



Material Receipt and Staging at Solid Waste Services (SWS) New Central Transfer Station (CTS) - Household Hazardous Waste (HHW) Facility

General Operating Procedures:

No commercial drop-off of HHW materials is allowed and no unknown materials are accepted at the CTS HHW Facility (CTS HHW).

Only HHW materials from residential sources are received, segregated, and consolidated for frequent shipment to the primary HHW Facility located at the Anchorage Regional Landfill (ARL HHW).

Shipment from the CTS HHW occurs twice weekly at a minimum, with emphasis on throughput to the ARL HHW for where it is managed for final disposition.

All Flammables are managed and prepared for shipment in Room C114.

All other materials will be processed in Rooms C113 and C116. Some overflow from C113 and C116 may be stored in C114, but no flammables will be stored above 5 ft.

Use and Staging in Rooms C114 – H-3 Occupancy

Room C114 is classified as an H occupancy with 2-hour walls to adjacent spaces. Floor drainage connects to an exterior storage tank with capacity for all liquids in room plus 20 min fire flow.

No materials in room C114 will be stored in racks or above 5 ft.

Quantities noted for Room C114 are the maximum expected in normal operations, but may exceed this during periods of heavy customer intake.

1. Flammable Class IB/C Liquids: Mixed Fuels and Mixed Solvents

Location: Room C114

Proposed Limits: (16) 55-gallon drums, 880 gallons total

Container Size: 55-gallon drum

Standard Operating Procedure Summary:

(2) 55-gallon consolidation drums will be used for consolidation and will be normally closed. Flammable liquids or solvents in original containers, limited to 5 gallons or less, will be dispensed directly into the drums for consolidation. Consolidation occurs under a fume hood with explosion proof exhaust fan. Bungs are opened and liquids decanted. When finished bung is closed.

When full, the drums are sealed. Up to (16) max sealed drums may be stored inside.

Room C114 will be classified as Class 1 Div. 2 space.

2. Combustible Liquids: Cooking Oil Class IIIB

Location: Room C114

Proposed Limits: 55 gallons in use, 165 gallons storage, 220 total

Container Size: 55 gallon drum

Standard Operating Procedure Summary:

Drum is closed when not in use. Bung is opened and cooking oil is decanted into drum. Bungs are closed when decanting is finished.

When full, drum is sealed and transported to ARL HHW.

3. Combustible Liquid: Chlorinated machine oil from refrigerator compressors. Class IIIB

Location: Room C114

Proposed Limits: 55 gallons in use, (2) 55 gallons storage, 165 Gal total.

Container Size: 55 gallon drum

Standard Operating Procedure Summary:

Chlorinated machine oil is from refrigerator compressors drained on site. Refrigerators are dropped off by residential customers only.

Drum is closed when not in use. Oil is decanted into drum. Bungs are opened and liquids decanted, when finished bung is closed.

When full, drum is sealed and transported to ARL HHW.

4. Combustible Liquid: Antifreeze Class IIIB

Location: Room C114

Proposed Limits: 55 gallons in use, 165 gallons storage, 220 Total

Container Size: 55 gallons

Standard Operating Procedure Summary:

Drum is closed when not in use. Antifreeze is decanted into drum. Bungs are opened and liquids decanted, when finished bung is closed.

When full, drum is sealed and transported to ARL HHW.

5. Greases and Waxes: IIIB combustible

Location: Room C114

Proposed Limits: 1 cy bin in use

Standard Operating Procedure Summary:

Greases and waxes in original containers are placed in 5-gallon buckets at entry. When full, the bucket is brought to the greases and waxes bin.

6. Flammable/Combustible Class I/II/III Paint Related Materials: non latex paint

Location: Rm C114

Proposed Limits: (6) 55-gallon drums

Most paints are class II or III, approx. 10% Class IC by volume

Standard Operating Procedure Summary:

Incoming paints are sorted as latex or flammable. All flammable paints in original containers are decanted into 55 gallon drums in C114. These drums will be brought to ARL HHW for paint consolidation.

7. Flammable and Combustible Liquid, Part A and B epoxy paints, resins, and adhesives: Class I, II, Class IIIA and Class IIIB

Location: Rm C114

Proposed Limits: (2) 55-gallon drums in use, 220 gallons storage, 330 gallons total.

Container Size: 55 gallons

Standard Operating Procedure Summary:

Drums are lidded when not in use. Part A and B epoxies, resins, paints, or adhesives in original containers are separated by type and placed in a Lab Pak drum. When full, drum is sealed and transported to ARL HHW.

