

**Questions on Shredder Waste, Metal Shredder Residue (MSR),
Treated Auto Shredder Waste (TASW)**

**Submitted to the Department of Toxic Substances Control for Discussion on February 21, 2014
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Subject Areas:

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A. Applicable Statutory and Regulatory Frameworks

The federal law, the Resource Conservation and Recovery Act (RCRA), governs the handling of solid wastes both hazardous and non-hazardous. Hazardous wastes are regulated from cradle to grave, in accordance with the rigorous safeguards and waste management procedures. The California Hazardous Waste Control Law (HWCL) is in lieu of the federal program and is adequately enforceable. Waste that is regulated in California as hazardous waste but does not qualify as a RCRA hazardous waste is considered non-RCRA hazardous waste.

1. Can shredder waste be regulated as a hazardous waste?
2. Can shredder waste be regulated as a non-RCRA hazardous waste?
3. Can shredder waste be regulated as a special hazardous waste?
4. Are there differences in the permitting, control, management, enforcement and fee structure for shredder waste regulated as a hazardous waste, non-RCRA hazardous waste and a special hazardous waste?
5. When will the DTSC provide an analysis and explanation of the existing statutory and regulatory frameworks controlling shredder waste and include identifying discrepancies?
6. What is the DTSC's ministerial duty in monitoring non-RCRA hazardous shredder waste?

B. F Letters

On March 1, 1984 the California Department of Health Services (DHS) determined that auto shredder waste (ASW) was a non-RCRA hazardous waste as it exceeded regulatory thresholds for several inorganic constituents including lead, cadmium, copper and zinc. Seeking regulatory relief, in lieu of a formal "variance", "F" letters were issued to seven metal shredder operators in the state of California (see Table 1).

1. What code and/or regulation allows "F" letter entitlements to be transferred to successor companies?

2. What code and/or regulation allows "F" letter entitlements to be transferred to a site other than the original site?
3. Based on the original "F" letter issuance, can an operator transfer his "F" letter entitlements to a successor, move to a different site, change the treatment process, and substitute the material for treatment, without review by the DTSC?
4. If every "F" letter holder ceased business operations today, what would be the regulatory pathway for controlling new shredder waste operators?
5. Is there an expiration date associated with the "F" letter entitlements?
6. What is the legal basis for the DTSC to continue allowing an exclusive business model for a limited number of metal shredder operators?
7. Can TASW generated by an "F" letter operator be legally disposed in a location other than a landfill?
8. Are there any enforcement actions the DTSC can take for TASW disposal in locations other than landfills?

From 1986-1992 the DHS conducted reviews of waste samples for each metal operator independent of the others, at separate time periods. "In evaluating each reclassification request submitted by the original operators, the Department took into account the concentration of each of the constituents in the final waste stream, as well as the efficacy of the specific treatment technology which was used on the ASW. Based on its evaluation of the circumstances surrounding each of the auto shredding facilities (case specific, site specific, and treatment specific), the Department reclassified each as nonhazardous waste pursuant to section 66260.200 (f) on its own merits (emphasis added)."¹

1. As it relates to the issuance of the "F" letters, what is the DTSC definition of "Case Specific"?
2. As it relates to the issuance of the "F" letters, what is the DTSC definition of "Site Specific"?
3. As it relates to the issuance of the "F" letters, what is the DTSC definition of "Material Specific"?
4. How many samples were tested for each pre-existing metal shredder operator and which serve as the basis for the DHS issuance of "F" letters?

C. CCR Title 22 Subsection (f)

CCR Title 22, Division 4.5, Section 66260.200 Classification of Waste as Hazardous or Nonhazardous, Subsection (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 additional information is needed. Upon receipt of the additional information, the Department, within 60 days of receipt of the additional information, shall

¹ Pilorin, Ronald, Senior Hazardous Materials Specialist, DHS letter to John P. Filbert on May 7, 1993

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.

1. Are the original "F" letter bearers subject to subsection (f) above?
2. Are the current "F" letter users in compliance with subsection (f) above?
3. As it pertains to metal shredder residue, auto shredder waste, metal fluff management, who does "person" refer to?
4. Does the use of the word "shall" in the phrase "that person shall apply to the Department for its approval" mean that in the absence of an application the "person" is in violation of the code?

