

## ATTACHMENT 1 FACILITY DESCRIPTION

Storage Unit	Capacity (gallons)	Secondary Containment (gallons)	Stored Material	Waste Codes <sup>1</sup>
S02 (tank)	12,000	20,296 <sup>2</sup> (shared with another 12,000-gal. used antifreeze tank)	Waste Parts Washer Solvent (105/150)	D018, D039, D040
S02 (drum washer unit)	162	844 <sup>3</sup> (shared with drum washer unit, next line below)	<ul style="list-style-type: none"> <li>• Waste Parts Washer Solvent (105/150)</li> <li>• Waste Parts Washer Sludge</li> </ul>	<ul style="list-style-type: none"> <li>• D018, D039, D040</li> <li>• D001, D039</li> </ul>
S02 (drum washer unit)	162	844 <sup>3</sup> (shared with drum washer unit, next line above)	<ul style="list-style-type: none"> <li>• Waste Parts Washer Solvent (105/150)</li> <li>• Waste Parts Washer Sludge</li> </ul>	<ul style="list-style-type: none"> <li>• D018, D039, D040</li> <li>• D001, D039</li> </ul>
S01 (container warehouse)	17,280 <sup>4</sup>  Of which no more than 6,912 <sup>5</sup> may be waste and no more than 1,375 <sup>6</sup> may be flammable material.	2,160 <sup>4</sup> (shared with raw material containers in same warehouse)	Waste Parts Washer Sludge	D001, D039
			Waste Immersion Cleaner	D006, D008, D018, D027, D039, D040
			Waste Aqueous Parts Cleaner Solution	None
			Waste Aqueous Brake Cleaner	D039
			Waste Dry Cleaner Filter Powder	F002, D039
			Waste Paint Gun Cleaner	F005, F003, D001, D018, D035, D039, D040
			Waste Paint Other	F005, F003, D001, D018, D035, D039, D040
			Waste Dry Cleaner Bottoms	F002, D007, D039, D040
			Waste Parts Washer Tank Bottoms	D039
Silver-Containing Film	D011			

<sup>1</sup> Waste codes are reassessed annually or more often as needed. There may be some small changes in the waste codes (For example, see the changes from last year to this year in the re-characterization data in Appendix D-5). The customer may select codes different than Safety-Kleen codes based on the customer's waste characterization. All waste streams may be toxic and may additionally include; D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043.

<sup>2</sup> Taking into the consideration the volume of the tank pad (2,172 gallons), the volume of the second tank up to 3' 5½" (908 gallons), miscellaneous equipment (580 gallons) and a 25-year 24-hour rainfall event (1,866 gallons), the resulting secondary containment capacity for the single largest tank is 20,296 gallons (169% of the minimum required capacity).

<sup>3</sup> This represents the capacity of the Return & Fill area sump. Actual capacity, when including the sloped floor, is greater.

<sup>4</sup> The total amount of liquid product and waste stored in the Warehouse will not exceed 17,280 gallons. This container storage area design limit is based on ten times 2,160 gallons (1,703 gallons floor and 457 gallons trench) minus 20 percent for pallet, container, and miscellaneous equipment displacement.

<sup>5</sup> The total amount of waste stored in the Warehouse will not exceed 6,912 gallons.

<sup>6</sup> NFPA-30 (See Appendix E-15 – "NFPA-30-1990 'Flammable and Combustible Liquid Code', Applicable Pages") limit the amount of flammable liquid (sum of product and waste) which can be stored in the warehouse to 1,375 gallons.

## **1.1 Description of Business Activity**

### **1.1.1 Parts Washer Service**

The original service offered by the company in 1968 was the parts cleaner service and it remains the core business activity. This service involves the leasing of a parts cleaning unit containing parts washer solvent or aqueous based parts washer solution. On a fixed schedule, to meet the customer's needs, a Safety-Kleen employee cleans and inspects the parts washer machine and replaces the container of spent solvent with one of clean product. This service is performed under contract between Safety-Kleen and the customer.

