

## **APPENDIX M**

---

# San Francisco Household Hazardous Waste Collection Facility Operation Plan

This page intentionally left blank

**San Francisco  
Household Hazardous Waste  
Collection Facility  
Operation Plan**

**July 2011**

**In Compliance with  
Permit by Rule Regulations  
for  
Permanent Household Hazardous Waste  
Collection Facilities**

**Prepared by:  
San Francisco Department of the Environment  
and  
Recology San Francisco**

# TABLE OF CONTENTS

<b>1.0</b>	<b>PURPOSE OF THE OPERATIONS PLAN</b>	<b>1</b>
1.1	Scope of the Plan	1
1.2	Plan Review and Amendments	1
<b>2.0</b>	<b>PROGRAM OVERVIEW AND FACILITY DESCRIPTION</b>	<b>1</b>
2.1	Program History and Overview	1
2.2	Facility Description	2
2.3	Hours of Operation	4
2.4	Traffic Control	4
2.5	Supplemental Household Hazardous Waste Collection Programs	4
<b>3.0</b>	<b>STAFFING / MEDICAL MONITORING / TRAINING</b>	<b>6</b>
3.1	Facility Staff	6
3.2	Medical Monitoring	6
3.3	Training	6
<b>4.0</b>	<b>WASTE ACCEPTANCE GUIDELINES</b>	<b>7</b>
4.1	Acceptable and Unacceptable Wastes	7
4.2	General Guidelines for Accepting Waste from Residents	7
4.3	General Guidelines for Accepting Waste from CESQG	8
<b>5.0</b>	<b>WASTE HANDLING, PACKAGING AND SHIPMENT PROCEDURES</b>	<b>9</b>
5.1	Waste Handling Equipment	10
5.2	Waste Processing Procedure	10
5.3	Waste Identification and Characterization	10
5.4	Consolidation and Packaging Procedures	11
5.5	Waste Shipments	13
<b>6.0</b>	<b>REUSE AND RECYCLING</b>	<b>13</b>
6.1	On-Site Reuse and Recycling	14
6.2	Off-Site Recycling	14
6.3	Off-Site Energy Recovery	14
<b>7.0</b>	<b>FACILITY SIGNAGE</b>	<b>14</b>
<b>8.0</b>	<b>PAYMENT OF HHWCF DISPOSAL COSTS</b>	<b>15</b>
<b>9.0</b>	<b>RECORDS / REPORTS / AUDITS</b>	<b>15</b>
9.1	Drum Records	16
9.2	Shipment Files	16
9.3	Manifests and Bills of Lading	16
9.4	Facility Inspection Reports	17
9.5	Participation Database Records	17
9.6	Training Records	17
9.7	Quarterly Summary Reports	17

9.8	California Department of Resources Recycling and Recovery Form 303 Report.....	18
9.9	Facility Emissions.....	18
9.10	Facility Audits.....	19
<b>10.0</b>	<b>MANAGING LOADCHECK WASTE AT THE HHWCF .....</b>	<b>19</b>
<b>11.0</b>	<b>PUBLIC EDUCATION AND OUTREACH .....</b>	<b>19</b>
<b>12.0</b>	<b>FINANCIAL RESPONSIBILITY AND LIABILITY INSURANCE.....</b>	<b>20</b>
12.1	Financial Assurance for Closure.....	20
12.2	Liability / Insurance Requirements.....	20

## **1.0 PURPOSE OF THE OPERATIONS PLAN**

This San Francisco Household Hazardous Waste Collection Facility Operations Plan (“Plan”) was written by Recology San Francisco (RSF) and the City and County of San Francisco, Department of the Environment (“SFE”) to supplement the 2008 Household Hazardous Waste Program Agreement (“Agreement”) between the two parties. This Plan serves two purposes: (1) to comply with the California Department of Toxic Substance Control’s (DTSC) Permit by Rule regulations (Title 22, Section 67450.25), and (2) to clearly define RSF and SFE’s responsibilities per the Agreement.

### **1.1 Scope of the Plan**

The Plan provides the information required by Permit by Rule regulations for a Permanent Household Hazardous Waste Collection Facility (HHWCF). Additionally, the Plan specifies specific responsibilities of RSF and SFE in carrying out the terms of the Agreement. The Plan will assist DTSC and other regulating agencies, including the City’s Department of Public Health (Hazardous Materials Unified Program Agency) which serves as the County’s Certified Unified Program Agency (CUPA) in monitoring compliance of the HHWCF with applicable requirements. The Plan shall be sent by certified mail or delivered in person to DTSC and the San Francisco CUPA when required, and made available to other interested parties upon request.

### **1.2 Plan Review and Amendments**

SFE and RSF shall meet periodically to discuss the status of the HHWCF and supplemental household hazardous waste (HHW) collection programs, and the need, if any, for substantive revisions to program operations. Such reviews may be necessary for a number of reasons, including but not limited to: (1) changes in the operation of the HHWCF, (2) addition of new (HHW) collection programs managed as part of the HHWCF operations, (3) changes in the regulatory requirements applicable to an HHWCF, and (4) changes in the operation of the San Francisco Solid Waste Transfer and Recycling Center where the HHWCF is located, that may impact the HHWCF operations.

SFE or RSF may make amendments to the Plan at any time provided that any such amendments do not materially alter the terms of the Agreement between the two parties. Amendments shall be discussed in detail between and agreed upon by both parties prior to their incorporation into the Plan. In addition, SFE shall inform community members of amendments to the Plan, and make copies of the amended Plan or sections available upon request.

## **2.0 PROGRAM OVERVIEW AND FACILITY DESCRIPTION**

### **2.1 Program History and Overview**

The San Francisco Household Hazardous Waste Collection Facility (“Facility”) began operating in 1988 as a joint project of Recology San Francisco, the owner and operator of the San Francisco Solid Waste Transfer and Recycling Center (SFSWTRC), and the City and County of San Francisco. In 1992, the Facility began accepting waste from Conditionally Exempt Small Quantity Generators (CESQGs) - businesses that generate 100 kilograms or less of hazardous waste per month.

To better serve the community and to increase the convenience of HHW recycling and proper disposal, SFE and RSF have since added several supplemental HHW collection programs including holding

temporary HHW collection events in various neighborhoods, a door-to-door (D2D) collection service, and an extensive network (more than 130 sites) of neighborhood, retail drop-off sites for specific waste products.