8. Aerosols

Location: C114

Proposed Limits: (5) 55-gallon drums, approximately 500 lbs. level 1, 2 and 3 aerosols

Container Size: 55 gallons

Standard Operating Procedure Summary:

Aerosol cans are collected in original containers in a 5-gallon bucket at entry, then deposited in 55-gallon drums. When each drum is full they are sealed and transported to ARL HHW.

Use and Staging in Rooms C113

9. Corrosives: Acids, Bases - Corrosive

Location: Room C113

IFC Limits: 200 gallons in open use, 1,000 gallons storage

Proposed Limits: 55 gallons corrosive acid and 55 gallons corrosive base in use, 330 gallons storage
(3) 55-gallon drums acid, (3) 55-gallon drums base)

Container Size: 55 gallons

Standard Operating Procedure Summary:

Typical Acids, residential concentrations. Hydrochloric acid, sulfuric acid less than 12.7% concentration.

Typical Bases, residential concentrations. Potassium hydroxide less than 45% concentration, sodium hydroxide less than 50% concentration.

Drums sealed when not in use. All in-use drums under fume hood. Acids and bases shall each have separate fume hoods. Acids, bases, in original containers are decanted into the appropriate drum. Bungs are opened and liquids decanted, when finished bung is closed.

10. **Household Ammonia: Alkali - Ammonium Hydroxide <10% concentration**

Location: Room C113

IFC Limits: 200 gallons in open use, 1,000 gallons storage

Proposed Limits: 55 gallons in use (*ammonia based cleaning products*), 55 gallons storage, 110 gallons total

Container Size: 55 gallons

Standard Operating Procedure Summary:

Drums sealed when not in use. In use drum under fume hood. Ammonia cleaners in original containers will be decanted to in use 55-gal drum. Bungs are opened and liquids decanted. When decanting is complete the bung is closed.

11. **Household Bleach: Sodium hypochlorite <10% concentration** (not hazardous per IFC)

Location: Room C113

IFC Limits: combined total for acids/bases 200 gallons in use, 1,000 gallons storage

Proposed Limits: 55 gallons in use, 55 gallons storage, 110 gallons total

Container Size: 55 gallons

Standard Operating Procedure Summary:

Drums sealed when not in use. Household bleach in original containers are decanted into the appropriate drum. Bungs are opened and liquids decanted, when finished bung is closed. When full, drums are sealed and located on a storage spill pallet in Room C114 prior to transport to ARL HHW. Bleach will be segregated from Ammonia.

12. **Alkaline Batteries Dry -Corrosive**

Location: Room C113

IFC Limits: 10,000 lbs., corrosives

Proposed Limits: 800 lbs., total

Container Size: 55 gallons

Standard Operating Procedure Summary:

Residential alkaline batteries separated at entry into a plastic tub. Wet alkaline batteries are not accepted. When full, the tub contents are weighed and placed in a 55-gallon drum. When full, the drum is sealed and transported to ARL HHW.

13. NICAD Batteries Dry - Corrosive

Location: Room C113

IFC Limits: 10,000 lbs., corrosives solid stored

Proposed Limits: 500 lbs, total

Container Size: 55 gallons

Standard Operating Procedure Summary:

Residential NICAD batteries are separated into categories at Entry and placed in a plastic tub. . When tub is full it is emptied into a 55-gallon drum. Prior to placement, duct tape is placed over terminals on each battery.

14. Nicad Batteries, Wet - Corrosive

Location: Room C113

IFC Limits: 10,000 lbs., solid stored

Proposed Limits: 500 lbs., total

Container Size: 55 gallons

Standard Operating Procedure Summary:

Batteries are separated into categories at entry and placed in a plastic tub. When tub is full it is emptied into a 55-gallon drum. Prior to placement, duct tape is placed over terminals on each battery.

15. Lithium Batteries: Corrosive & Class 1 Oxidizer

Location: Room C113

IFC Limits: 4,000 lbs. closed system, 4,000 lbs. storage

Proposed Limits: 350 lbs. closed system

Container Size: 55 gallons

Standard Operating Procedure Summary:

Residential lithium batteries are separated into categories at entry and placed in a plastic tub. When tub is full it is carefully emptied into the lithium battery 55-gallon drum. Prior to placement, duct tape is placed over terminals on each battery.

