

Using ASR as landfill daily cover

SHREDDER RESEDUE

When end-of-life vehicles are recycled by shredding, there is a large amount of residue created. Shredder residue is the non-metallic waste material remaining after removal of metal scrap from shredded vehicles, household and commercial appliances, or other shredded items. Shredder residue is also known as shredder fluff, shredder flock, or automotive shredder residue (ASR). Common contaminants found in ASR include polychlorinated biphenyl (PCBs) and metals, while lower levels of volatile organic compounds (VOC's) and semi-volatile organic compounds (SVOC's) may also be found.



According to the EPA, approximately 75 percent (by weight) of a vehicle is composed of metals that are recycled. The remainder ASR is disposed of primarily in landfills as daily cover. Salvage operators and other recyclers can reduce the potential for vehicles they will shred or ship off-site for shredding to result in shredder residue that fails the hazardous waste evaluation by identifying and removing hazardous components and materials from the vehicles

ALTERNATE DAILY COVER FOR MUNICIPAL SOLID WASTE LANDFILLS

Using ASR for landfill daily cover is considered landfill disposal, thus the waste generator (Shredding facility) must provide the landfill with a waste determination in accordance with 40 CFR part 262.11, prior to sending it off site. ASR waste streams tend to be heterogeneous and will vary daily depending on the feedstock. Table 1 lists the recommended testing analysis and sample frequency.

Table 1.

	Regulatory limit	Testing frequency
RCRA metals	See 40 CFR 261.24	quarterly
Total PCBs	<50 mg/kg	quarterly
VOCs	See 40 CFR 261.24	annually
Semi VOCs	See 40 CFR 261.24	annually

BEST MANAGEMENT PRACTICES/CONSIDERATIONS FOR USING ASR AS LANDFILL COVER

- Material can become windblown under windy conditions.
- Dust and tracking may be an issue.
- A minimum thickness of 6 inches is required.
- The material can become caught in truck tires and tracked onto perimeter roads.

Helpful guidance can be found on EPA's [PCB Q&A Manual](#)