The Facility also works in conjunction with RSF's Waste Acceptance Control Program (WACP) Loadcheck Program to ensure that all reasonable steps are taken to identify and remove hazardous waste from San Francisco's solid waste stream before it goes to landfill.

Use of the Facility and supplemental programs is free to San Francisco residents. CESQGs pay a subsidized fee, approved by SFE, for disposal of their hazardous waste at the Facility. SFE and RSF inform San Francisco residents and businesses about the household and CESQG programs through a variety of outreach methods including websites, brochures, bill inserts, newspaper articles, public meetings, social media, and other avenues. Data on program participation and waste volumes collected and processed are carefully tracked and available by request.

## **2.2 Facility Description**

The Facility is located next to the Auxiliary Disposal and Recycling Area (ADRA) of the SFSWTRC. The primary building is enclosed within a fenced area. An asbestos-waste storage box, a waste motor oil and antifreeze collection tank, and a hazardous materials storage bin for the Waste Exchange Program are outside of the fenced area. The original building was an existing 3-sided storage shed, retrofitted in 1988 for use as an HHWCF. Since then, two major upgrades were done in 2005 and 2008 as described below.

All electrical components of the Facility are constructed of explosion-proof materials, and an emergency heat-activated sprinkler system operates from three rows of sprinkler heads suspended three feet from the ceiling. Overhead explosion-proof lamps are used to light the inside of the building. A high-intensity light is used to illuminate the yard area of the Facility.

The Facility has metal walls and ceilings, and is divided into three storage areas: 1) flammables and toxics, 2) acids, and 3) bases. The flammables and toxics storage room on the west side of the building opens to the Facility driveway. The driveway is covered with a seismically built canopy. The combined (acids and bases) corrosives storage room on the east side of building is approximately half the size of the flammables and toxics room. A two-story addition was made to the northeast side of the building in 2008 and contains a lab on the ground floor, and a staff changing room and supply storage space on the second floor. The canopy was also added as part of this upgrade.

The corrosives storage room is split into two bays – acids and bases. The bays are separated by a 4-foot tall, 6-inch thick concrete barrier wall, which extends down through the secondary containment. The maximum storage capacity is 1,980 gallons for the acid bay and 2,530 gallons for the base bay. The secondary containment capacity is 2,290 gallons for the acid bay, and 2,560 gallons for the base bay. Each bay is labeled by hazard class to ensure that incompatible wastes are not stored next to each other. The space is also used as a supply storage area. A door in the acid bay connects to the two-story addition. Another entrance in the acid bay connects to the flammables and toxics storage room. The room has a ceiling vent with a fan in the center of the room, and a motorized fan in the base bay with outside air-intake is used to keep the room cool. The flooring is made of fiberglass grates, re-enforced from below with fiberglass beams.

The flammables and toxics storage room faces the covered driveway of the Facility where customers drive up and stop their vehicles. This room also functions as a staging area for most of the incoming wastes. The room is divided into two sections – a storage area for flammable and toxic wastes and a consolidation area for paint and paint-related materials. The maximum storage capacity is 7,755 gallons and the secondary containment capacity is 2,309 gallons. This room has grate floors and concrete berms separate the secondary containment into three storage sections. The room is labeled by hazard class to ensure that incompatible wastes are not stored next to each other. In the center of the storage area is a ceiling vent with a fan. The consolidation area is a partially enclosed and used to consolidate paint and paint-related materials under a fume hood. The consolidation area was built within the Facility in 2005.

The addition adjacent to the corrosives storage room consists of a laboratory on the ground floor, and a staff changing room and supply storage space on the second floor. The lab is used to analyze unknown hazardous waste brought to the Facility. The laboratory has explosion-proof light fixtures, a fume hood, two corrosive reagent storage cabinets for acids and bases, and a refrigerator for lab chemicals. The staff changing area and safety supply storage space contains lockers for staff uniform and safety supplies.

Outside the building, secondary containment of the unloading and loading area is provided by an impervious concrete pad which is sloped to ensure that spills and rain water drain to a 668 gallon covered sump at the northeast end of the Facility. The concrete pad and drainage to the containment sump prevent spills from contaminating the grounds around the Facility. The building is surrounded by a hinged, rollaway chain-link fence with sliding gates for incoming and outgoing traffic.

A 30-cubic yard asbestos storage box and a motor oil and antifreeze collection tank with an internal split capacity of 1500 and 500 gallons, respectively, are outside the Facility's fenced area. The box and the tank are located across the entranceway to the ADRA and considered part of the Facility's permitted boundary. To the south of the motor oil/antifreeze collection tank is a hazardous materials storage bin used for the Waste Exchange Program and propane tanks.

The Facility's maximum storage capacity and secondary containment have been evaluated by a licensed California Professional Engineer and have been determined to meet the requirements of Title 22, California Code of Regulations Sections 66264.174-175 and 67450.25(a)(1)(A). The certified report is available in Attachment 4 of the PBR packet.

The current maximum storage capacity of the Facility is 12,265 gallons of household hazardous waste, in addition to the use of a 30 cubic yard asbestos debris box, and a split 1500-gallon used oil/500-gallon antifreeze tank. If at any time the amount of waste stored comes close to the Facility's maximum storage capacity, a shipment will be arranged immediately. The maximum capacity is a permit maximum, which may be modified from time to time upon approval of appropriate agencies, and not a physical maximum.

A weather station operates on the premises to record wind direction and speed, and precipitation levels. In the event of a release of hazardous substances, this information can be provided to emergency response personnel.

Site maps illustrating the Facility and surrounding area are included in Attachment 1 of the PBR packet.

### **2.3 Hours of Operation**

RSF shall operate the Facility for residents and CESQG collection only during hours when the SFSWTRC is open to the public. The SFSWTRC is open to the public Monday through Friday from 7 am to 4:30 pm, and Saturdays and Sundays from 8 am to 4:30 pm.

The Facility is open to San Francisco residents for collection from 8 am to 4 pm, every Thursday, Friday, and Saturday. The Facility services CESQGs two Wednesday per month from 8:30am to 11:30am. Occasionally, waste arriving to the Facility on a non-operational day will be accepted if determined to be in the best interest of public safety or to meet other special circumstances.

The Facility is close for the following holidays: January 1 (New Years Day); July 4 (Independence Day); the Thursday and Friday of Thanksgiving week; and December 25 and 26. RSF shall request any other modifications to the operating hours of the Facility at least one month in advance of the proposed change so the City can notify the public.