Battery Summary for Rooms C116 and C113

Lead Acid: 6,000 lbs.

Alkaline Dry: 800 lbs.

Nicad Dry: 500 lbs.

Nicad Wet: 500 lbs.

Lithium: 350 lbs.

Battery max in CTS HHW: 8,150 lbs.

16. Fluorescent light tubes (toxic mercury vapor when broken)

Location: Room C113

IFC Limits: Managed as toxic solid. 1,000 lbs. solids closed system, 1,000 lbs. storage

Proposed Limits: 55 lbs. in cardboard container in closed system. All other containers closed in storage, 330 lbs. or (6) standard cardboard fluorescent containers maximum. Use and storage: 330 lbs. total

Standard Operating Procedure Summary:

Fluorescent tubes are placed in an open cardboard container designed for transporting bulbs. When the container is full it is capped and sealed. No more than (6) containers kept on site at any one time.

17. Compact Fluorescent light bulbs (toxic mercury vapor when broken)

Location: Room C113

IFC Limits: 1,000 lbs. closed system, 1,000 lbs. storage

Proposed Limits: 75 lbs. in 55-gallon drum closed system, 75 lbs. in 55-gallon drum stored. Total 150 lbs.

Container Size: 30 or 55 gallons

Standard Operating Procedure Summary:

Fluorescent tubes are placed in a 30- or 55-gallon drum. When the drum is full it is capped and sealed.

18. Mercury in consumer items (toxic if broken)

Location: Room C113.

IFC Limits: 1,000 lbs. closed system, 1,000 lbs. storage.

Proposed Limits: 25 lbs. net weight of consumer items in closed system, no storage

Container Size: 5 gallons (Lab Pak)

Standard Operating Procedure Summary:

Mercury in consumer items are placed in a plastic lined 5-gallon Lab-Pak plastic container. Voids are filled with vermiculite. When full the plastic liner is folded over the top, and the Lab Pak lid is sealed.

19. Household pesticides and weedkillers in original containers – liquid (toxic if spilled)

Location: Room C113

IFC Limits: 1,000 lbs. closed system, 1,000 lbs. storage

Proposed Limits: 100 lbs. in closed system, 100 lbs. storage (in sealed 55-gallon Lab Pak drum)

Container Size: 55-gallons

Standard Operating Procedure Summary:

Pesticides and weedkillers in original containers are bagged and placed in a poly 55-gallon Lab Pak drum. Drum is under fume hood. Lids left on drum when not in use. When full, drum is sealed.

20. Household pesticides and weedkillers in original containers – solid.

Location: Room C113

IFC Limits: 1,000 lbs. closed system, 1,000 lbs. storage

Proposed Limits: 125 lbs. in use, 125 lbs. storage

Container Size: 55 gallons

Standard Operating Procedure Summary:

Pesticides and weedkillers in original containers are bagged and placed in a poly 55-gallon Lab Pak drum. Drum is under fume hood. When full, drum lid is placed and sealed.

Summary for Toxins:

Fluorescent Tubes: 330 lbs. (6 containers)

Fluorescent Compact Bulbs: 150 lbs. (2) 55-gallon drums

Mercury in consumer items: 25 lbs. (5-gallon Lab Pak bucket)

Poison liquid 200 lbs. in (2) 55-gallon Lab Pak drums

Poison solid 250 lbs. in (2) 55-gallon Lab Pak drums

Total: 955 lbs. maximum at any time.

21. Non-regulated Solids - caulks, adhesives, glues (no flammables or liquids)

Location: Room C113

IFC Limits: N/A

Proposed Limits: 1 cy bin (800 lbs.) in use, up to 1 bin (800 lbs.) storage. 1,600 lbs. max.

Container Size: 1 cy

Standard Operating Procedure Summary:

Non-regulated solids in original containers are placed in 5-gallon buckets at entry. When full the bucket is brought to the non-regulated solids bin. Bins are cardboard boxes draped with plastic liner. When closed the plastic liner covers the contents, and the box is strapped.

22. PCB Ballasts

Location: C113

Proposed Limits: 10 lbs per week sent offsite once per week in 55 gallon drum.

Standard Operating Procedure Summary:

PCB ballasts deposited in 55 gallon drums, closed when not in use.

