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OFFICIAL POLICY/PROCEDURE

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| /X/ Policy | /X/ Permitting | /X/ New |
| /X/ Procedure | /X/ Site Mitigation | |
| | /X/ Surveillance/Inspection | |
| | /X/ Enforcement | |

DESCRIPTION:

Policy and Procedures to ensure that a consistent regulatory approach is applied to the management and disposal of auto shredder waste.

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OPP Form 005 (2/88)
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BACKGROUND

Auto shredder waste (ASW) constitutes one of the largest volumes of inorganic hazardous waste currently generated in California. ASW originates from the shredding of automobiles, major household and industrial appliances, and other scrap for their recyclable metal content.

ASW was at one time considered nonhazardous and suitable for disposal at nonhazardous waste landfills. This type of disposal was discontinued when the Department of Health Services (DHS) notified the regulated community that ASW was classified as hazardous pursuant to Section 66699(b), Title 22, California Code of Regulations (CCR) due to both its total and soluble inorganic lead content. Later it was discovered that ASW also contained hazardous soluble levels of cadmium, copper and zinc as well as hazardous total levels of copper and zinc. Hazardous total levels of polychlorinated biphenyls (PCBs) (see Section 66699(c), Title 22, CCR) have also been found in some ASW.

Section 25143.8(a), Health and Safety Code (H&SC), states that DHS shall not prohibit any person from disposing of ASW in Class III landfills authorized by a Regional Water Quality Control Board (RWQCB). This statute has been unsuccessful for two reasons. One is due to the differences between the waste classification systems used by DHS and the RWQCBs. The second is due to the landfill operators' concern over the long-term liability associated with accepting a hazardous waste which has been issued a variance for disposal to an appropriate non-Class I landfill.

Several auto shredders have opted to chemically treat their ASW in an effort to qualify for a DHS nonhazardous waste classification pursuant to Section 66305(e), CCR. These facilities have been successful in both disposing of their treated ASW in an RWQCB authorized Class III landfill and meeting the legislative mandate for hazardous waste treatment prior to the 1990 deadline required by Section 25179.6(a), H&SC.

PURPOSE

This document establishes the policy and procedures for the Toxic Substances Control Division (TSCD or Division) to ensure that a consistent regulatory approach is applied to the management and disposal of ASW.

POLICY STATEMENT

The Division's goal is to attain full compliance by auto shredder facilities to manage and dispose of their ASW according to the Hazardous Waste Control Act (HWCA) Chapter 6.5 (commencing with Section 25100 of Division 20, H&SC). he primary focus needed to achieve that goal is internal coordination among TSCD's technical

programs to ensure that the appropriate program units are involved in a timely manner. The secondary focus is external coordination with the State Water Resources Control Board (SWRCB) and RWQCBs to ensure that land disposal facilities are authorized to accept ASW.

Since landfill operators may elect not to accept ASW even though they have been authorized, TSCD staff should be responsive to their concerns and take every opportunity to inform them that the issue of long-term liability applies to all hazardous waste, and not solely to ASW.

STATUTORY AND REGULATORY AUTHORITY

The Division's authority to regulate the management and disposal of ASW is governed by State laws and regulations.

CCR, Title 22, Division 4, Chapter 30:

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| Article 11 | Criteria for identifying hazardous and extremely hazardous wastes. |
| Section 66216 | Definition of treatment. |
| Section 66305 | Classification of a waste as hazardous or nonhazardous. |
| Section 66310 | Conditions under which variances are granted and the process for requesting and granting variances. |

H&SC, Division 20:

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| Section 25117 | Defines hazardous waste. |
| Section 25123 | Defines storage. |
| Section 25123.3 | Defines storage facility. |
| Section 25141 | Authorizes DHS to develop and adopt regulation criteria for identifying hazardous waste. |
| Section 25143.8 | Authorizes DHS to allow the disposal of qualified ASW to an appropriate Class III landfill upon meeting specific criteria. |
| Section 25179.6 | Requires treatment of all hazardous waste generated within the State on or before May 8, 1990. |

Federal and other State agencies can also regulate ASW under the following laws and regulations:

CCR, Title 23, Subchapter 15:

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| Section 2510 et. seq. | These regulations are used by the RWQCBs to prescribe Waste Discharge Requirements to landfills and to regulate the storage of wastes, including ASW. |

Toxic Substances Control Act: (Public Law 94-469, as amended; 15 U.S.C. Section 2601 et seq.)