At the end of each day, as the service vehicle returns from customer sites, the spent solvent is transferred from the containers to a storage tank at the service center and containers of product are prepared for the next day's service. Periodically, a tanker truck is dispatched from one of the recycling centers to deliver a load of clean solvent and to collect the waste parts washer solvent at the service center. Two-thirds of the solvent used by Safety-Kleen customers has been reclaimed with the remaining being purchased from a vendor.

Safety-Kleen has also established a parts cleaner service for users who own their own machines. This service, known as the Customer Owned Machine Service, provides a solvent reclamation service to these customers, though the customer maintains the parts cleaner machine.

A second type of parts washer, the immersion cleaner, is available for the removal of varnish and gum from such things as automotive carburetors and transmissions. This machine consists of an immersible basket with an agitator affixed to a USDOT approved container containing a non-halogenated hydrocarbon mixture. The waste immersion cleaner solvent remains in the container after delivery to the service center where it is stored in the warehouse. Periodically, fresh solvent is delivered, and the drums of spent solvent are collected for reclamation.

### **1.1.2 Dry Cleaner Service**

In 1984, Safety-Kleen began offering a service for the collection of dry cleaner (perc) bottoms (still bottoms), dry cleaner (perc) filter powder, and dry cleaning naphtha (mineral spirits) contaminated with dry-cleaning solvents. These wastes are containerized on the customers' premises and are periodically collected by a Safety-Kleen employee. The containerized waste is accumulated in the warehouse until it can be transported to an approved reclamation or disposable facility.

### **1.1.3 Paint Waste Collection Service**

In 1986, a paint waste reclamation program was initiated to service automobile body repair businesses. Paint gun cleaning machines are leased to customers with a reservoir of lacquer thinner (for cleaning of paint guns). On a periodic basis the reservoir is replaced and the waste paint gun cleaner is taken back to the service center for shipment to a reclamation facility. Other paint wastes, which may consist of various thinners and paints, are collected in containers meeting USDOT specifications on the customer's premises. These wastes are periodically shipped to a reclaimer. The regenerated solvent is distributed to Safety-Kleen customers for use

as product. The wastes that are not regenerated as solvent may be potentially used as fuels or shipped to another appropriately permitted treatment, storage, or disposal facility.

#### **1.1.4 Spent Aqueous Cleaning Solvent**

Safety-Kleen has three types of aqueous cleaning solution:

- Aqueous brake cleaner, generated in the maintenance of automotive brakes,
- Aqueous immersion cleaner, generated as immersion cleaner above, and
- Aqueous parts washer, generated as parts washer solvent above.

Based on annual re-characterization data, Safety-Kleen has found the waste aqueous brake cleaner can be expected to carry a D039 waste code. Waste aqueous immersion cleaner and waste aqueous parts washer are non-hazardous. Of course, the customer (generator of the waste) may identify waste codes different than those identified by Safety-Kleen re-characterization data.

Safety-Kleen receives the waste aqueous cleaning agents in a variety of USDOT specification containers. Containers are stored in the warehouse prior to shipment for recycling. The non-hazardous aqueous parts washer solvent waste may be consolidated in the return and fill area as presented in Appendix B-2, which includes that Aqueous Consolidation Procedure, Tank Farm/Shelter Plan showing the area where consolidation activities will take place, and supporting information. The aqueous cleaner is compatible with other parts washer solvents and other materials stored in the warehouse.

#### **1.1.5 Used Antifreeze Service**

In 1990, Safety-Kleen began offering a service for the collection of used antifreeze from automobile service stations. Currently, this service also includes industrial customers where large volumes of fluid are managed by use of a tank truck. This program follows procedures to ensure the material collected is non-hazardous according to the following guidelines: Oregon Department of Environmental Quality - Used Antifreeze Management Policy 1997-PO-004, and Arizona's Best Management Practices for used antifreeze. A copy of the Oregon Used Antifreeze Policy is located in Appendix B-3. Checklists used at the used antifreeze customer sites and for training Safety-Kleen personnel are found in Appendix B-3. Other references to management of used antifreeze are located throughout the Permit, including Appendix B-1, Appendix D, and Appendix G-6.

