

Construction and Demolition Waste

Guidance Document

March 2022

Alaska Department of Environmental Conservation
Division of Environmental Health
Solid Waste Program



Construction and Demolition (C&D) waste constitutes 25% to 40% of the waste disposed in the United States. Proper management of C&D is important to protect workers and can reduce project costs. In planning a C&D project, consideration must be given to material hazards, the salvaging of reusable materials, and to proper disposal options.

Building Survey

Before a demolition or renovation project begins, federal regulations require the **identification of any asbestos-containing materials (ACM) or other hazardous materials in the structure**. A person trained to identify potentially hazardous materials must conduct and record a building survey of the structure and any contained materials.

All hazardous materials must be removed and properly disposed prior to demolition. In particular, ACM must be removed, managed, and disposed in compliance with the Environmental Protection Agency (EPA) National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements [40 CFR 61, subpart M]. Workplace safety standards and disposal requirements require any contractor to identify and properly manage all ACM; however, the NESHAP standards only apply to commercial structures, institutional structures, or residential buildings with more than four units.

For homeowners doing their own demolition or renovation, identifying ACM is also important to prevent exposure to asbestos fibers, which are known to cause cancer and other lung disease.

Asbestos

Any potential ACM identified in the building survey must be sampled and tested; if it contains more than 1% asbestos, it must then be categorized as friable or regulated ACM (RACM), or as Category I or Category II non-friable ACM, which are often referred to as non-RACM. These categories determine how the materials must be managed during removal and disposal.

Failure to properly identify, remove, and dispose of ACM can expose workers and the public to asbestos fibers, and facility owners and contractors to civil and criminal liability.

See our Asbestos Handling and Disposal guidance for more information – <http://dec.alaska.gov/eh/solid-waste/asbestos/>



For all demolitions of commercial structures, institutional structures, or residential structures with more than four units, federal law requires ***you submit notice to EPA at least 10 days before any demolition begins*** regardless of the presence of hazardous materials or ACM. More information is available by calling the EPA Alaska Operations office or online at <http://www.epa.gov/asbestos/epas-notification-rules-and-regulations-regarding-demolition-asbestos-containing-structures>.

Hazardous Materials

Hazardous materials, or other wastes that may cause a potential hazard to human health or the environment, often require special handling and disposal methods under federal laws, including the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act, and the Low-Level Radioactive Waste Policy Act (LLRWPA). Hazardous wastes commonly found in a demolition project include:

- Lead-based paint
- Lead pipe and solder
- Fluorescent tubes and bulbs
- Mercury switches and thermostats
- Paints, solvents, or pesticides
- PCB-containing transformers or light ballasts
- PCB-containing paint or caulking
- Radionuclide-containing smoke detectors and exit signs
- Refrigerants from air conditioning units.

For additional details on materials that are suspect of containing PCBs, please refer to EPA's *PCBs in Building Materials* guidance document: [PCBs in Building Materials - Determining the Presence of Manufactured PCB Products in Buildings or Other Structures | US EPA](#) .

Alaska does not have any landfills permitted to accept regulated hazardous wastes. However, if you qualify as a conditionally exempt small quantity generator (CESQG) under RCRA you may be allowed to dispose of RCRA hazardous wastes at a permitted Class I or II landfill. Small rural landfills (Class III) are not allowed to accept CESQG waste. Contact your local landfill to determine if they accept CESQG waste, or contact the ADEC Solid Waste Program office for assistance.

Burning C&D

Controlled burning of woody debris and clean wood from construction, demolition, or land clearing projects is allowable in most areas of Alaska. For C&D, "woody debris" means tree limbs, branches, brush, stumps, or foliage that has been cut or cleared from the land; "clean wood" means dimensional lumber that has not been treated with a paint, glue, or preservative. Burning of other C&D is prohibited as it has the potential to create toxic or acid gases. All burning must be conducted in accordance with the requirements of the Alaska Department of Natural Resources (ADNR) Division of Forestry or the Bureau of Land Management (BLM), the ADEC Division of Air Quality, and any local regulations. In addition, the burn may not create a nuisance or a human health hazard.

