JUNE 2014 - UPDATES FOR DTSC MSR PROJECT

Project Description: In the late 1980s and early ‘90s, the California Department of Health Services (DHS) – the predecessor of the Department of Toxic Substances Control (DTSC), classified metal shredder residue as non-hazardous waste. This decision was based upon the best science at the time, but much has changed since then: vehicles and appliances and the materials they are made from are different; and the technology for processing materials and treating wastes has changed. These factors prompted DTSC to revisit decisions made more than 20 years ago.

Regulatory References: Six major metal shredders in California (five facilities currently active) are operating under authorizations issued by DHS, and later DTSC, in the late 1980s and 1990s. These authorizations, also known as "f letters", allow facilities to manage “treated automotive shredder waste” (TASW) pursuant to Title 22 of the California Code of Regulations, section 66260.200(f) [Please see attachment A], and DTSC Policy and Procedure No. 88-6. [Please see attachment B]

Project Correspondence:

- **May 19, 2014** – Public Records Act Request from a stakeholder regarding Air Monitoring at Simi Valley Landfill
- **March 21, 2014** – DTSC received comments on the Draft Auto Shredder Residue Treatability Study, letter to Margaret Rosegay
- **February 21, 2014** – Stakeholder comments on DTSC’s Regulation of MSR
- **October 10, 2013** – DTSC sent Request letters for Participation in Review of Metal Shredder Residue (MSR) Practices to State and Local enforcement agencies.
- **September 26, 2013** – DTSC received 2nd Draft Auto Shredder Residue Treatability Study Workplan from Institute of Scrap Recycling Industries (ISRI).
- **July 11, 2013** – DTSC Responds to initial Draft Auto Shredder Residue Treatability Study Workplan, submitted by the California Chapter, ISRI
- **June 13, 2013** – DTSC letter to provide update of the departments current activities on the reevaluation of metal shredder facilities practices and path forward.

Meetings:
• **April 18, 2014** – Meeting requested by Ms. Margaret Rosegay, on behalf of the California Chapter, Institute of Scrap Recycling Industries (ISRI). Meeting held at Berkeley Regional Office with DTSC Director, Executive Staff, Ms. Rosegay and other shredder industry principals.

• **February 21, 2014** – Meeting held at DTSC Chatsworth Regional office at the request of Ms. Alice Sterling (public) with DTSC’s MSR and enforcement staff to discuss regulatory historical background and framework for management of MSR by the department. Additional discussion focused on concerns regarding industry’s’ treatability study, clarification and details on DTSC’s work plan, and related activities under consideration as part of DTSC’s overall evaluation of metal shredder facilities and landfills that receive their wastes. Also in attendance was Ms. Liz Tucker from Consumer Watchdog to transcribe meeting discussions.

• **January 14 and 23, 2014** – MSR public workshop meetings held in Wilmington and Oakland, CA. DTSC invited the public and key stakeholders to discuss future long-term management and disposal of MSR generated from metal shredding operations throughout California. DTSC provided an overview of its current regulatory authorities for the metal shredding industry and invited comments on the DTSC draft MSR workplan and industry’s treatability study workplan. Participants at the workshops offered perspectives from the public, community agencies, businesses, and regulatory agencies regarding environmental, health and safety, community, and economic impacts from metal shredder facility activities and landfills that accept treated metal shredder residuals as ADC.

• **December 19, 2013** – Meeting held at CalEPA building, Sacramento at the request of DTSC with CalEPA directors from the Air Resources Board, State Water Resources Control Board, Office of Environmental Health and Hazards Assessment (OEHHA), and Cal Recycle. Meeting purpose was to provide background and updates of DTSC’s MSR Evaluation, and Metal Recyclers Enforcement Initiative activities. Discussions focused on: consideration and impacts of potential policy decisions and changes to regulatory status of metal shredder wastes, and pathways for adequate coordination and policy development on future decisions for affected stakeholders.