“Based on available analytical studies, used antifreeze generated from motor vehicles, motorized equipment, industrial/commercial processes and deicing activities, that is recycled and managed according to certain best management practices (Storage containers/tanks in good condition, properly labeled and managed in a way that prevents releases, not mixed with used oil, solvents or other materials – etc.), generally does not exhibit hazardous waste characteristics. Therefore, used antifreeze managed according to these best management practices is presumed to be managed in accordance with the State's hazardous waste regulations”.

All Antifreeze is recycled.

All automotive used antifreeze may be stored in containers meeting USDOT specifications by the customer, on the customer's premises, or may be received by high volume tanker truck. Upon entering the customer's premises, the sales representative inspects the container to ensure it is in good condition and that the contents meet the criteria for acceptance (i.e. color, odor, etc.) and is not mixed with other materials. The containerized used antifreeze is collected and transported back to the Service Center where it may be stored prior to shipment to a recycler. Individual containers may be consolidated into the 12,000 gallon used antifreeze tank on site via a high volume tanker truck.

All industrial (non automotive and high risk) used antifreeze is profiled by trained Safety-Kleen representatives. If applicable, it is subject to a complete hazardous waste determination (to include analytical) to ensure it is non-hazardous prior to collection. Issues that might trigger the requirement to undergo a complete hazardous waste determination include but are not limited to: The generator being unsure of the process generating the waste; the generator being unsure of the materials entering the waste stream, or the materials toxicity. Industrial used antifreeze may be managed in two ways; these materials may be collected in containers meeting USDOT specifications from the customers' premises, or they may be collected using a high volume tanker truck. Managing the industrial used antifreeze in containers is similar to managing automotive customer's used antifreeze since the materials are picked up on a periodic basis and transported back to the service center where they may be stored prior to shipment to a recycler. Industrial used antifreeze may also be collected by a high volume tanker truck. Large volumes are collected from the customer's premises and then transported back to the service center where the material is off-loaded into the 12,000 gallon used antifreeze tank on site via the tank access connector.

Accumulated used antifreeze will be transferred periodically from the 12,000 gallon tank to a tanker truck for transport to an offsite recycler. Sludge and solids that accumulate in the tank will be removed periodically through the tank manway for offsite disposal. Any still bottoms removed will undergo a complete hazardous waste determination (analytical) prior to being shipped off site. All of the ancillary equipment for this system is located in the tank secondary containment area. Flow charts depicting the collection procedure are located in Appendix B.

Safety-Kleen expects that all used antifreeze stored at the Safety-Kleen Chandler facility will be non-hazardous. However, used antifreeze must be handled as a hazardous waste if the waste exhibits any of the characteristics in 40 CFR 261 Subpart C. As antifreeze is used, it may pick up hazardous waste constituents such as lead, benzene or tetrachloroethylene. If the waste exhibits these or any other hazardous characteristics, and/or other listed wastes, then it must be managed as a hazardous waste. Otherwise, it may be disposed of as a solid waste or recycled.

#### **1.1.6 Photo Imaging Service**

Safety-Kleen collects, from customers, silver bearing materials (i.e., silver plate, silver photographic film) for recycling of the silver. Customers are paid for the silver based on the weight of material and form of silver. These silver bearing materials are transported to a silver recovery facility for recycling

### **1.1.7 Used Oil Services**

Like the spent antifreeze, used oil is collected from generators in tank trucks. The oil is transferred to rail tank cars and transported to a recycling center for recycling.

## **1.2 Description of the Facility**

Property for the Chandler Service Center was purchased on March 16, 1987. This service center replaces the service center formerly located in Phoenix, Arizona and serves customers in the same geographic region. The facility consists of the following structures:

- A nominal 8400-square-foot building with offices, a return and fill area with two drum washer units and a loading dock, and a contained warehouse area for container storage. The office area has a second floor for a total of 10,480 square feet of office space,
- Two aboveground storage tanks with diking for clean and spent solvent,
- A third aboveground double-walled storage tank for clean solvent only.

Descriptions of the surrounding area and waste management practices at the center follow. Applicable maps and facility drawings are in Appendix C (“Maps and Facility Drawings”).