In addition, the D2D Program collects HHW from San Francisco residents Wednesday – Saturday from 8am to noon. Facility staff also picks up waste from neighborhood, retail drop-off sites during these days and hours, as well as on Tuesday.

Except during RSF’s holidays, RSF employee(s) shall also be available Monday – Friday to answer public or SFE inquiries about HHW programs and services, to make appointments for the D2D service, and to arrange pick-up from neighborhood, retail drop-off sites.

## **2.4 Traffic Control**

RSF shall provide signage to assist the public in finding the HHWCF. The current signs are posted on Tunnel Avenue at Beatty Road, on Tunnel Avenue at Recycle Road, at the stop sign adjacent to the inbound public scale house, and on the entrance side of the Facility building.

RSF has a traffic coordinator stationed at the entrance of the SFSWTRC that directs traffic to and from the Facility. Traffic follows a one-way pattern up to and through the Facility gate into the unloading area, and out into a one-way exit. Ingress and egress routes for the Facility are depicted on the maps in Attachment 1 of the PBR packet. RSF continuously monitors traffic flow to ensure that residents are able to drive directly and safely to the Facility.

A traffic control plan was approved by the San Francisco Police Department in 1996. The information contained in the 1996 approval is still current and therefore, no additional approval is needed. A copy of the approval letter is included in Attachment 5 of the PBR packet.

## **2.5 Supplemental Household Hazardous Waste Collection Programs**

SFE and RSF shall continue to actively look for ways to increase the number of HHW collection opportunities and services that are provided to the residents of San Francisco. Increasing opportunities for residents to recycle and dispose of hazardous waste should lessen the impact that the Facility may have on the surrounding communities and increase the proper management and disposal of household hazardous waste. In addition to the HHWCF, RSF operates the following supplemental HHW collection program:

### Door-to-Door Collection Service

The D2D program is available to all San Francisco residents, by appointment, Wednesday-Saturday, from 8am to noon. When making an appointment, customers are asked about the types and quantities of HHW at their home. Facility staff then develops efficient routes based on the collection vehicle's capacity, what the customers have and where they live. Customers are normally serviced within a two week period. Multiple appointments may be needed for customers with large volumes of HHW. HHW collected through this program is brought back to and processed at the Facility. This program is funded through garbage rates; there is no additional charge to use it.

#### Retail Drop-Off Sites

More than 150 retail sites, community centers and other neighborhood-based locations partner with RSF and SFE to serve as collection points for a variety of HHW products. HHW collected through this program is brought back to and processed at the Facility. At the time that this Operations Plan was submitted, the program included:

- 115 sites accepting household-type batteries
- 39 sites accepting fluorescent lights
- 29 sites accepting used motor oil and oil filters
- 12 sites accepting used latex paint
- 8 sites accepting empty propane tanks
- 2 sites accepting mercury thermometers (and offering a digital thermometer in exchange)

#### Temporary Collection Events

Commonly referred to as "one-day" events, the number of events held each year and type of HHW accepted at the events varies based on need and permitting requirements. Targeted outreach is done based on event locations. HHW collected through this program is brought back to and processed at the Facility. The types of events include, but are not limited to:

- Gigantic 3 Collection Events – One "Gig 3" event is held in each Supervisorial District annually. Used motor oil, oil filters, household-type batteries and fluorescent lights are collected at these events. Participants can also bring bulky items and compostable materials to these events, which are managed by other programs and staff.
- Used Motor Oil and Oil Filter Collection Events – These events are usually held at the location of retail drop-off partner.
- Treasure Island Collection Events – These events are held 1-2 times per year to accommodate Treasure Island residents, in conjunction with a Gig 3-like event. Most types of HHW are accepted at this event.
- SF Marina Collection Event – These events are held 1-2 per year and target recreational boaters that have HHW like waste on their boats.

#### Curbside Battery Collection

Though not operated by Facility staff, curbside collection of batteries is another HHW collection service offered by RSF. Residents living in single-family homes or buildings of 4 units and smaller may place their household-type batteries in a clear plastic bag on their black refuse bin for collection on their refuse collection day. Residents living in buildings of 5 or more units may request a 4-gallon battery collection bin. Once full, any tenant may call to have the bin picked up and exchanged for an empty one. Batteries collected through these programs are brought to a different location of the SFSWTRC and managed by WACP staff.

### **3.0 STAFFING / MEDICAL MONITORING / TRAINING**

RSF shall follow the procedures outlined in this section regarding Facility staffing, medical monitoring and training.

### **3.1 Facility Staff**

Staffing levels of RSF's CESQG, HHWCF and WACP programs shall be reflected in the most recent publication submitted and approved by the Director's Report for the Refuse Collection and Disposal Rate Board of the City and County of San Francisco. Other than employee turnover, RSF shall maintain the equivalent number of employees in the Director's Report at all times.

Staff positions include:

- Facility Manager
- CESQG Coordinator
- Door-to-Door Program Coordinators
- Chemist
- Technicians
- Administrative Staff

Additional qualified employees, usually from the WACP, assist with Facility operations during busy periods. WACP employee job descriptions are outlined in the WACP Manual.

At the time that this Plan was submitted, the following staff held these positions:

Primary Site Supervisor: Billy Puk, HHWCF Manager

Alternative Site Supervisor: Gus Munoz, HHWCF Chemist

### **3.2 Medical Monitoring**

All HHWCF employees shall undergo a medical examination before they are hired to work at the Facility. Thereafter, each employee shall have a medical examination once a year. Medical examinations include basic physical, respiratory and hearing tests, and a blood chemistry evaluation. Employees shall also have an exam when their employment with RSF ends.

### **3.3 Training**

All Facility employees shall undergo basic training as required by DTSC, Cal/OSHA, and other regulatory agencies prior to performing their employment duties. Trainings include 24 hr Hazardous Waste Operation and Emergency Response (HAZWOPER) (8 CCR 5192), Injury and Illness Prevention Program (IIPP) (8 CCR 3203) and DOT Hazardous Material Transportation Training for shipments of hazardous materials and wastes off-site. An annual HAZWOPER refresher is also required. Additional job specific trainings are scheduled as needed.

All personnel also receive training in proper use and identification of personal protective equipment, respiratory protection, safe lifting and ergonomics, and other employee safety-related topics on an annual basis and as applicable to the employee's responsibilities. Additionally, RSF holds periodic safety meetings and training that address property-specific topics (e.g. hearing conservation) and reinforce safe work practices and Facility safety requirements.

