GFI (except Work within a bridge prism, Work that will impact an expansion joint, any utilities, or stormwater or sewer pipes, and Work located within a naturally occurring asbestos area).

Thus, based on **objective data**, WSDOT can be reasonably certain that ACM would typically not be present and could not be disturbed by the Work. Therefore, a project-specific asbestos GFI may not be necessary for these projects. If you have any questions or concerns about a specific project, consult the region/mode AHERA Building Inspector or the ESO HazMat Program to receive assistance.

How does WSDOT document compliance with asbestos GFI requirements for capital construction projects?

All WSDOT capital construction projects must complete the WSDOT asbestos [GFI Compliance Form](#) located on the [ESO HazMat Program](#) webpage. The asbestos GFI Compliance Form will guide a project engineer, environmental manager, a hazardous material specialist, and AHERA inspector in their roles and to determine and document if an asbestos GFI is necessary for the project Work.

Questions?

Contact the [ESO Hazmat Program](#) if you have any questions about this asbestos GFI guidance or the corresponding asbestos GFI Policy in Chapter 447 of the WSDOT [Environmental Manual](#).

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This certifies that
Patrick Svoboda
has satisfactorily completed
4 hours of online refresher training as an
AHERA Building Inspector

to comply with the training requirements of
TSCA Title II, 40 CFR 763 (AHERA)


Instructor: Andre Zwanenburg Date: Apr 5, 2022 EPA Provider # 1085
Cert. Num: 184508 Expires in 1 year.



E-Signature: Patrick Svoboda