### **1.2.1 Description**

The non-building areas of the facility are paved with asphalt, concrete, or gravel as noted on the site plan in Appendix C-15 (“Site Plan Showing Construction Soil Samples”). Most vehicular traffic and loading/unloading operations occur at the return and fill area, and all vehicular traffic occurs on areas paved with concrete. A dock is adjacent to the warehouse for loading/unloading of containers. The entrance to the facility is on Frye Road. Internal roads at the facility are designed to bear 40,000 pounds per axle. A Safety-Kleen tank truck, when full of solvent, weighs a maximum of 80,000 pounds. The access road was designed in accordance with engineering criteria appropriate for sustaining the traffic volume and loading for the industrial activities in this area. The route vans that travel each operating day, the routes between the service center and its customers, use the two-lane approach driveway. The trucks dispatched from the recycle center to deliver and pick up fresh and spent solvents perform these activities at the above ground tank area. The tanker empties and fills his tank and leaves through the east or west gate. A tank truck services the facility about twice per week. Safety-Kleen will inform the operators of their tank trucks to/from the facility to avoid any routes that pass through residential areas or that pass by schools.

### **1.2.2 Waste Management Practices**

The Chandler service center was designed to facilitate the handling and storage of the wastes resulting from the services offered by Safety-Kleen. The aboveground storage tanks, container storage area, and the return and fill station all have secondary containment and the facility has the equipment necessary for employees to safely manage wastes onsite. Appendix C (“Maps and Facility Drawings”) contains drawings of the waste management facilities.

### 1.2.2.1 Return and Fill Station Practices

Spent parts washer solvent from parts washers is accumulated in a 12,000-gallon aboveground storage tank via the return and fill station. USDOT-specification containers of spent parts washer solvent poured into one of two 162 gallon drum washer units in the return and fill station. This activity is performed on the return and fill platform. The return and fill platform is an elevated iron grating that allows liquids to drain to the secondary containment below.

Once the spent solvent is poured into the drum washer unit, the container is placed on the drum washer unit roller brushes. As the machine is turned on, the container rotates on the brush, cleaning the outside of the container. In the drum washer unit there is a nozzle that directs a stream of spent solvent into the bottom of the now upside-down container to clean the inside of the container. The spent solvent goes to a reservoir in the bottom of the drum washer unit, and is automatically pumped to the 12,000-gallon above ground storage tank for storage. Located in the drum washer unit is a basket that protects the pump by straining extraneous material like sediment and car parts. The extraneous material forms a sludge. Once per day, the sludge is removed from the basket and placed in a drum washer unit sediment container, satellite accumulation drum. When full, this container of sediment will then be stored in the permitted container storage area until transported to a recycle center.

The return and fill station has secondary containment in the form of a sloped monolithically poured concrete slab that drains into a sump with a capacity of 844 gallons. Any spilled liquids would drain into the sump and then be transferred to containers and finally to the 12,000-gallon storage tank via the drum washer unit. In addition to the 844-gallon sump, the return and fill floor is sloped and sealed (the walls are also sealed to six inches above the floor) to provide additional containment.

The return and fill station is an elevated grating that allows liquids to drain to the secondary containment sump, below. In addition, the entire drain and fill area has sloped floors that drain to the secondary containment sump. Liquids in the secondary sump would be cleaned up using a wet/dry vacuum cleaner, containerized and emptied into the drum washer unit to be pumped into the spent solvent storage tank. Recovered solids will be containerized and transported to a facility permitted to receive the material.

### 1.2.2.2 Aboveground Storage Tanks Practices

The above ground tank installation has been designed in accordance with NFPA requirements. The two tanks are constructed of carbon steel and are painted white to reduce the amount of energy absorbed from sunlight. One of these tanks contains used antifreeze and the other, waste parts washer solvent. They are mounted vertically in the secondary containment structure. The secondary containment is a monolithically poured steel reinforced concrete floor with four walls measuring 48' 8" × 20' 6" × 3' 5½" (L × W × H) which holds about 25,800 gallons. Taking into the consideration the volume of the tank pad (2,170 gallons), the volume of the second tank up to 3' 5½" (908 gallons), miscellaneous equipment (580 gallons), and a 25-year 24-hour rainfall event (1,870 gallons), the resulting secondary containment capacity for the single largest tank is 20,300 gallons (169% of the minimum required capacity).