(m) A person seeking Department concurrence with a nonhazardous determination or approval to classify and manage as nonhazardous a waste which would otherwise be a non-RCRA hazardous waste shall supply the following information to the Department:

- (1) name, mailing and billing address, location, contact person and phone number for the generating facility;
 - (2) A description of the waste including a physical description, quantities produced per unit of time, a detailed description of the generating process and current waste disposal method;
 - (3) information on the sampling of the waste including the name and address of the firm sampling the waste, the name(s) of the person(s) sampling the waste, dates and locations of sample collection and a description of the sampling methodology and sample handling and preservation procedures;
 - (4) testing laboratory information including the name, address, and certification number of the testing laboratory, the test methods used and references for locating these methods, the name(s) and qualifications of the person(s) testing the waste, the method for preparation of laboratory samples from field samples and information needed to identify each sample;
 - (5) laboratory results including results from all tests required by chapter 11 of this division and a listing of the waste's constituents. Results shall include analyses from a minimum of four representative samples as specified in chapter 9 of "Test Method's for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, 3rd Edition, U.S. Environmental Protection Agency, 1986 (incorporated by reference in section 66260.11 of this chapter);
 - (6) certification of the veracity of the information submitted, signed and dated by a person who is the responsible manager of the facility."
5. What is meant by "quantities produced per unit of time"?
 6. With enormous quantities of TASW annually landfilled, what practical means does the DTSC rely upon to assure the chemical properties of shredder waste are mitigated by the "analyses from a minimum of four representative samples"?
 7. Is the DTSC's request for a treatment study from the MSR industry a means of bypassing subsection "m" above?
 8. Why is the DTSC wasting time and tax-payer money by not requiring a third-party to conduct the Treatability Study?
 9. Is the DTSC analyzing this section for practical application in managing shredder waste?

10. What are the requirements for gathering samples as mentioned in this section of the code?
11. What control standards does the DTSC provide to the metal shredder operators for gathering samples in the absence of a regulation?
12. Will the DTSC recommend amendments to the code?
13. Is the DTSC evaluating and reconciling the differences in the CCR Section 66260.200 Classification of Waste as Hazardous or Nonhazardous, and Section 66261.124 Classification of a Waste as a Special Waste, for the same type of shredder waste?

D. Treatment

The DTSC response to a question I asked on the treatment of shredder waste, includes the statement, "However, DTSC's original analysis of the treatment process, treatment materials and treatment chemical stability verified that the treatment being used by the metal shredding facilities was not simply neutralizing the test method, but was effectively immobilizing and chemically binding the waste constituents."²

1. As it relates to shredder waste, what is the DTSC definition of "Treatment Process"?
2. As it relates to shredder waste, what is the DTSC definition of "Treatment Materials"?
3. As it relates to shredder waste, what is the DTSC definition of "Treatment Chemical Stability"?
4. Does the DTSC have in its possession the documents and analytical data supporting the "original analysis" including sample results?

Industry representatives state, "Each of the applications for reclassification was granted based on demonstrated effectiveness of the treatment process.... The ASR [*auto shredder residue*] process, as currently conducted, uses one of two proprietary, soluble polysilicate solutions (with potassium silicate as the active ingredient), and a form of pozzolanic (cementitious) material which functions as an alkaline activator (AA) in the process... Different treatment chemicals are evaluated from time to time, and may be used in lieu of the chemicals described in this report if determined to be more cost-effective.... Two of the three auto shredder facilities in California that treat their ASR use a commercially-available product known as Metbond MCX-90, manufactured by Envirokem Engineering Services, LLC Stockton, California. ... The third auto shredder facility uses a product known as HP Treatment, which is manufactured by C.C.I. Chemical Corporation (formerly Cherokee Chemical), with corporate offices in Vernon, California (C.C.I. 2011).... The California auto shredder facilities that treat ASR use Portland cement, fly ash, lime or similar dry pozzolanic material as the alkaline activator (AA)." ... The amount of silicate necessary to effectively treat the ASR has been established through treatability studies conducted in the past... The treatment process has evolved over time, with an eye towards optimizing the process and allowing use of different, more effective or more economical treatment chemicals."³

In 1992, the DTSC stated "any change, including those involving ingredient and/or material processing, in the generation of that waste could affect its resultant characteristics, and therefore, the classification of that waste. The degree to which any of these changes would affect the resultant waste such that the nonhazardous classification would no longer be applicable is not known without evaluating the analytical data gathered from that waste. It is therefore the position of the Department,

² Brausch, Rick, DTSC Deputy Director for Policy and Legislation, letter to Ms. Alice Sterling dated October 26, 2011