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| Section 6 (U.S.C. Section 2605) | Authorizes EPA to regulate the manufacture processing, distribution in commerce, disposal and marking of PCBs. |

Code of Federal Regulation, Title 40:

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| Part 261 | Regulations governing hazardous waste classification e.g. scrap metal - See Sections 261.1 (c) (6) and 261.2(c) (3). |
| Part 761 | Regulations governing those activities involving PCBs. |

ROLES AND RESPONSIBILITIES

This section is designed to assist TSCD staff in regulating generators of ASW and ASW storage facilities. Several scenarios and options have been developed to offer regulatory responses and alternatives for a variety of situations involving the treatment, storage and disposal of both treated and untreated ASW.

The term "in-line treatment" is used in several of the following illustrations. In-line treatment is defined as any treatment to a material in an industrial process before that material is exhausted or otherwise rendered a waste. Because in-line treatment is applied to a material that is not a waste, it is exempt from DHS hazardous waste requiremants.

To date, all successfully demonstrated in-line ASW treatment technologies have been of the chemical encapsulation/fixation type. While each has the ability to reduce the soluble inorganic constituents of ASW to nonhazardous levels, none are successful in reducing hazardous total levels of inorganic waste contaminants. It is for this reason that treated ASW can only be classified nonhazardous by DHS utilizing Section 66305(e), Title 22, CCR.

Waste Evaluation Unit

Waste classification determinations are made by the Alternative Technology Section's Waste Evaluation Unit in headquarters. This unit is also responsible for determining whether the treatment residuals are nonhazardous. To carry out these responsibilities,

the Waste Evaluation Unit is the nucleus for providing technical expertise and advice to other TSCD Units (Surveillance and Enforcement, Permitting, and Site Mitigation), SWRCB, RWQCBs, the auto shredder industry and landfill operators.

Surveillance and Enforcement Program

Waste handling and disposal methods utilized by generators of ASW must be in compliance with all applicable State hazardous waste statutes and regulations. The Surveillance and Enforcement Program has lead responsibility for ensuring such compliance.

Regional Surveillance and Enforcement Units are responsible for inspecting auto shredder facilities. The following enforcement strategy will be used to determine both the regulatory status of each facility and the appropriate TSCD enforcement response.

Scenario #1:

The facility:

- has no untreated ASW stored on-site,
- has a successfully demonstrated treatment system in-line,
- has been issued a nonhazardous treated waste classification pursuant to Section 66305, Title 22, CCR by DHS, and
- is required by an RWQCB to conduct continuous sampling of the treated waste for disposal verification.

TSCD Enforcement Response:

Given all of the above conditions remain in effect, the facility is no longer considered a hazardous waste treatment, storage, or disposal facility, or even a hazardous waste generator based on ASW. Since the treated ASW is being monitored by another regulatory agency, TSCD would not conduct additional inspections or enforcement follow-up unless monitoring data indicates that the characteristics of the treated waste have changed to the extent that the waste is hazardous.

Scenario #2:

The facility:

- has neither been permitted nor issued a variance for the treatment of ASW,
- has untreated ASW stored on-site,
- has a successfully demonstrated treatment system in-line,

- o has been issued a nonhazardous treated ASW classification pursuant to Title 22, CCR, Section 66305 by DHS, and
- o is required by an RWQCB to conduct continuous sampling of the treated ASW for disposal verification.

TSCD Enforcement Response:

TSCD will notify the facility that an application is required for a variance to treat the ASW stored on-site, or soil contaminated by storage of that waste, through the in-line system. The application must be submitted within 45 days of TSCD's notification.

If no application is submitted, TSCD will initiate a formal enforcement action for the storage of hazardous waste without a storage permit. The frequency of follow-up inspections will be dependent on resource availability. However, as soon as the untreated ASW has been removed, TSCD would diminish its enforcement response to that described in Scenario #1.

Scenario #3:

The facility:

- o either has some or no untreated ASW stored on-site,
- o has a successfully demonstrated treatment system which is not an in-line treatment system,
- o has been issued a nonhazardous treated waste classification pursuant to Title 22, CCR, Section 66305 by DHS, and
- o is required by an RWQCB to conduct continuous sampling of the treated ASW for disposal verification.

TSCD Enforcement Response:

TSCD will notify the facility that an application is required for a variance to treat the ASW, or soil contaminated by storage of that waste, through the treatment system. The application must be submitted within 45 days of TSCD's notification.

If no application is submitted, TSCD will initiate a formal enforcement action for unpermitted storage (if waste is stored on-site) and/or treatment of a hazardous waste without a variance and will require the removal of any stored ASW by disposal or treatment. Follow-up inspections will be depend nt on resource availability.

Scenario #4:

The facility:

- o has untreated ASW stored on-site (e.g., greater than 45,000 pounds pursuant to 25123.3, H&SC) and
- o does not have a successfully demonstrated treatment system.