• **December 16, 2013** – DTSC hosted a meeting at CalEPA building, Sacramento at the request of landfill owners and representatives to discuss DTSC’s work plan for re-evaluating MSR industry’s proposed treatability study for MSR, upcoming public stakeholders meetings, and disposal issues including use as landfill ADC. Also discussed were questions regarding handling and storage practices of MSR at landfill, are there uses other than ADC for MSR accepted at landfills, reporting issues for MSR as ADC, and pathways for adequate coordination and policy development on future decisions for affected stakeholders.
• **December 9, 2013** – meeting held at CalEPA building with technical staff from DTSC, CalRecycle and State Water Resources Control Board to discuss and solicit comments for second submittal version of industry’s treatability study workplan.

• **November 15, 2013** – MSR Regional State and Local Agency Stakeholder Workshop held in Cypress: DTSC met with identified state and local agencies impacted by metal shredder facility activities. Purpose of the meeting was for DTSC to provide an overview of the metal shredding industry, existing regulations that apply to the metal shredding industry and invite comments on the DTSC draft MSR workplan and industry’s treatability study workplan. Participants at the workshop also provided overviews of their agency’s regulatory authorities and issues for metal shredder facilities and landfills that accept treated metal shredder residuals as alternative daily cover (ADC).

**Workshop Participants:**
- DTSC
- State Water Resources Control Board
- South Coast Air Quality Management District
- Los Angeles Regional Water Quality Control Board
- Ventura County Environmental Health Division
- San Bernardino County Fire Department
- Los Angeles County Fire Department
- Anaheim City Fire Department
- Santa Ana Regional Water Quality Control Board

**Summary of meeting notes and input provided by stakeholders at the November 8 and November 15 MSR Workshops** [Please see attachment C]

• **November 8, 2013** – MSR Regional State and Local Agency Stakeholder Workshop held in Berkeley: DTSC met with identified state and local agencies impacted by metal shredder facility activities. Purpose of the meeting was for DTSC to provide an overview of the metal shredding industry, existing regulations that apply to the metal shredding industry and invite comments on the DTSC draft MSR workplan and industry’s treatability study workplan. Participants at the workshop also provided overviews of their agency’s regulatory authorities and issues for metal shredder facilities and landfills that accept and use treated metal shredder residuals as alternative daily cover (ADC).

**Workshop Participants:**
- DTSC
- County of Alameda Environmental Health Department
- San Joaquin County Environmental Health Department
- Alameda County Environmental Health Department
- City of Berkeley Environmental Health Division
- Solano County Department of Resource Management
San Mateo County Environmental Health Services Division
City and County of San Francisco Department of Public Health
Bay Area Air Quality Management District
Oakland City Fire Department (Certified Unified Program Agency, CUPA)
Solana County CUPA
San Mateo County CUPA
CalRecycle
San Francisco Regional Water Quality Control Board

- **September 16, 2013** – Meeting held with CalRecycle staff to provide status of DTSC MSR project and discuss their participation in public workshops and assistance in review of treatability study documents. DTSC requested CalRecycle to review and provide comments for DTSC MSR project workplan, industry treatability study workplan, and to provide management and technical experts for project coordination.

- **August 15, 2013** – DTSC staff from Policy and Program Support, and Office of Legal Counsel met with Chuck White and Brian Bowen from Waste Management. Mr. White requested the meeting to learn about DTSC’s Metal Shredder Residuals project. Waste Management offered to help in DTSC’s MSR industry evaluation by providing existing groundwater monitoring and leachate data, and by offering site visits to landfills for potential sample collection. Waste Management operates two of the larger landfills Altamont (2nd largest) and Simi Valley (3rd), that accept TASW. Waste Management’s Altamont Landfill has a new TASW sampling requirement imposed by the State’s Regional Water Quality Control Board (SRWCB) in which they must sample TASW loads “once per 1,000 tons.” Mr. White offered to provide DTSC a list of important issues for landfills accepting treated metal shredder residues that may assist DTSC in its evaluation of MSR.

- **August 9, 2013** – Margaret Rosegay, from the law firm of Pillsbury Winthrop Shaw Pittman LLP, requested the meeting to review and respond to DTSC’s July 11, 2013 letter regarding DTSC Responses to the Draft Auto Shredder Residue Treatability Study Workplan. Ms. Rosegay went over each point identified in the letter and received clarification from DTSC staff and agreed to include additional details in the formal version, which was expected to be submitted by 8/15/2013. Ms. Rosegay stated that they would not have it ready by then, and offered to send a letter to DTSC requesting an extension. Subsequent discussion centered on sampling approaches and sample preparation, and the need for a consistent methodology and QA/QC to be established and followed throughout the treatability study and across the various metal shredding facilities and analytical laboratories.