## **4.0 WASTE ACCEPTANCE GUIDELINES**

This section describes procedures that RSF shall follow while operating the HHWCF. Employees shall be regularly trained in and be familiar with these operating procedures.

### **4.1 Acceptable and Unacceptable Wastes**

#### Acceptable Waste

The Facility accepts most HHW from San Francisco residents and CESQGs. Waste must be in 5 gallon or smaller containers. The types of products include, but are not limited to, aerosols, automotive fluids, acids, bases, batteries, cleaning products, fluorescent lights, paints, pesticides, poisons, small propane tanks, solvents, and sharps/needles from residential sources only.

#### Unacceptable Waste

The Facility does not knowingly accept compressed gas cylinders greater than 20 pounds, explosives (including fireworks and ammunition), infectious and biological waste, pharmaceuticals, radioactive waste (excluding smoke detectors and alarms), reactives, sharps from non-residential sources, and hazardous waste from non-residential sources other than those qualifying as CESQGs. To prevent illegal disposal on surrounding streets, staff may accept certain explosives or reactives that have already been transported to the Facility if the waste does not pose a risk to staff. The Facility does not accept hazardous waste in containers larger than 5 gallons. In addition, un-bagged asbestos may be rejected if it poses a health risk to employees. If customers bring in waste that cannot be accepted at the Facility, staff will provide them with the best available information regarding alternative disposal methods.

### **4.2 General Guidelines for Accepting Waste from Residents**

To control how wastes are accepted at the Facility, staff shall:

1. Direct traffic into the unloading area and instruct customers to remain in their vehicles at all times.
2. Greet each customer, request proof of San Francisco residency and ask the participant about the source of their wastes. Ask customer to sign the HHWCF Data Sheet, a form stating that their waste is from a San Francisco residence, and ask them to answer some questions on the form. A copy of this form is included in Attachment 6 of the PBR packet.
3. If staff determines that the waste was not generated in San Francisco, they will not accept the waste. Staff will provide the customer with an appropriate referral phone number for the county in which the waste was generated.
4. Inquire about the waste (types and quantity) in the customer's vehicle and review California HHW transportation rules. Per California Health and Safety Code Section 25218.5.1, the amount of HHW that is allowed to be transported per vehicle is 15 gallons or 125 pounds. Next, staff inspects the customer's waste load and asks them about any container that is not clearly labeled in order to determine its content.

5. Unload the waste to a cart from the vehicle inside the fenced area of the Facility and roll it to the staging/sorting area within the area of secondary containment. Take unidentified waste (unknowns) to the laboratory for proper storage and analysis.

A parking area shall be available for vehicles that require extra attention (e.g., large quantities of wastes, unidentified wastes). If safe, staff may accept larger quantities of waste from customers who have already transported quantities in excess of the legally allowable transportation limits.

6. If staff determines that the waste is not an acceptable waste type, they will not accept the waste and provide the customer with an appropriate referral phone number for proper disposal of their waste.
7. If appropriate, staff shall provide customer with printed information about additional HHW programs and services in San Francisco.
8. After the waste is unloaded, staff directs vehicle out of the Facility.

### **4.3 General Guidelines for Accepting Waste from CESQG**

Conditionally Exempt Small Quantity Generators (CESQGs) are businesses that generate less than 100 kilograms of RCRA hazardous waste per month or one kilogram of extremely hazardous waste per month. California law allows CESQGs to transport up to these amounts to a HHWCF each month for proper disposal. In San Francisco, CESQG is also known as Very Small Quantity Generator (VSQG).

#### Determining Eligibility

CESQGs must make an appointment to bring their waste to the Facility. Facility staff shall determine if a business is eligible to use the CESQG Program using the following the criteria:

1. Ask the caller if the waste was generated by a San Francisco business. If the answer is no, the caller cannot use the program. Staff will refer the caller to their county's CESQG program or CUPA.
2. If the business is in San Francisco, ask the caller to describe the types and volumes of hazardous waste that are generated by the business. If the business does not meet the definition of a CESQG as defined by state law, staff shall refer the business to a hazardous waste hauler or to the City for additional assistance.
3. If the business is eligible for the CESQG Program, staff shall schedule a CESQG appointment. To use the CESQG Program, a business must have either a U.S. or California EPA ID number. If the business does not have an EPA ID number, staff will provide instructions on how to obtain one. The business may not use the CESQG program until it has an EPA ID number.
4. If there is a dispute between staff and the business regarding CESQG eligibility, the City will be contacted to address the situation and make a determination.

#### Scheduling Appointments

Once eligibility is confirmed, staff shall mail or fax the business a copy of the VSQG Appointment Sheet that contains directions regarding program and participation guidelines. A copy of this form is included in Attachment 6 of the PBR packet.

The CESQG Program cannot accept unknown waste. If a business has unknown wastes, Facility staff (with guidance from the City) may conduct a site visit to the business to analyze their waste or provide the business with information regarding companies that conduct laboratory analysis of waste or hazardous waste haulers.

#### Waste Handling and Operational Procedures

Waste collected on CESQG days shall be handled using the same procedures used to handle HHW, except staff shall:

1. Require CESQGs to sign the VSQG Tracking Sheet certifying that their business is a CESQG and that the wastes were generated in San Francisco. A copy of this form is included in Attachment 6 of the PBR packet.
2. Provide the CESQG representative a VSQG Hazardous Waste Disposal Receipt that shows the types and quantities of wastes taken for disposal and the cost for disposal according to the CESQG fee schedule. A copy of this form is included in Attachment 6 of the PBR packet.
3. Indicate which drums contain CESQG waste in the Facility records.
4. Retain the VSQG Tracking Sheets for a minimum of three years and make them available for review to the City, CUPA and DTSC.
5. If the CESQG representative delivers unknown wastes, Facility staff shall analyze it while the business representative is present. If acceptable, staff shall process the waste. If unacceptable, staff shall return the waste to the representative as long as it poses no imminent danger.
6. If extremely dangerous waste is accepted for disposal, notify the appropriate authorities.

### **5.0 WASTE HANDLING, PACKAGING AND SHIPMENT PROCEDURES**

After Facility staff unloads HHW from a customer's vehicle, they take the waste to one of three areas of the Facility: the laboratory, if it is an unknown; the Waste Exchange Bin, if it is latex or oil-based paint and still usable; or to the appropriate HHW storage bays/containers of the facility to be prepared for on-site recycling or for shipment and disposal. The majority of wastes received at the Facility are consolidated, containerized, or labpacked into larger drums/containers for on-site recycling or shipment.

