



Engineering and Public Works Department  
155 Heritage Way  
Juneau, Alaska 99801  
Telephone: 586-0800 Facsimile: 586-4565

DATE: September 9, 2024  
TO: Wade Bryson, Chair  
Public Works and Facilities Committee  
THROUGH: Denise Koch, Engineering and Public Works Director  
FROM: Dianna Robinson, Environmental Project Specialist  
SUBJECT: 2024 Flood Disaster Debris

The unprecedented flooding on August 6 inundated approximately 290-300 homes in the Mendenhall Valley of Juneau, Alaska. Hundreds of residents had to quickly muck out and remove flood-damaged flooring, insulation, drywall, appliances, vehicles, and belongings to prevent hazardous mold growth in their homes.

After meeting with CBJ leadership, Alaska Governor Dunleavy directed the Alaska Department of Environmental Conservation (ADEC), Alaska Department of Transportation and Public Facilities (ADOT&PF), and the Alaska National Guard to support CBJ's efforts to collect and dispose of the disaster debris. The debris collection efforts provided by CBJ and ADOT&PF offered immense relief to distressed residents, allowing them to focus on remediating water damage and other hazards in their homes. ADOT&PF, ADEC, and the National Guard assisted from August 6<sup>th</sup> – 22<sup>nd</sup>, when CBJ staff took over operations fully.

### Costs and Debris Volume

Below are our current estimates of the amount and costs of the disaster debris removed by ADOT&PF and CBJ crews collected. These costs do not include labor for ADOT&PF or CBJ. Debris removal is ongoing, and these figures are subject to change.

Material	Amount	Cost
Household and C&D (WM)	537 tons	\$195,140
Household and C&D (Republic Services)	Est. 100-200 tons	Est. \$20,000
HHW (e-waste & chemicals)	10-15 tons	Est. \$10,000
Refrigerators/white goods	<50 units	Est. \$10,000
Vehicles	10 units	\$1,640
<i>Total Estimated Cost</i>		<i>&lt;\$250,000</i>

### Suspected Asbestos-Containing Waste

There are different types of "garbage." There's recycling, household hazardous waste, municipal solid waste, and construction and demolition (C&D) waste.

During the 2023 flood event, the major logistical hurdle for CBJ was determining how to best work with Waste Management (WM)'s Capitol Disposal Landfill (CDL) on the disposal of C&D waste from homes built before 1984. Under WM's permit with ADEC, homes built before 1984 required paperwork from homeowners and in some cases asbestos abatement professionals.

In 2023, CBJ asked residents to separate C&D waste so the asbestos abatement contractor could inspect, package, and certify loads for disposal. WM's Capitol Disposal Landfill does not accept this waste for disposal, so it needed to be double bagged and placed in shipping containers to be shipped south a landfill in Oregon. No suspected asbestos containing materials were identified, but CBJ followed the procedure laid out by WM and ADEC for those C&D materials. This process was time consuming and cumbersome for affected residents, CBJ, and our contractor and stretched out the debris removal process by several weeks.

On August 6, 2024, EPW staff contacted WM and ADEC about the waste disposal procedure for the 2024 flood event, which ended up being the same as the 2023 event. As with the 2023 event, most affected homes were built before 1984.<sup>1</sup> Because of the magnitude of the damage, using the same process as 2023 was unmanageable. Governor Dunleavy and ADEC then approved waivers for certain permit requirements that would allow WM's landfill to dispose of these wastes at the CDL with less paperwork. ADEC also provided knowledgeable staff to assist crews with screening for suspected asbestos containing materials in the debris.

However, WM cited legal and operational concerns and did not consent to the approved changes until the legal counsel from the State of Alaska and WM were able to come to an understanding late on Friday, August 9<sup>th</sup>. Initially, there were no issues with this new process, but WM again raised concerns about these materials, and CBJ and ADOT&PF pivoted to take C&D waste from residences built before 1984 to a staging area in the South Lemon Creek Gravel Pit.

On August 6<sup>th</sup>, EPW staff anticipated the potential problems using the WM landfill for C&D waste and contacted Republic Services. Republic Services contracts with many Southeast Alaskan communities on waste transportation and disposal to their facility in Washington state. Republic Services was able to quickly mobilize containers from Sitka to provide a secondary disposal option for disaster debris and allowed all waste to be disposed of without special packaging or paperwork from individual residences. Alaska Marine Lines (AML) provided shipping for these containers at no cost, which made this secondary option exceedingly affordable for CBJ.

### Refrigerant Removal

Long Building Technologies, a newly opened company in Juneau, reached out to CBJ during the 2024 flood response to inform us that they can provide refrigerant removal for freezers, AC units, and refrigerators to make the cost of disposal lower for these items damaged by the flood. We are also looking into working with them for future services.

Currently WM charges \$164/unit to dispose of these units as they are unable to remove the refrigerants before shipping the units south. CBJ staff estimate that by using Long (or another company if identified through an RFP process) for refrigerant removal and then Skookum Recycling for recycling of the unit, we can reduce this cost to residents to under \$25/unit.

---

<sup>1</sup> 1984 is not a universally understood cutoff date to discern whether or not a building contains asbestos, but rather a rule of thumb that the ADEC uses for simplifying this process for solid waste handlers and contractors. For more information for Alaska and federal asbestos disposal, visit <https://dec.alaska.gov/eh/solid-waste/how-do-i-dispose-of/asbestos/>