TSCD Enforcement Response:

TSCD will notify the facility that it is in violation of Section 25123.3 H&SC for storage of untreated ASW, and that within 45 days of TSCD's notification, a formal enforcement action will be initiated. The enforcement action will be for storage of hazardous waste without a storage variance and will require the removal of the accumulated pile, the installation of a successfully demonstrated treatment system, or obtain a variance for storage. In addition, TSCD's Regional Surveillance and Enforcement staff will continue to inspect the facility subject to resource availability.

Scenario #5:

The facility:

- o generates ASW,
- o has no untreated ASW stored on-site, and
- o does not have a successfully demonstrated treatment system.

TSCD Enforcement Response:

TSCD's Regional Surveillance and Enforcement staff will continue to inspect the facility subject to resource availability.

Permit Program

Processes used to treat ASW must be granted a hazardous waste treatment variance if they are considered treatment of a hazardous waste by TSCD. Regional Permitting staff has lead responsibility for reviewing and issuing hazardous waste treatment variances. They will consult with their Surveillance and Enforcement Unit to determine the regulatory status of each facility utilizing a treatment process. Generators of nonhazardous ASW shall be exempt from regulations by TSCD for that waste.

Site Mitigation Program

Any facility contaminated by ASW shall be subject to remedial action by the Regional Site Mitigation Unit when there is a threat to human health or the environment.

The following remedial action alternatives shall be considered for facilities either storing, or contaminated by, ASW. The Regional Site Mitigation Unit Chief shall exercise judgement on a case-by-case basis as to the most appropriate mitigation strategy to use.

Option 1: Treat the ASW (or contaminated soil) using a successfully demonstrated treatment technology to reduce the soluble metal concentrations to nonhazardous levels and dispose of it at an RWQCB authorized Class III landfill.

Option 2: Dispose of qualified untreated ASW a an RWQCB authorized Class III landfill, pursuant to the requirements of H&SC Section 25143.8.

Option 3: Convert the ASW (or contaminated soil) to energy using thermal treatment followed by treating the ash using proven treatment technology to reduce soluble metal concentrations to nonhazardous levels.

On occasion, ASW has been found to be contaminated with PCBs above the federal regulatory limit of 50 ppm. This has only occurred at one facility in California. Remedial action alternatives for ASW containing PCBs greater than 50 ppm utilizing thermal treatment must be carefully evaluated to ensure total destruction of both the PCBs and their combustion products, e.g. polychlorinated dibenzodioxins (PCDDs) and polychlorinated dibenzoforans (PCDFs).

INTRA-AGENCY COORDINATION

Depending on the circumstances, any one of the three technical program units in the regions may be lead at any given time while working with auto shredder facilities. For example, the Regional Surveillance and Enforcement Unit would be lead in most cases; however, the Regional Permit Unit would be lead for instance in granting or denying hazardous waste treatment variances. The Regional Site Mitigation Unit would be lead where on-site contamination has occurred and abatement is necessary.

Whichever unit is lead shall be responsible for identifying all potentially impacted program areas. Issues affecting other programs will be coordinated with appropriate staff prior to selecting a course of action.

INTER-AGENCY COORDINATION

Lead programs shall also be responsible for identifying all regulatory agencies impacted by a TSCD action and contacting them for input before a course of action is chosen. Contact with these agencies will include determining which agency would take the lead on enforcement or agreeing to procedures to coordinate enforcement actions. Agencies that TSCD would most likely contact include the following:

- County District Attorney for enforcement case referrals.
- County Environmental Health Departments regarding all determinations that impact facilities within their jurisdiction.
- State Attorney General for enforcement case referrals.
- State Regional Water Quality Control Boards for surface or groundwater contamination and landfill disposal requirements. When regional boards are contacted, also notify the Executive Officer of the State Water Resources Control Board.
- Local Air Pollution Control Districts (e.g. South Coast Air Quality Management District) for potential emissions. When districts are contacted, also notify the Executive Officer of the Air Resources Board.
- Federal EPA, Toxics and Waste Management Division, when applicable federal programs have been impacted (e.g. RCRA, TSCA, CERCLA, etc.).

IMPLEMENTATION AND MONITORING

Several facilities have incorporated in-line treatment processes into their auto shredder operations. Treated waste monitoring is currently being conducted by the appropriate RWQCB. TSCD anticipates this trend continuing with all auto shredders within the State utilizing treatment prior to 1990 when legislation mandates that all hazardous waste be treated prior to disposal.

As previously discussed, treatment technologies currently used by the auto shredder industry employ chemical encapsulation/fixation technologies. These technologies do not decrease the volume of waste generated but have allowed qualified facilities to become generators of nonhazardous waste. This has reduced the need for TSCD oversight except in those cases where a hazardous waste treatment variance is required.