This section describes how Facility staff shall handle and package waste once it is received from customers. The treatment of hazardous wastes at the Facility is limited to the consolidation of certain types of hazardous wastes. Staff shall not conduct any form of treatment at the Facility, other than consolidation, without the written consent of the City and proper permitting from appropriate federal, state and local regulatory agencies.

## 5.1 Waste Handling Equipment

Staff shall use the following equipment at the Facility:

- Department of Transportation (DOT) approved containers
- Absorbent materials, broom and shovels
- Task specific personal protective equipment (PPE), including but limited to, Tyvek, gloves, safety glasses, face shield, respirator and puncture resistance boots with steel toes and shanks
- Paint and paint-related material container scrapers, drum screens and paint mixer
- Chemical dictionaries, Material Safety Data Sheet binder and other information on chemical composition of consumer products
- pH, oxidizer and peroxide testing papers and other supplies for initial identification of unknown materials
- Pallet jack and drum truck
- Radiation detection device
- Split 2000-gal AST for used oil (1500-gal max) and antifreeze (500-gal max)
- 30-cubic yard covered asbestos debris box

## 5.2 Waste Processing Procedure

Wastes are handled and stored at all time to minimize the possibility of reaction between incompatible wastes. Waste handling areas are protected from exposure to rain under a canopy. All waste segregation and packaging is done inside the Facility except asbestos. Following characterization, wastes are stored in drums or other DOT approved containers, closed, and labeled according to DTSC and DOT requirements. Drums are segregated into acid, base, and flammable/poison storage bays according to the waste stream's chemical compatibility.

Leaking or damaged packages identified during vehicle unloading are immediately placed in a dedicated plastic tub and brought to the attention of the Facility chemist for characterization. Once the chemist determines the proper waste stream, the damaged container is placed in a Ziploc bag or other container of sufficient size to serve as a secondary containment, then placed into the proper waste stream drum.

## 5.3 Waste Identification and Characterization

Preliminary sorting is based on the container labels. When staff unloads vehicles, participants are asked about the identity of any waste not in its original container or any waste in an unlabeled container. Staff writes the content information on the side of container with a permanent marker after the participant has responded. Sometimes unloading staff might verbally convey waste information to the sorting staff instead. All good, reusable 1-gal size and up latex and oil-based paint are separated and stored in the Reuse Bin. Other incoming wastes are sorted, categorized and packaged in their appropriate waste stream according to DOT rule.

When an unknown waste is received, the chemist will conduct a Waste Identification and Classification Test (WICT). WICT was developed by our legendary HHWCF chemist, Mr. Thomas G. Watkins, to characterize unknown waste. The WICT system determines the proper DOT waste stream for packaging and identifies a waste's chemical constituents. The WICT Data Sheet indicating the test results is kept on file with the shipment package and a copy is sent with the hazardous waste manifest. A copy of this form is included in Attachment 6 of the PBR packet. The Facility chemist also keeps a

log of the waste stream for each container analyzed on site for any Facility audit/inspection described in Section 9.

## **5.4 Consolidation and Packaging Procedures**

### Aerosols

Aerosols are loose packed in DOT approved drums without absorbent and stored in the flammable bay. Caps and nozzle tips are removed to the maximum extent possible.

### Antifreeze

Waste antifreeze is consolidated into a 500-gal maximum capacity split AST located across from the Facility's driveway exit. Antifreeze is currently removed from the AST by a recycler within two weeks.

### Asbestos

Waste asbestos are packaged in plastic bags of total thickness of at least 6-mil. Asbestos-specific plastic bags are 3-mil thick. Heavy duty trash bags are typically 1.5-mil thick. One mil is 0.001 inch. Each asbestos-containing bag should be tied with duct tape. The bagged asbestos will be stored in a covered debris box across from the Facility's driveway exit. Waste asbestos is sent to a special Class II landfill.

### Auto Flares (or fusees)

DOT classifies auto flares as a flammable solid. Auto flares are broken in half and stored in an 8-gal container filled with water in the flammable bay.

### Compressed Gas Cylinders

20-lb or less propane gas cylinders are the only compressed gas accepted at the Facility. Propane cylinders are stored in the flammable gas storage of the Reuse Bin.

### Corrosives

Corrosives are separated into non-oxidizing acids and non-oxidizing bases for storage at the Facility. Additional segregation of organics and inorganics may also be performed. Corrosives are labpacked in DOT approved drums typically using vermiculite except hydrofluoric acid. Hydrofluoric acid is labpacked by polypropylene pulp. Product containers are labpacked in an upright position.

### Flammable Liquids (Solvents)

Various petroleum distillates, including gasoline, diesel, chlorinated and non-chlorinated solvents are consolidated in DOT approved drums fitted with pressure relief bungs in a designated consolidation room equipped with ventilation.

### Flammable Solids

Glue, non-asbestos containing roofing tar, patching compound and similar materials are consolidated in DOT approved open-top drums in a designated consolidation room equipped with ventilation.

### Fluorescent and other Mercury-containing Lamps (Bulbs & Tubes)

Fluorescent and other mercury-containing lamps are accepted at the Facility and at the SFSWTRC's Public Disposal and Recycling Area (PDRA). All lamps are temporarily stored in approved and labeled containers while on site at the Facility. When containers are full, they are transferred from the Facility to the PDRA for final storage before shipping off-site for recycling. Broken lamps are swept up and containerized immediately and sent off-site for recycling.

### Household Batteries

Various types of household batteries, excluding lead acid batteries, are sorted and consolidated in base bay. Typical waste batteries streams are alkaline, rechargeable (e.g. NiCd and NiMH) and lithium (including Li-ion). All batteries are stored in DOT-approved open-top drums. Any battery that is 9 volts or lithium-type requires additional packaging to prevent short-circuiting and the evolution of heat during storage and transportation. Additional packaging methods include: 1) aligning the same terminal of each battery and storing it in cardboard boxes with an inert separation layer, 2) bagging each battery in an individual plastic bag, or 3) taping the terminals of each battery.

### Latex Paint

“Good” latex paint is rebleded on-site in three adjacent 65-gal drums fitted with a bottom valve for repackaging into 5-gal containers. 1-gal and 5-gal size “poor” quality latex paint is consolidated into 55-gal DOT-approved open-top drums. Any latex paint that is less than 1-gal size is containerized in a cubic yard box. Poor quality and containerized latex paint are sent off-site for recycling.