**Site Visits by DTSC MSR Staff**
• June 4, 2014 – Sims Metal Management, Redwood City
• May 28, 2014 – Vasco Road Landfill
• April 24, 2014 – Altamont Landfill
• April 10, 2014 – Altamont Landfill
• March 21, 2014 – S.A. Recycling, Bakersfield
• March 20, 2014 – Chiquita Canyon Landfill.
• February 20, 2014 – Simi Valley Landfill
• January 24, 2014 – Schnitzer Steel, Oakland
• January 15, 2014 – S.A. Recycling, Anaheim
• November 14, 2013 – S.A Recycling, Terminal Island

**Stakeholders/Partners to Date:**

• Institute of Scrap Recycling Industries
• CalRecycle
• Air Resources Board
• State Water Resources Control Board
• Regional Water Quality Control Board
• Certified Unified Program Agency (CUPA)
• Local Enforcement Agencies
• Landfill Operators
• Coalition for a Safe Environment, Wilmington CA
Attachment A

Title 22. Social Security
Division 4.5. Environmental Health Standards for the Management of Hazardous Waste
Chapter 10. Hazardous Waste Management System: General
Article 3. Variances

22 CCR § 66260.200
§ 66260.200. Classification of a Waste as Hazardous or Nonhazardous.

(f) If a person wishes to classify and manage as nonhazardous a waste which would otherwise be a non-RCRA hazardous waste because it has mitigating physical or chemical characteristics which render it insignificant as a hazard to human health and safety, livestock and wildlife, that person shall apply to the Department for its approval to classify and manage the waste as nonhazardous. The application for approval shall include the information required by section 66260.200(m). The Department, within 30 days of receipt of the application, shall acknowledge in writing receipt of the application. Pending written approval by the Department, the applicant shall manage the waste as hazardous waste. Within 60 days of receipt of an application, the Department shall notify the applicant in writing that the application for classification and management of the waste as nonhazardous is approved, disapproved, or that the application is incomplete or inadequate and what additional information is needed. Upon receipt of the additional information, the Department, within 60 days of receipt of the additional information, shall notify the applicant in writing that the application for classification and management of the waste as nonhazardous is approved or disapproved. The application shall be considered disapproved if the applicant fails to provide the additional information in writing 90 days from the date the information was requested. However, the applicant may request, in writing, an extension up to 90 days, within which the information shall be submitted or the application shall be considered disapproved.
Attachment B
DOCUMENT #: 88-6

TITLE: Auto Shredder Waste Policy and Procedures

Effective Date: November 21, 1988
Expiration Date: n/a
Supersedes: n/a

DOCUMENT TYPE

[ ] Policy
[X] Procedure

PROGRAM

[X] Permitting
[X] Site Mitigation
[X] Surveillance/Inspection
[X] Enforcement

STATUS

[X] New

DESCRIPTION:

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

APPROVED BY:

Alex R. Cunningham
Chief Deputy Director

Date: 21 Nov 88

cc: C. David Willis, Deputy Director
TSCD Technical Reference Center

OPP Form 005 (2/88)
(blue)
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). The 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 RMQCBs 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:

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.

HSC, Division 20:

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:

-2- November 1988
CCR, Title 23, Subchapter 15:

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.)

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:

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 requirements.

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,
has been issued a nonhazardous treated ASW classification pursuant to Title 22, CCR, Section 66305 by DHS, and
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:

- either has some or no untreated ASW stored on-site,
- has a successfully demonstrated treatment system which is not an in-line treatment system,
- has been issued a nonhazardous treated waste classification pursuant to Title 22, CCR, Section 66305 by DHS, and
- 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 dependent on resource availability.
Scenario #4:
The facility:
- has untreated ASW stored on-site (e.g., greater than 45,000 pounds pursuant to 25123.3, H&SC) and
- 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:
- generates ASW,
- has no untreated ASW stored on-site, and
- 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.

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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 judgment 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 at 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 dibenzofurans (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.