³ Guatney, Mark and Trezak, George, Treatment of Auto Shredder Residue, May 18, 2012, prepared for California Chapter Institute of Scrap Recycling Industries (ISRI)

that any auto shredder facility that already received a nonhazardous classification from the Department, but wishes to use a substitute process such as Metbond, must re-evaluate the resultant treated waste, and apply to the Department for another nonhazardous classification pursuant to Title 22, California Code of Regulations, Section 66260.200 (f) (emphasis added).⁴

5. What independent scientific proof and analysis does the DTSC have to substantiate the efficacy of Metbond MCX-90?
6. What independent scientific proof and analysis does the DTSC have to substantiate the efficacy of HP treatment material?
7. Did the DTSC re-issue "F" letters for metal shredder operators changing to a new proprietary blend, Metbond MCX-90?
8. Did the DTSC re-issue "F" letters for metal shredder operators switching to the proprietary HP Treatment?
9. Is it true that when the DTSC was made aware of the discontinued manufacturing of the K-20 proprietary blend, the DTSC did not subsequently send notice to each of the six metal shredders, using this treatment blend, to submit their new treatment material and treated auto shredder waste samples and testing results in compliance with the referenced state code?
10. Can the DTSC produce written proof it has requested and reviewed data on fly ash used to coat TASW to ensure it is not hazardous or adding to the hazardous properties of TASW?
11. Has the DTSC calculated a flyash/cement to MSR ratio to determine if the ultimately the process is resulting in unnecessarily large amounts of treatment materials ending up in California landfills.

The DHS determined "inline treatment" would allow shredder waste to qualify for a non-hazardous waste classification and no hazardous waste treatment variance or permit would be required. In DHS Policy and Procedure 88-6⁵, "in-line" is defined as any treatment to material in an industrial process before that material is exhausted or otherwise rendered a waste."

12. Is Policy and Procedure 88-6 an underground regulation?
13. Did "inline" treatment as originally prescribed in PP 88-6 include manually spraying silicates onto auto shredder "fluff" before the material fell from the conveyor belt?
14. Does "in-line" mean open to the atmosphere and not an integrally enclosed treatment process/

The Department stated in a letter dated October 20, 1992 to Mr. David Long of Diversified Minerals, Incorporated, "if an auto shredding facility wishes to use a treatment process other than one which has already been evaluated, the facility must submit a request for reclassification of its waste to the Department." And in 1993, the DTSC made it clear, "The next step will be for each auto shredding facility to submit to the Waste Evaluation Unit analytical data which demonstrates that there is no statistical difference between the characteristics of the treated ASW currently being generated, and which has been treated with Metbond MCX-90."⁶

⁴ Peebler, Diana, Associate Hazardous Materials Specialist, DTSC letter to David Long, Diversified Minerals Incorporated dated October 20, 1992

⁵ Auto Shredder Waste Policy and Procedure Document #88-6, Official Policy and Procedure, DHS, November 21, 1988

⁶ Pilorin, Ronald, Senior Hazardous Materials Specialist, DHS letter to John P. Filbert dated May 7, 1993

The DHS further states, "The fluff is treated 'in-line' while both ferrous and non-ferrous metals are still being extracted. If the treatment were to occur after the metals have been extracted, the fluff would be considered waste and the treatment would be considered treatment of a hazardous waste, which requires a permit or variance from the Department" (emphasis added).⁷

In the 2002 DTSC Initiative it states, "The majority of shredders operating in California are in violation of the in-line treatment provisions of DTSC's auto shredder policy and procedure. Four the five shredders that treat their shredder waste are not in compliance with the 'in-line treatment' provisions of the policy and procedure."

15. What is the authoritative definition of "in-line treatment" in respect to MSR?
16. Does the authoritative definition of "in-line" allow manual application of a treatment?
17. Can the DTSC prove that "in-line" treatment of shredder waste is technically feasible?
18. Can the DTSC prove that all hazardous constituents are encapsulated?
19. What enforcement action did the DTSC take when staff acknowledged that metal shredders have manually sprayed treatment on open piles after the waste has left the conveyor belt in violation of PP88-6?
20. The ISRI 2012 report states that the treatment process "has evolved" and with this clear violation of the "F" letters, what remedial or enforcement action has the DTSC taken?
21. What are the DTSC's written standards for MSR/ASW treatment materials specific to non-RCRA hazardous waste?
22. If per the industry's own admission, hazardous auto waste is shredded and larger pieces leave the conveyor belt without being properly treated, and supposedly are re-introduced to the shredder, isn't this practice a violation of the authoritative or approved "inline" requirements?
23. When the operators co-mingle the waste stream (extraneous untreated materials with TASW) are they creating a different waste stream category not addressed by the "F" letters and Policy and Procedure 88-6?
24. Is "shredder aggregate" mentioned in the DTSC 2002 initiative still being stored on-site at the metal shredder operators?
25. Is it a violation to store hazardous waste (untreated shredder aggregate)?
26. Has the DTSC sent letters to the metal shredder operators informing them that stock-piling of shredder aggregate is a violation?