### Lead-acid Vehicle-type Batteries

Car batteries are the primary lead-acid vehicle battery received at the Facility. Lead-acid batteries are stored on metal carts. Broken or leaking lead-acid batteries are stored in plastic containers. All lead-acid vehicle-type batteries are marked with the date received.

### Oil-based Paint

Oil-based paints are either flammable or combustible. Oil-based paints are consolidated into DOT approved open-top drums in a designated consolidation room equipped with ventilation.

### Oxidizers

Oxidizers are separated into oxidizing acids and oxidizing bases for on-site storage. Strong oxidizers including hypochlorites and ammonium-based compounds may also be stored separately. Product containers are labpacked in an upright position with vermiculite as an absorbent material. Follow-up characterization and repackaging is performed, as needed, by the final treatment, storage and disposal facility (TSDF) prior to off-site transportation.

### PCB Wastes

PCB wastes are typically light ballasts and small capacitors. PCB ballasts and capacitors are loose packed and stored separately in DOT-approved drums in the base bay.

### Photochemicals

Photochemicals are consolidated in either acid or base bay depending on their pH and oxidizer testing. Typically, photofixers are consolidated in DOT-approved drum fitted with pressure relief bungs in the acid bay. Photodevelopers are consolidated the same type of drum in base bay.

### Pesticides, Herbicides and Fungicides

Pesticides, herbicides and fungicides are labpacked in DOT-approved drums using vermiculite as absorbent. Product containers are labpacked in an upright position.

### Sharps (Needles)

Only household-generated sharps are accepted at the Facility. All sharps must be packaged in a puncture-resistant container when delivered to the Facility. Household sharps are stored in designated red medical waste containers in the flammable storage bay. Sharps are removed weekly by a medical waste hauler for off-site destruction. Sharps from non-residential sources are not accepted at this Facility.

#### Used Cooking Oil

Cooking oil is consolidated in DOT-approved open-top metal drum in the flammable storage bay. A biofuel recycling company takes the collected cooking oil off-site for fuel blending. The San Francisco Public Utilities Commission's SFGreasecycle Program is the current vendor.

#### Used Motor Oil (Petroleum-based)

Used motor oil is consolidated into a 1500-gal maximum capacity split AST located across from the Facility's driveway exit. Used motor oil is currently removed from the AST by a recycler within two weeks.

### **5.5 Waste Shipments**

Treatment, storage and disposal facilities (TSDF) and hazardous waste haulers used to transport HHW from the Facility shall be chosen and approved by SFE or the City's Department of Public Health. Any TSDF or hazardous waste hauler used must be registered in the State of California and hold all required local, state and federal permits. All waste, including manifested waste and excluded recyclable materials, must be sent out for proper disposal/treatment within the time storage limit required by California Health & Safety Code, Section 25218.1(h)(2).

A representative of the City shall be present at the Facility on shipment days. Prior to loading waste onto the transport vehicle, the City representative shall check all of the shipment containers to ensure compliance with DOT requirements, including container integrity and proper labeling. The City representative shall also review and sign the shipping documents (e.g. manifest and bill of lading) to ensure that the documents are accurate and complete.

## **6.0 REUSE AND RECYCLING**

SFE and RSF shall continue to explore options to maximize reuse and recycling of the wastes received at the Facility. RSF shall include information regarding its source reduction efforts in its reporting to SFE. RSF shall maximize the amount of HHW that is reused and recycled by following common HHW management practices, including, but not limited to:

### **6.1 On-Site Reuse and Recycling**

Prior to 2006, RSF offered a materials reuse program (Waste Exchange Program), where it allowed the general public to take, for free, from a dedicated reuse bin, products brought to the Facility that staff determined to be in good condition and safe for reuse. Reuse products included pesticides, cleaning chemicals, paint and other common HHW products. Unfortunately, due to concerns over improper use of these products by some repetitive users of the program (e.g. spray paints used for graffiti), SFE and RSF, in agreement, discontinued this reuse program in 2006.

RSF continues to offer latex and oil-based, in good condition and at least three quarters full, for direct reuse through the Waste Exchange Program.

In addition, most of the latex paint received at the Facility recycled on site. Good quality latex is separated into white and non-white colors, poured through screens into 65-gallon drums, mixed, and transferred into five-gallon buckets. These buckets are then given away for free through the Waste Exchange Program.

Customers wishing to take paint through the Waste Exchange Program are accompanied to and assisted by staff at the reuse bin (located outside the fenced area of the Facility). Recipients must sign the Waste Exchange Program Waiver form that releases SFE and RSF from any and all liability resulting from use of the products. A copy of this form is included in Attachment 6 of the PBR packet.

## **6.2 Off-Site Recycling**

RSF shall send poor quality latex paint, photochemicals, antifreeze, used motor oil, household batteries, lead-acid vehicle type batteries, fluorescent lights, propane tanks, liquid mercury and cooking oil to off-site recycling facilities.

## **6.3 Off-Site Energy Recovery**

Solvents, non-asbestos containing flammable solids and oil-based paints are sent to a facility where they are blended for use as a supplemental fuel.

## **7.0 FACILITY SIGNAGE**

RSF shall post signs in and around the Facility in compliance with all local, state and federal regulations. Signage must include, but is not limited to:

### Warning Signs

- Outside the Facility, indicating that the Facility contains hazardous waste.
- California Proposition 65 warning requirements regarding the deleterious effects of hazardous chemicals.
- A red buffer line painted on the ground at the bottom of the roll-up doors to the Facility to indicate the physical boundary between the waste unloading and waste handling areas, and signs to indicate “Employees Only” areas.
- “Remain in vehicle” during HHW unloading at the Facility.
- “No Eating or Drinking”
- “No Smoking” at and around the perimeter of the Facility. Smoking is prohibited within 25 feet of the facility.

### Informational Signs

- Operational hours of the HHWCF.
- Conditions of use at the HHWCF: waste must be from a San Francisco household, commercial waste will not be accepted during household collection hours, options available for CESQGs, etc.

### Interior Signs

- “Emergency Response Contact”.

- Locations of fire extinguishers and fire alarms.
- Signage, in and around the lab fume hood that complies with BAAQMD's responsible lab management practices.
- Emergency showers and safety eye washes locations.
- First aid kit.
- Proper waste material storage (e.g. flammable, acid, base, etc.).

It is RSF's responsibility to post additional signs as necessary or as required by government agencies, and to post the signs in languages appropriate to San Francisco's current language demographics.