Use and Staging in Rooms C116

23. Latex consolidation (non-hazardous)

Location: Room C116

IFC Limits: N/A

Proposed Limits: (1) 55-gallon drum in use, (8) 55-gallon drums (sealed) storage

Container Size: 55 gallons

Standard Operating Procedure Summary:

Latex paint containers are scraped and placed upside down on racks above a 55-gallon drum until all liquid is removed. Drums are filled to 2/3 volume to allow for addition of bentonite or polymer to solidify.

24. Non-regulated Liquids – surfactants, detergents, water-based glues (non-flammable, non-corrosive, non-hazardous)

Location: Room C116

IFC Limits: N/A

Proposed Limits: (1) 55-gallon drum in use, (6) 55-gallon drums (sealed) storage

Container Size: 55 gallons

Standard Operating Procedure Summary:

Non-regulated liquids in original containers are placed in 5-gallon buckets at entry. When full the bucket is brought to the non-regulated liquids drum. Drums are closed when not in use. Bungs are opened and liquids decanted, when finished bung is closed.

Stored in CTS HHW yard under Exterior Covered Canopy

25. Fire Extinguishers - Sodium Bicarbonate (not hazardous)

Location: Exterior Covered Canopy

IFC Limits: N/A

Proposed Limits: (1) 55-gallon drum sodium bicarbonate

Container Size: 55 gallons

Standard Operating Procedure Summary:

Fire extinguishers are placed in a plastic tote under cover upon entry. Periodically the tote is emptied by discharging the contents of the extinguishers into the bung of a 55-gallon drum, and any remaining contents of the extinguisher are also emptied into the drum. When full, drum is sealed and transported to the ARL HHW.

26. Lead Acid Car Batteries – Non-Spill (contains corrosive acid)

Location: Room C116 (open air screened storage)

IFC Limits: 10,000 lbs., corrosives

Proposed Limits: 6,000 lbs. storage

Container Size: 2,000 lb./1 cy liquid proof totes

Standard Operating Procedure Summary:

Lead acid batteries are temporarily stored in 1 cy plastic waterproof totes under cover. When a tote reaches (3) layers full, the batteries are moved to a pallet and wrapped for shipment.

Yard

27. Residential propane cylinders

Location: east fence line in yard

IFC Limits: IFC table 5003.1 - 300 lbs. storage

Proposed Limits: (20) 15-gallon propane cylinders, or as varies by size to maintain less than 300 lbs. total

Container Size: 1 cy

Standard Operating Procedure Summary:

Propane cylinders are placed upright and stored in a 1 cy bin in the yard. When the bin is full, bin is transported to ARL HHW.

28. Used Motor Oil Class: IIIB combustible liquid

Location: at drive through

IFC Limits: 13,200 gallons in closed system.

Proposed Limits: 450-gallon transfer tank, 3,000-gallon storage tank (both tanks double walled, monitored)

Standard Operating Procedure Summary:

Waste oil is deposited by customers on a fill grate above the 450-gallon transfer tank. Waste oil level is monitored in the tank, and when it reaches a set level the waste oil is pumped to the storage tank.

Tank levels are monitored, with a regular schedule of commercial removal of waste oil from the storage tank.

Use and Staging in Mercantile Re-Use Room C104

Room C104 is established as a control area, mercantile use for resale of reusable consumer products and will be separated from the rest of the CTS HHW with a 1- hour rating.

Operations follow IFC Table 5003.1.1 for Flammables and IFC table 5003.11.1 for Toxins and Corrosives. All materials in original containers.

1. Flammables

IFC Limits: 240 gallons storage

Proposed Limits: 300 lbs. total by container weight, approx. 30 gallons

- Oil based paint and adhesives in original containers
- Aerosol spray paints in original containers
- Solvents: mineral spirits, acetone in original containers

2. Toxins

IFC Limits: 2,000lbs. , 200 gallons

Proposed Limits: all below not to exceed 400 lbs. solid weight, 25 gallons max liquid volume.

- Residential Herbicides, Pesticides in original containers
- Residential Garden/lawn weed killer in original containers
- Residential Garden lawn fungicides in original containers
- Residential Moss killer in original containers

3. Corrosives

IFC Limits: 19,500 lbs., 1,950 gallons

Proposed Limits: all below not to exceed 300 lbs. total by combined container weight:

- Residential Ammonia Based household cleaners in original containers
- Residential Bleach based household cleaners in original containers

Alkali based cleaners in original containers

4. Not Regulated (limited by available shelf space)

- Latex paint in original containers
- Liquid household cleaners in original containers
- Nonflammable adhesives/waxes in original containers
- Antifreeze in original containers

Oil & lubricants in original containers