

Executive Summary

The Department of Toxic Substances Control (DTSC) is pleased to present this Evaluation and Analysis of Metal Shredding Facilities and Metal Shredder Wastes (Final Report). This Final Report incorporates feedback received after initial posting of the Draft Report in 2018, summarizes recent enforcement actions taken since 2018, provides an analysis of the DTSC-directed treatability study, incorporates information learned by DTSC during the course of its community workshops and stakeholder consultation group meetings, and revises terminology where appropriate.

DTSC reviewed hazardous waste management activities, current regulatory environmental oversight, and the history of releases, contamination, and enforcement actions at metal shredding facilities in California. Additionally, DTSC coordinated with metal shredding facilities on a treatability study to identify the highest level of treatment that could be achieved to stabilize metals of concern on metal shredder waste with current technology. DTSC also reviewed the current disposal practices of chemically treated metal shredder waste at municipal solid waste landfills to identify the potential for migration of contaminants to groundwater, surface water, and the air.

The study team found numerous examples of accidents, improper storage of hazardous wastes, soil contamination, and releases of hazardous wastes that impacted the environment and surrounding communities at metal shredding facilities. DTSC and other agencies have taken several enforcement actions against metal shredding facilities in response to these types of incidents.

DTSC's efforts have allowed for it to gain a more thorough understanding of metal shredder operations, as well as of the ambiguities within the existing regulatory framework under which metal recyclers, including shredding facilities, have historically operated. Based on this evaluation, DTSC has determined that the point of generation of hazardous waste is at the shredder itself, meaning that various downstream activities performed at the facilities would be subject to the Hazardous Waste Control Law. Under the Hazardous Waste Control Law, entities who conduct hazardous waste treatment, storage, or disposal are required to apply for and receive a form of authorization from DTSC in order to operate. Based on the results of its evaluation and DTSC's updated understanding of these activities, metal shredding facilities would require a form of authorization from DTSC to continue to operate in the same manner.

DTSC's analysis demonstrates that the disposal of chemically treated metal shredder residue as nonhazardous waste in municipal solid waste landfills, including its use as alternative daily cover, has not resulted in harm to human health or safety or to the environment, based on the limited data available to DTSC. Additionally, the analysis demonstrates that chemically treated metal shredder residue has not contributed to the solubilization and migration of heavy metals from solid waste landfills via leaching into soil or groundwater, surface water contamination, or windborne dispersion. Thus, while various protections and requirements related to the management of chemically treated metal shredder residue (CTMSR) during its transportation to landfills may need to be developed to ensure the safety of human health and the environment, DTSC has concluded that it is not necessary that metal shredder residue that has been appropriately chemically treated, managed, and transported, to be disposed of as a hazardous waste to prevent or mitigate potential hazards to human health or safety or to the environment.