E. Chemical and Physical Characteristics

1. Does PP-88-6 specify thresholds for hazardous constituents?
2. If the DTSC relies upon PP88-6, which states "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" than why is it that when TASW TTLC levels of lead are exceeded, there is no enforcement by the DTSC?

⁷ Brausch, Richard, DHS Toxic Substances Control Program, in letter to David Hu, Project Manager, Jaykim Engineers, dated January 8, 1990

3. If the DTSC relies upon PP88-6, which confers responsibility to the Department's Waste Evaluation Unit, to determine whether the treatment residuals (TASW) are nonhazardous, and in 2008 WET testing of samples taken by DTSC indicated thresholds were exceeded, than why didn't this unit, advise other units (per PP88-6) to take enforcement action?
4. If the DTSC relies upon PP88-6, which states, "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," and since testing of samples taken in 2008 by the DTSC indicated thresholds were exceeded, than why didn't this unit, advise other agencies to take enforcement action?
5. In 1988 or thereafter, were regulatory amendments adopted raising the STLC criteria for lead from 5.0 mg/l or 50.0 mg/l?
6. If yes, what regulation specifies soluble lead threshold specific to treated auto shredder waste for F letter operators?
7. What scientific body of information on the biological, ecological, and health effects of lead does the DTSC rely upon to determine that the 50.0 mg/l threshold is safe?
8. What amount of lead in MSR and TASW is safe to inhale?
9. If testing results indicate TASW exceeds regulatory thresholds defining chemical characteristics, does it qualify as a non-RCRA hazardous waste?
10. Did the DTSC rely upon NAS/NAE 1973 to establish the STLC zinc threshold of 250 mg/l?
11. Is the DTSC considering raising the thresholds for zinc?
12. Are zinc compounds very toxic to aquatic life forms?
13. Can the zinc particulate matter in MSR and TASW migrate off-site, accumulate and pose a danger to aquatic life forms?
14. What current scientific body of information on the biological, ecological, and health effects of zinc did the DTSC rely upon to determine the industry proposed elevated threshold for zinc (from 250 to 1000 mg/L) would be safe?
15. Is the environmental behavior of toxic constituents inherent in shredder waste and TASW particulate matter different from those that occur in solution?
16. Only one "F" letter expressly mentions lead and is the following statement from the Adams Steel F letter a legal and enforceable regulation permitting a threshold of 50 mg/l for lead?

"Except for inorganic lead, the soluble concentrations for the metals of concern in the treated waste are below their respective regulatory threshold values. The soluble lead concentration in the treated waste is greater than the regulatory threshold value of 5 mg/l, but is lower than 50 mg/l."

17. If TASW possesses ignitability characteristics, can the waste be deemed a RCRA hazardous waste?
18. Has the DTSC asked LEA agents for their observation on stock-piles of TASW at landfills smoldering and igniting?

19. With over four billion pounds of TASW generated in California and buried in local landfills, does the DTSC have scientific evidence that the physical characteristics of TASW prevent ignitability?
20. Has the DTSC tested the ignitability potential of shredded waste and TASW?
21. What are the waste sampling protocols/procedures uniformly applied to TASW generators?
22. How does the DTSC verify that sampling procedures are followed?

F. Alternative Daily Cover (ADC)

October 2009, California Integrated Waste of Management Board (CalRecycle), *Alternative Daily Cover White Paper*, states that the DTSC "is re-examining Auto Shredder Waste (ASW), and its reclassification as a hazardous waste would require shredder waste to be treated so it is not hazardous or to be disposed in a Class I landfill." The paper goes on to state that "Given the wider use of ADC materials and degree of variation in the type, quality, and quantity of material used at landfills, there is less certainty that the demonstration projects conducted in the 1990s upon which the original set of ADC requirements is based is still applicable to the amount and types of ADC used today. A re-evaluation of the current suite of ADC materials should be undertaken to determine the optimum amount, depth, quality, etc. that is required to meet the performance requirements of ADC as well as to conserve landfill capacity."