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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.
Attachment C

Summary of meeting notes and input provided by stakeholders at the November 8 and November 15 MSR Workshops

Meeting notes categorized by area of concern:

1. Metal Shredding Facilities:
   - do not necessarily employ the same production processes throughout the industry
   - have differing scales of operation (large fixed location and small mobile operations)
   - each shredder can process different types of materials
   - are subject to different laws depending on the number of years operating
   - Not all operations have paved work floors, some use loose gravel covering or a mix of pavement and gravel

2. Landfills:
   - Storage – liquid phase. Test for off-gassing before treatment
   - 500 tons/day taken in at some landfills– reporting inconsistent between landfills and agencies
   - MSR piles sat for 6 months uncovered. Concern about dust from the piles being blown offsite
   - Reporting accuracy is an issue
   - MSR deposits into landfills may not be accurately reported?
   - Is leachate being tested?

3. Regulatory Agencies:
   - “F” Letter from DTSC deeming treated MSR non-hazardous in the ‘80’s early 90’s makes regulation difficult for businesses that have the letter.
   - Fraudulent copies of these letters used by new businesses – inspectors don’t know which facilities have original documents
   - Metal shredding affects air, soil, storm water runoff and groundwater
   - Stormwater may be regulated at regional or State levels and permitting may differ from region to region – communication is a challenge relating to regional tiered permit issues
   - There is a new permit (2012) in place in Santa Ana, their Regional Water Board is awaiting results of first annual test
   - Oil & grease are tested but not gasoline
   - Hard to regulate, there is a lot of metal dust in addition to MSR
   - Need a daily log of cleaning practices at each facility/operation
   - Good housekeeping is the key
   - Storm water discharge is predominantly an open system where contaminants can be released into the environment
   - Acid gases and Volatile Organic Compounds (VOCs) may be released and are regulated
   - CUPA authority limited due to “F” Letters

4. Dust –The process of metal shredding creates high volumes of airborne emissions:
   - Small size of particulate matter
Lot of dust at treatment/storage locations
What do the shredders do with collected dust? How do they collect it?
Why are there different requirements for on-site verses offsite acceptable quantities?
How is the site line monitored and how often? (Annually) Is that enough?
How is dust stopped from crossing the property line?
Plume in one instance was over 100 ft. from property boundary before any enforcement actions taken
Rule 403
Does DTSC have a role in regulating dust?
Are there emissions from offsite uncovered shredder mounds?
Monitoring data is available on SCAQMD website
Small size dust particulate matter – is there testing? How can we find out if it causes health problems in the surrounding community?
Fire hazards – better water storage or heat testing?
Pools of dust and sediment found during inspection. The shredding process is very high volume and creates so much MSR that it is difficult to enforce cleanliness/containment standards
Problem of dust being tracked out of facilities via vehicles/transportation.

5. Metals – Treatability Study Workplan developed by Metal Shredding Industry:
May require additional testing to what is in the plan, e.g. PCB testing required in plan but an agency may see the need to include testing for more contaminants
Agencies asked for comments as soon as possible, but by December 16, 2013 at the latest to maintain project timelines
State Water Control Board Policy 87-22 may need to be rescinded if “F” letters are rewritten

6. Additional Questions:
Where are the data gaps? If all the agencies share information are there still missing pieces?
What is the impact to groundwater?
Are the materials hazardous in different phases of treatment? If so what safety measures can be taken at each phase?
Will there be a protocol for treatment and long-term testing of materials?
How is Cal-Recycle working with DTSC?
Is the moisture level or danger of MSR drying out over time an issue?
Leachate – is it being tested at landfills? Are there new tests for the leachate?
What can be done about outdated and fraudulent “F” letters?
Rewrite “F” letters with more site-specific language so that letter cannot be used at other sites?
Is a 3rd party study possible? Who would fund it?
What kind of guidelines can be developed for sampling?
Will there be a central online hub for information and sharing?

7. Goals:
Develop universal management practices
Change inspection model – may increase workload for CUPAs
Agencies with oversight collaborate and share information
Develop uniform standards
- Examine how long MSR should go without being covered (180 days)? Currently, there is no limit to cover stock piles
- Develop a comprehensive plan by November 2014