## **8.0 PAYMENT OF HHWCF DISPOSAL COSTS**

RSF shall follow the procedures listed below for processing invoices from hazardous waste transporters and TSDFs:

1. Transporter/TSDF submits invoices to RSF with thorough supporting documentation.
2. HHWCF Manager reviews invoices to be sure they are accurate and complete.
3. If the invoice documentation is incorrect or incomplete, RSF shall notify the transporter or TSDF of the error and waits until the problem is corrected before sending payment.
4. Once the invoice is complete and accurate, RSF shall submit payment to the contractor within 30 days, unless SFE notifies RSF to withhold payment.
5. Copies of invoices and payment shall be made available to SFE upon request.

## **9.0 RECORDS / REPORTS / AUDITS**

RSF shall maintain the following records at 501 Tunnel Avenue in San Francisco, and make them available upon request to all interested parties, including the public. All records shall be maintained for a minimum of three years, unless otherwise specified. Prior to disposing of or destroying any of the following records or reports, RSF shall offer them to the SFE for their records.

RSF and SFE shall endeavor to reduce the amount of paperwork that is generated by the Facility's operations by modifying record keeping procedures as needed. If records are being kept by RSF that may no longer be needed by the City, transporters, TSDFs, or by RSF's internal policies, RSF shall discuss modifying their record keeping procedures with SFE.

### **9.1 Drum Records**

#### Drum List

Staff shall record on this list each time a drum, cubic yard box, or other waste storage container is opened at the Facility. A copy of this form is included in Attachment 6 of the PBR packet.

#### Labpack Drum Inventory Sheet

Staff shall complete this sheet for each drum containing labpacked wastes. A copy of this form is included in Attachment 6 of the PBR packet.

## **9.2 Shipment Files**

RSF shall maintain a shipment file for each shipment of hazardous waste from the facility. Shipment files shall be kept for at least three years and contain the following documents and information.

### Pre-Shipment Waste Volume Records

Records are kept on the total container count and the total volume of waste stored in the Facility just prior to each shipment. These records shall be stored in the shipment file and include a breakdown by waste stream and location.

### Shipment Packages

The master copy of each shipment package shall be kept in the appropriate shipment file. Shipment packages contain: a shipment drum/container inventory list waste stream pricing form for the shipment, EPA Land Disposal Restriction Notification forms for each waste profile in the shipment, labpack drum inventory list and WICT sheets. Examples of these forms are included in Attachment 6 of the PBR packet.

### Description and Quantity of Waste Shipped Out

RSF shall maintain a computer database to record the types and amounts of waste handled.

## **9.3 Manifests and Bills of Lading**

RSF shall complete hazardous waste manifests, bills of lading and other shipment documents accurately and completely, and provide the correct part of the manifest to the transporter, the TSDF and DTSC. RSF, on the behalf of SFE, shall retain the signed copy that is returned by the TSDF. All appropriate steps, in compliance with state and federal laws and regulations, will be followed by RSF.

If a designated disposal facility does not send RSF a signed copy of “Designated Facility to Generator” portion of the manifest within a proper time frame, proper steps must be taken by RSF, including but not limited to, a thorough follow-up investigation with both transporter and TSDF and a Manifest Exception Report with DTSC.

## **9.4 Facility Inspection Reports**

Facility staff shall inspect the Facility to assess the condition of containers, containment drainage features, emergency response equipment, and other Facility operations and equipment. The inspection frequency and items to be inspected are listed on the inspection forms. Copies of the inspection forms are included in Attachment 6 of the PBR packet. RSF is responsible for updating the inspection forms whenever law, regulation or company policy requires substantial changes.

## **9.5 Participation Database Records**

RSF shall maintain a database that provides a weekly, cumulative tally of the number of participants served at the HHWCF. Using these database records, RSF shall tally the number of participants per day, week, and zip code.

## **9.6 Training Records**

Facility employees shall each complete a training program that complies with Title 22, Section 66264.16(a) and Title 8, Sections 3380 and 5192. Training attendance forms and training descriptions are filed in each employee's training file. RSF shall maintain training records on file at RSF for a period of three years after each worker's term of employment ends.

Per Title 22, Section 66264.16(d), RSF shall ensure that each training record contains the following information:

- The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
- A written job description for each position that describes the requisite skill level, education or other qualifications, and the duties of employees assigned to each position;
- The date of the training session; (b) the topics covered; (c) the names of the employees involved in the training, and (d) the instructor or institution giving the training.

## **9.7 Quarterly Summary Reports**

RSF shall prepare and submit Quarterly HHW/CESQG Summary Reports, or as needed, for SFE. RSF will submit the reports within six weeks after each report period ends, which are as follows:

- Quarter 1: July 1 - September 30
- Quarter 2: October 1 - December 31
- Quarter 3: January 1 - March 31
- Quarter 4: April 1 - June 30

The content of the reports will be agreed upon by SFE and RSF, and may include:

- Description of the various hazardous waste collection programs administered by RSF, including but not limited to, D2D, retail collection, CESQG
- Type and volume of hazardous waste handled at the Facility
- The program through which the waste was received (e.g. D2D, retail collection, CESQG, retail sites)
- Participation data by program type, day, week, zip code, etc.
- CESQG participant's information

## **9.8 California Department of Resources Recycling and Recovery Form 303 Report**

In compliance with Health and Safety Code Section 25218.9, RSF shall assist SFE to complete the annual California Department of Resources Recycling and Recovery (CalRecycle) Form 303 Report. Waste volume, participation, cost data and any other information needed to accurately and thoroughly complete the Form 303 Report must be provided to SFE by on September 1 of each year. SFE will send the completed report to CalRecycle by its October 1 due date, and provide a copy to RSF.

## **9.9 Facility Emissions**

### Maximum Volumes

In a letter dated April 8, 1996, the Bay Area Air Quality Management District (BAAQMD) exempted the Facility from air permitting as long as the Facility limited its emissions of organic compounds to less than 10 pounds per day. A copy of this letter is included in Attachment 5 of the PBR packet. In addition, the former Local Assessment Committee (LAC) prepared a list of conditions in 1996 which proposed a limit on the volumes of waste put through the facility to 2.5 times 1995 volumes.

Therefore, RSF shall limit the amount of residential wastes consolidated at the facility to 2.5 times 1995 residential volumes, until and unless a community public process is held to revise this limit. The following table shows that total emissions will be approximately 5.1 pounds per day, or about half of the emissions allowed by the BAAQMD.

