HAZARDOUS WASTE EXCLUSION PROGRAM

The operator’s perspective to prevent hazardous or prohibited materials entering at landfills.
HAZARDOUS WASTE Exclusion Program

- **Theory (Software)** = Laws, Regulations, SWFP, JTD, WDRs, Plans

- **Practice (Hardware)** = What we do everyday to keep Hazardous and Prohibited Materials out of Landfills
HAZARDOUS WASTE Exclusion Program

THEORY
HAZARDOUS WASTE
(GENERIC DEFINITION)

Hazardous waste is waste that has substantial or potential threats to public health or the environment.
A solid waste is a hazardous waste if:

- It is listed in subpart D of this part and
- Not excluded from regulation as a hazardous waste under §261.4(b) and
- It meets the following criteria
  - It exhibits any of the characteristics of hazardous waste
    - ignitability, corrosivity, reactivity, or toxicity
  - It is Radioactive waste
1.5.2 Waste Types

1.5.2.1 General

- A Class III landfill permit – accept only non-hazardous solid and inert wastes in accordance with 27 CCR, Sections 2022(a) and 20230

- No hazardous wastes, designated wastes, or special wastes as defined in 22 CCR shall be disposed at the landfill.

- In addition, no semi-solid wastes, radioactive waste, materials of toxic nature (i.e., insecticides, poisons, etc.), infectious materials or hospital or laboratory wastes, pesticide containers (unless rendered nonhazardous by triple rinsing), or septic tank or chemical toilet wastes shall be disposed.

- A temporary hazardous materials storage facility is available for temporary storage of prohibited materials found during the Waste Load Checking Program.
1.5.2.2 Hazardous Waste

- Facility is not currently permitted to accept hazardous wastes for disposal and strictly forbids acceptance of this type of wastes.
- In addition, the existing SWFP does not currently allow the acceptance of:
  - Hazardous
  - Radioactive
  - Medical
  - Liquid

- Or other wastes requiring special treatment or handling, except as approved by LEA, Federal, State, and Local Agencies

- Appendix B – Hazardous Waste Exclusion Program
  - Mayor component of plan is a periodic load-checking program
  - Various other measures are employed to assist in the exclusion of hazardous or other unacceptable wastes from the site.
  - Landfill designates and trains staff responsible for conducting the periodic load-checking.
6.0 DISPOSAL SITE OPERATIONS

6.2.1 Personnel Training (27 CCR 21600 (b)(5)(H))
- Training includes hazardous materials recognition and screening...
- The training program includes initial and refresher training in several areas including hazardous waste identification.

6.4.2 Refuse Unloading Operations
- Waste vehicles entering the site are inspected for type of wastes and screened for prohibited wastes
- The load checking program is part of the Hazardous Waste Exclusion Program
7.7 Hazardous Waste Screening Program (27 CCR 21600 (b)(8)(J))

Regulation state that “owners or operators of all Municipal Solid Waste Landfill units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes…”
Introduction

- 27 CCR 20870 – Hazardous wastes requires a load-checking program to ensure that hazardous materials are not discharged at landfills.
- Purpose – Discovering and discouraging attempts to place hazardous or other unacceptable wastes at the landfill
- Major component of the plan is a random load-checking program
- Other measures are employed to assist in the exclusion of hazardous and other unacceptable wastes from the site. (Pictures)

Load-checking Program

- Site designates and trains staff responsible for conducting random load-checks at the site.
- Observations recorded on the data sheet for the load
JOINT TECHNICAL DOCUMENT

APPENDIX B – HAZARDOUS WASTE EXCLUSION PROGRAM

- Additional Exclusion Procedures
  - Signs – Posted at entrance of facility which clearly state the types of wastes that are not accepted at the site, and that are prohibited.
  - Observation by Site Personnel – All landfill employees are trained and directed to identify potentially harmful wastes that may be delivered to the site. Heavy equipment operators play a particular valuable role.