TASW used as alternative daily cover at the landfills must comply with CCR Title 27 section 20690 (b) (6) (A) which states, "Auto shredder waste shall be treated pursuant to Title 22, CCR section 66268.106 (a) (1)." The subsequent CCR reference provides a table (Table I-A CCWE) identifying the "non-RCRA auto shredder wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of the waste or treatment residual for the allowable land disposal of such waste or residual."

1. What specific actions has the DTSC taken to coordinate with CalRecycle an approach to address the concerns with ADC ASW outlined above?
2. Has the DTSC studied the refuse-to-TASW ratio in the three landfills accepting the preponderance of TASW in California?

G. Management Standards, Actions and Enforcement

1. What specific actions will the DTSC's take to protect human health and safety to address known flaws in the ASW management standards?
2. What have been the specific actions DTSC's has completed in the past 20 years to adopt rulemaking to replace the acknowledged irregular and inconsistent "F" letters?
3. What scientific body of information does the DTSC rely upon to assure CalRecycle, LEAs, Waterboards, etc., that shredder waste inputs are monitored and controlled?
4. Does the DTSC have the resources to conduct timely and an adequate frequency of inspections to assure that metal stock inputs, sampling, treatment, and testing is in compliance with non-RCRA hazardous waste protections requirements?
5. What is the status of the DTSC's examination of the re-classification of ASW from certain authorized shredder facilities as hazardous waste?
6. The DTSC is charged with protecting the public and the environment, and can the DTSC explain to the public how this is accomplished when there is no ensured chain-of-custody

requirements for the cradle to grave disposal of shredder waste and there is a ridiculously significant time lapse between input shredding, unverified sample gathering, laboratory testing, transportation, stock-piling at landfills, burying with municipal solid waste, and submission of sample test results semi-annually?

7. What is meant by "continuing progress in the development of alternative management standards that are protective of human health and the environment" as stated in DTSC September 25, 2009 letter to Landfill Owners/Operators?
8. In 2001, the DTSC distributed an official memo rescinding variances issued without an expiration date, but exempted auto shredder waste, why?⁸
9. How will the DTSC address the fact that the lack of data and protocols established for monitoring the efficacy of treated ASW are dated or non-existent?
10. If the shredder industry produces jobs, is a benefit to the economy, is not regulated in other states, and the material is an insignificant hazard, why does the DTSC bother with the expensive pretense of regulating shredder waste?
11. Will the DTSC's proposed recommendations for correcting potential environmental impacts resulting from MSR and TASW require an Environmental Impact Report to be prepared?

H. Quantities of Metal Shredder Residue

At the time of the "F" letter issuances, the annual output of auto shredder waste was about 100,000 tons as opposed to the current average of 600,000 tons.

1. What role does the DTSC have in advising other agencies in establishing standards for the management of the single-largest hazardous waste stream in the state of California?
2. What is the DTSC doing to evaluate the impacts of concentrating the majority of the TASW to reside in three landfills in the state of California?
3. Why does the DTSC continue to allow vast quantities of TASW (600,000 tons annually) to be buried in landfills when the basis for this business practice is an unknown number of samples tested over 25 years ago?
4. Is there a problem with billions of pounds of TASW buried in landfills in the past 25 years yet the industry has never submitted test results indicating soluble metal thresholds have been exceeded while the DTSC has proof that samples have exceeded regulatory thresholds?

I. Air and Water

1. What regulations control air-borne shredder waste and TASW particulate matter?
2. What prevents the toxins in shredder waste from being inhaled?
3. TTLC values are exceeded in TASW as test results prove, and what has the DTSC done to assess public health risks that the handlers of this waste and the public are exposed to through the inhalation pathway, especially for fine particulate matter?

⁸ Gin, Watson, DTSC Management Memo #EO-92-008-MM Rescission Document, Validity of "Old" Variances, October 29, 2001