On days when household hazardous wastes are being managed at the facility, RSF shall use the following table as a guideline to stay under total emission limits of 5.0938 pounds per day:

**Maximum Number of Gallons Consolidated Per Day for the HHW Program**

WASTE STREAM	VOC EMISSIONS <sup>1</sup> (lbs/gal)	MAX CONSOLIDATED PER DAY <sup>2</sup> (gal)	TOTAL EMISSIONS PER DAY (lbs)
Flammable Solids	0.020930	100	2.0930
Solvents	0.015400	91	1.4014
Oil Based Paint	0.006771	173	1.1714
Latex Paint	0.001309	327	0.4280

<sup>1</sup> Data taken from a study conducted at the Facility by the BAAQMD

**Total = 5.0938**

<sup>2</sup> 2.5 x 1995 volumes

In addition, on days when wastes are being accepted from CESQGs, RSF shall use the following table as a guideline to stay under total emission limits of 8.9994 pounds per day.

**Maximum Number of Gallons Consolidated Per Day for the CESQG Program**

WASTE STREAM	VOC EMISSIONS <sup>1</sup> (lbs/gal)	MAX CONSOLIDATED PER DAY <sup>2</sup> (gal)	TOTAL EMISSIONS PER DAY (lbs)
Flammable Solids	0.020930	181	3.7883
Solvents	0.015400	266	4.0964
Oil Based Paint	0.006771	125	0.8464
Latex Paint	0.001309	205	0.2683

<sup>1</sup> Data taken from a study conducted at the Facility by the BAAQMD

**Total = 8.9994**

<sup>2</sup> 2.5 x 1995 volumes

Emissions and volumes shown in the two tables above are not cumulative. If household hazardous wastes and business wastes are being consolidated at the Facility on the same day, RSF shall adhere to the limits specified for the management of household hazardous wastes above.

### Tracking Consolidation Volumes

RSF shall keep daily logs of the amounts of latex paint, oil based paint, solvents and flammable solids that are consolidated, and provide SFE, upon request, summaries of each waste stream's average daily volume consolidated and emissions. In addition, RSF shall report the maximum gallons recorded for any given day for each waste stream and their associated emissions. SFE shall periodically review the logs during audits.

## **9.10 Facility Audits**

The following types of audits and inspection are conducted at the Facility

### Department of the Environment Audits

The Department of the Environment shall perform quarterly audits of the Facility operations and records to ensure compliance with this Plan, the Agreement and applicable federal, state, and local law and regulation. SFE may contract with consultants, including the Department of Public Health, to

conduct these audits. Audits will be conducted during normal SFSWTRC business hours. SFE shall provide RSF with a completed copy of each audit report.

#### San Francisco Department of Public Health /Fire Department/DTSC Inspections

RSF shall allow the San Francisco Department of Public Health (CUPA Program), San Francisco Fire Department and DTSC to inspect the HHWCF for compliance with the applicable sections Title 22 of California Code of Regulation, Health and Safety Code, and the local hazardous materials storage law and regulation.

#### Corrective Action Measures

RSF and/or SFE shall remedy any problems or issues noted during an inspection/audit. Where a hazard is imminent or has already occurred, RSF shall take remedial action immediately (within 24 hours), or provide the City with a written explanation for the delay(s) as well as the anticipated correction date(s).

### **10.0 MANAGING LOADCHECK WASTE AT THE HHWCF**

Permit by Rule authority allows SFE and RSF to store hazardous waste found during load checking at SFSWTRC and manages the loadchecked wastes at the Facility. RSF's loadcheck program is administered and staffed by their Waste Acceptance Control. The loadcheck program is described in detail in the WACP Manual, available from RSF upon request.

### **11.0 PUBLIC EDUCATION AND OUTREACH**

SFE and RSF shall conduct an on-going public education and outreach program. The goal of this program is to encourage residents and CESQG businesses to reduce the amount of hazardous waste generation, to seek less toxic / alternative product, to properly manage their hazardous wastes, and to be familiar with the HHWCF and other HHW programs offered by SFE and RSF. Education and outreach efforts include, but are not limited to:

- SFE, RSF and other websites
- Social media
- Community events and presentation
- Brochures/flyers
- Direct mail, including refuse bill inserts
- Billboard and public transportation advertisements
- Customer service hotlines
- Garbage tag
- Local newspaper publication

### **12.0 FINANCIAL RESPONSIBILITY AND LIABILITY INSURANCE**

RSF shall maintain and demonstrate financial responsibility for closure of the Facility. In addition, RSF shall maintain liability insurance to manage the day-to-day operations of the Facility. This section summarizes RSF's financial responsibilities.

#### **12.1 Financial Assurance for Closure**

RSF shall establish a closure trust fund and adjust the closure cost estimate annually in accordance with the California Code of Regulations, Title 22, Section 67450.30. The closure trust fund shall be established according to Title 22, Section 66265.143(a).

RSF shall adjust the closure cost estimate for inflation by updating required documents and forwarding them to SFE within the time frame specified in Title 22 regulations. SFE and RSF shall periodically incorporate the new closure cost estimate as an addendum to the financial assurance documents, found in Attachment 2 of the PBR packet.

## **12.2 Liability / Insurance Requirements**

RSF shall maintain, at a minimum, the following types and amounts of coverage:

(1) Workers' Compensation, in statutory amounts, with Employer's Liability Limits not less than \$1,000,000 for each accident, injury or illness; and

(2) Commercial General Liability Insurance with limits not less than \$1,000,000 for each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Product and Completed operations; and

(3) Commercial Automobile Liability Insurance with limits not less than \$1,000,000 for each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable.

(4) Environment Impairment Liability Insurance with limits not less than \$1,000,000 each

occurrence, for the sudden and accidental release of hazardous materials from the insured site including coverage for clean-up costs.

Commercial General Liability and Commercial Automobile Liability Insurance policies must provide the following:

(1) Name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

(2) That such policies are the primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this Agreement, and that insurance applies separately to each against whom claim is made or suit is brought.

All policies shall provide thirty (30) days' advance written notice to the City of reduction or nonrenewal of coverage or cancellation of coverage for any reason. Notices shall be sent to the following address:

Department of the Environment  
City and County of San Francisco  
11 Grove Street  
San Francisco, CA 94102

A copy of RSF's Certificate of Liability Insurance is included in Appendix 10 of the PBR packet.

Certificates of insurance evidencing all coverages above were furnished to and approved by the SFE before commencing operations of the HHWCF. Complete copies of policies are available to the SFE upon request. Approval of the insurance by SFE shall not relieve or decrease liability of RSF.