Ash from the burning of clean wood or mixed materials is a solid waste and must be disposed in a permitted landfill. You will need to contact your local landfill for disposal requirements. Ash solely from the burning of woody debris is not a solid waste and is not required to be disposed in a landfill.

For more information on burning requirements, consult

- ADNR Division of Forestry <http://forestry.alaska.gov/>
- ADEC Division of Air Quality: Open Burn Information <http://dec.alaska.gov/air/air-permit/open-burn-info/>

Disposal of ACM and Non-Hazardous C&D

All other non-hazardous C&D and ACM must be disposed in a landfill permitted to accept the waste. Most municipal landfills will accept C&D, and a number of C&D monofills are operated in the state for commercial disposal. It is important to contact landfills directly to determine your disposal options and costs early in the planning process. Most small rural landfills (Class III) cannot accept ACM. In a remote location where no disposal

options are available, you may choose to apply to ADEC for a permit or authorization to construct and operate a project-specific landfill.

For a remote project, you may apply for a one-time disposal authorization. These authorizations are limited to project locations that do not have year-round access to a system of connected roads with a total length of 100 miles or more, or where all permitted landfills are more than 100 road miles away or have refused, in writing, to accept the waste. ADEC provides two types of one-time authorizations for remote C&D projects:

- **Authorization for One-Time Disposal of Asbestos Waste** – This authorization allows the disposal of up to 250 cubic yards of RACM and non-RACM waste that is generated on the project site.
- **Authorization for One-Time Disposal of Inert (C&D) Waste** – This authorization allows the one-time disposal of up to 1,000 cubic yards of C&D and other inert waste, but does not include RACM.

In rural Alaska, it is important to engage with the local community early in the planning process. You must ensure that the landfill has a current permit, and that they allow disposal of the C&D in the landfill. In addition, during the project, providing assistance to consolidate, compact, and cover waste in the landfill is encouraged.

If your project does not meet the location or quantity limitations, you will need to apply for an inert waste or asbestos monofill permit. Contact us for assistance in determining your disposal options.

Waste Exempt from Permitting

Some wastes are exempt from the solid waste regulations and do not require a solid waste permit as long as they are not mixed with any other wastes or do not cause a health, safety, or environmental problem. These wastes may not need to be disposed in a permitted landfill if managed properly. See our Exempt Waste guidance <http://dec.alaska.gov/eh/solid-waste/exempt-wastes/> or call a regional ADEC Solid Waste Program office. You may also want to check with material recyclers for other non-disposal options for certain materials.

Examples of exempt wastes that you might encounter during demolition, renovation, or construction projects include:

- Land clearing waste, including excavated dirt, rock, soil, butt ends, limbs, stumps, or other foliage;
- Bricks and mortar;
- Unpainted Portland cement type concrete and associated steel rebar that cannot be easily removed.

Summary

Consideration of waste management for construction, demolition, and renovation projects early in the planning and bid process is important to ensure a successful project. Identification of disposal options and requirements, including identifying and managing any hazardous waste or ACM, will save time and money and can prevent potentially serious legal consequences. Consideration of material reuse or recycling can also save on disposal costs. Particularly in rural Alaska, it is important to engage the community to determine your disposal options and how your project could provide a benefit for the local community.

Contacts	
EPA Alaska Operations Office	907-271-5083 800-781-0983 907-271-3688 Asbestos 907-271-6329 Hazardous Waste
Alaska Occupational Safety and Health (AKOSH)	800-656-4972 Consultation and Training 800-770-4940 Compliance and Enforcement
Alaska Division of Forestry	907-356-5512
ADEC Air Quality	907-269-7562 Anchorage 907-451-2143 Fairbanks 907-465-5127 Juneau