4. What studies have been conducted on air quality impacts of shredded waste and TASW?
5. What are the cumulative impacts of air-borne TASW particulate matter landing on water courses?
6. What progress has the DTSC made in conducting air monitoring tests at and near the Simi Valley Landfill?
7. Waste Management staff indicated that they have tested the air at the Simi Valley Landfill and is the DTSC in receipt of these findings?
8. Will the DTSC develop uniform requirements for TASW waste discharge in partnership with the state water boards?
9. The secondary focus of PP88-6 is "external coordination with the State Water Resources Control Board (SWRCB) and RWQCBs to ensure that land disposal facilities are authorized to accept ASW." Can the DTSC explain why it has not coordinated with these agencies when DTSC testing in 2008 indicated soluble metal thresholds had been exceeded?
10. Within the boundaries of the Los Angeles Regional Water Quality Board District (Region 4) 55% of the statewide generation of treated ASW has been permanently deposited and will the DTSC address the potential environmental impacts of this disproportionate concentration of TASW?
11. The Water Board is responsible for monitoring and setting standards to ensure toxic leachate, seepage and/or run-off from the landfill never enters the off-site aquatic environment and what is the DTSC doing to address the potential for toxic dust entering the air stream and precipitating in nearby water courses including troughs serving range animals on adjacent grazing lands?

J. Waste Discharge Requirements – Simi Valley Landfill and Recycling Center 2013

Treated Shredder Waste (TSW) Monitoring and Reporting - The Discharger shall track and report the disposal of TSW at the Landfill on a monthly basis, including the source, quantity (volume and/or weight), disposition at the Landfill (waste disposal versus re-use as ADC), and all analytical results of TSW, including those provided by the generator, to confirm compliance with the Department of Toxic Substances Control (DTSC) Policy and Procedure No. 88-6 and the Order. Within 60 days of the adoption of the Order, the Discharger shall develop a Waste Acceptance Plan (WAP), or amend the WAP associated with Order No. R4-2011-0052, for approval by the Executive Officer, as follows:

- i.* The Discharger shall develop a tracking system for all TSW accepted at the Landfill. The tracking system shall identify the generator for all TSW loads accepted, confirm that the TSW load complied with DTSC Policy and Procedure No. 88-6 for disposal as non-hazardous waste, list the quantity (volume and/or weight), and document the disposition at the Landfill (waste disposal versus re-use as ADC).
- ii.* The Discharger shall tabulate and report the quantity of TSW disposed/reused at the Landfill for each calendar month from each generator.
- iii.* The WAP shall include best management practices for assuring that any TSW temporarily stockpiled at the Landfill does not result in a release of pollutants to surface water.

- iv. Once each quarter, on a random basis, the Discharger shall collect one TSW sample from each generator source for leachability testing pursuant to the Synthetic Precipitation Leaching Procedure (Method 1312) of the latest edition of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) promulgated by the USEPA, or equivalent method, as approved by the Executive Officer. The purpose of the testing is to determine the leachability of potential constituents of potential concern (PCOCs) from TSW in contact with rainwater. PCOCs shall include CAM-17 metals, VOCs, SVOCs, and any other constituents required by the Executive Officer. Any PCOC identified in the TSW leaching extraction testing shall be included in surface water monitoring conducted pursuant to the General Industrial Stormwater Permit and/or Order No. R4-2011-0052. After four quarters of TSW leachability testing the Discharger may request the Executive Officer to revise the testing schedule if warranted by the testing results (i.e. PCOCs results are consistent).
1. Has the DTSC reviewed these new WDRs?
 2. Has the DTSC explained to the Water Board the relevancy of PP88-6 being an underground regulation on the above WDR's?
 3. Has the DTSC reviewed the WDRs for Altamont Landfill and Chiquita Canyon Landfill?
 4. Can the DTSC explain the how a "load" must comply with PP88-6?
 5. Does the DTSC have requirements for determining the hazardous constituents contained in a "load"?

K. Revenue Stream for Managing Shredder Waste

1. With untreated waste material of over four inches in size comingled in the treated auto shredder waste piles (even though this material is supposed to be sifted out) has the DTSC calculated the revenue lost to the state by allowing this unregulated practice?
2. Has the DTSC alerted CalRecycle to the fact that ordinary and hazardous untreated waste is co-mingled with the TASW and the operators are thereby avoiding the appropriate disposal fees?
3. Has the DTSC calculated the cost to the taxpayer for monitoring this industry, specifically treated auto shredder waste?
4. How much time did staff spend reviewing the 2012 ISRI report on treatment?
5. What was the calculated expenditure for reviewing the 2012 ISRI report on treatment?
6. Under the tiered permitting process, minimal fees and regulatory requirements are established for regulating hazardous waste and is the DTSC considering this as an option for properly regulating MSR operators when the illegal and incorrect PP88-6 is revoked?
7. Does the DTSC have plans to coordinate with CalRecycle how they have partnered to mislead the public into believing TASW is "diversion through recycling" and is therefore exempted from the \$1.40/ton integrated waste management fees at a loss of nearly \$900,000 per year?