- Procedures for Handling Identified Hazardous or Prohibited Wastes
  - Detection
  - Cordon Designated Area
  - Notify Supervisor
  - County Hazardous Material Unit (if needed)
  - Transport and disposal through a licensed hazardous waste company
  - Log incident at site records
HAZARDOUS WASTE
Exclusion Program

PRACTICE
Special Waste Profile
Special Waste Service Agreement

2. Acceptable Waste: ... “and which Waste is approved by the Company and is otherwise in accordance with all laws, regulations, and permits”...

6. Waste Accepted at Facility: “Generator warrants that Waste delivered to Company will be Acceptable Waste and will not contain any unacceptable quantity of hazardous materials, radioactive materials, or toxic waste, as defined by applicable federal, state, local or provincial laws or regulations.”

8. Rights of Refusal/Rejection: “The Generator shall inspect all Waste and shall remove any and all Unacceptable Waste. Company has the right to refuse, or to reject after acceptance any load(s) of waste delivered to its facility...”
Entrance Signs

**OX MOUNTAIN LANDFILL**

- **Closed**
  - New Year’s Day
  - President’s Day
  - Memorial Day
  - Independence Day
  - Labor Day
  - Thanksgiving Day
  - Christmas Day

**SWIS No. 41-AA-0002 CLASS III FACILITY**

**“NO HAZARDOUS WASTE ACCEPTED”**

List of Prohibited Waste:
- Hazardous, Radioactive, Medical, Liquids, Dead Animals, Flammable or Infectious Wastes

24 Hour Emergency Contact Number: (650) 678-5838
Main Office Number: (650) 726-1819

Local Emergency Number:
- San Mateo County Sheriff Dept. (650) 726-8286
- Half Moon Bay Fire Dept. (650) 726-5213
- California Highway Patrol (650) 369-6261

Heavy equipment has right of way.
Smoking in designated areas only.
No scavenging.

Minors under 16 must stay in vehicles at all times.
Scale: Lines of Defense?
Scale: Lines of Defense?
Scale: Lines of Defense

RADIATION DETECTION SYSTEM
Scale: Lines of Defense
SPECIAL WASTE PROFILE AND MANIFEST

- Waste Profile / Contract Number is entered into system before truck arrival
- Scale Operator confirms information
- Scale Operator inspect load through camera inspection, visual inspection or both
- If Scale Operator finds any discrepancy he is fully authorized to reject the load
Scale: Lines of Defense
Scale Operator Visual Load Checks
Scale: Lines of Defense
Recycling Options to Customers
Waste Load Checking Program
# Waste Load Checking Program

A form for tracking waste loads at OX Mountain Sawmill. The form includes columns for categories such as vehicles, weight, and materials, and a section for signatures.

## Form Layout

- **DATE:**
- **SPOTTER:**

### Tracking Log Columns

<table>
<thead>
<tr>
<th>FROM ON VEHICLE (OR DRIVER)</th>
<th>COMPANY NAME</th>
<th>REFRIGERATORS</th>
<th>APPLIANCES</th>
<th>TVMONITORS 21 OR LESS</th>
<th>TVMONITORS 21 OR GREATER</th>
<th>WATER HEATERS</th>
<th>OPT. TIRE WHEEL</th>
<th>OPT. TIRE WHEEL</th>
<th>OPT. TIRE WHEEL</th>
<th>OPT. TIRE WHEEL</th>
<th>OPT. TIRE WHEEL</th>
<th>SIGNATURES (NOT REQUIRED)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Hazardous Waste Material Storage Facility
Case Study

- Class III Permitted Landfill
- Accepting ash wastes from a biomass facility
- Special Waste approval process
  - Waste Profiling
  - TCLP lab samples submitted every year
- Biomass facility contacted landfill “Houston we have a problem”
- Biomass facility found out a “manager” was “pencil whipping numbers” and selectively sending samples for TCLP
- Waste stream immediately suspended
- LEA and RWQCB were immediately contacted
Conclusion (ongoing)

Several hazardous waste tons were disposed of at the landfill in a time span of approximately 2 years.

Hazardous Constituent – Copper slightly above allowed maximum concentrations.

Excavation not feasible. Mostly because of spread related to time span.

Landfill is negotiating with RWQCB new special wastes acceptance procedures, updated WDRs, including sampling frequency for waste streams as well as for landfill leachate.

Landfill went after Generator to cover all associated present and future costs.
Q & A