The third above ground storage tank is a double-walled steel tank also painted white mounted horizontally and outside the secondary containment. This tank contains only fresh parts washer solvent (never waste).

Each tank is equipped with a Milltronic level measuring system. The level measuring system is set to indicate a high level alarm at 95 percent tank capacity (11,400 gallons). The level measuring system is also used to track inventory. The inventory is measured daily and entered into the national Safety-Kleen inventory system where usage is tracked on a daily basis. In the event the Milltronic system requires repair and Milltronic equipment is not available, an equivalently functioning system will be installed.

The 40 CFR264.193(c)(3) "Tank Leak Detection System" that is used is: (1) weekly check of daily balances, (2) daily tank containment inspection, and (3) daily tank gauge readings. Daily means each day of operation, weekends and holidays excluded. Vadose zone vapor monitoring wells exist under the secondary containment.

#### 1.2.2.3 Container Storage (Warehouse) Practice

The warehouse is used for the storage of:

- Sediment from cleaning the drum washer units in the return and fill station,
- Spent immersion cleaner,
- Dry cleaning wastes,
- Paint wastes,
- Silver bearing materials,
- Spent aqueous parts cleaner, and
- Other compatible containerized waste.

These wastes are not removed from their containers, nor are any other wastes added to these containers, except for non-hazardous spent aqueous parts washer solvent. The non-hazardous aqueous parts washer solvent waste may be consolidated in the return and fill area as presented in Appendix B-2, which includes the Aqueous Consolidation procedure, Tank Farm/Shelter Plan showing the area where the consolidation activities will take place, and supporting information. None of these wastes are incompatible with the others, nor are there any incompatibilities with the fresh materials, also stored in the warehouse. No incompatible materials or wastes will be stored in the warehouse.

The warehouse has secondary containment in the form of a sloped floor with a capacity of about 1,700 gallons and a collection trench at the lowest point in the floor with a capacity of about 457 gallons (12' × 3' × 2'). This gives a total secondary containment capacity of about 2,160 gallons. The total amount of liquid (product plus waste) that can be stored in the warehouse will not be more than 21,600 gallons less twenty percent for container and other equipment displacement, or 17,280 gallons. To supply our customers with fresh materials and remove customer wastes, it is necessary to store both in the warehouse. No more than half the capacity will be hazardous waste. That is, no more than 6,912 gallons of waste will be stored. NFPA requirements for flammable material storage limit the amount of flammable liquids that may be stored in this

warehouse to 1,375 gallons. No more than 1,375 gallons of flammable liquid (fresh material plus waste) will be stored in the warehouse.

### **1.2.3 Requirements for Containers**

The containers utilized by Safety-Kleen meet USDOT specifications for the material they hold. The containers are stored on pallets and all spills are cleaned up immediately. Thus, containers are not stored in standing liquids.

The total secondary containment of the warehouse is 1,790 gallons. No more than 6,912 gallons of waste will be stored in the warehouse. The secondary containment can hold 20 percent of the wastes stored, well in excess of the required 10 percent. A total of 17,280 gallons of material (waste plus fresh) may be stored in the warehouse. The secondary containment can hold more than 10% of all materials that may be stored.

The warehouse is indoors so no run-on will occur. If liquid is found in the trench it will be removed and containerized, analyzed, and transported to a Safety-Kleen recycle center, contract reclaimer, or other permitted treatment/disposal facility.

The ignitable wastes in the warehouse are more than 50 feet from all property boundaries.

### **1.2.4 Requirements for Tanks**

The 12,000-gallon above ground storage tank for waste parts washer solvent has been designed in accordance with NFPA requirements and is located more than 15 feet from the property line. The 12,000-gallon tank is 10' 6" in diameter and 18' 11 15/16" high. The tank is constructed of 1/4" carbon steel for the lower third and 3/16" carbon steel for the upper two thirds of the tank and is painted white. The corrosion rate for waste parts washer solvent is negligible. In fact, parts washer solvent is sometimes used as a rust preventative coating for carbon steel.

The tank is equipped with a Milltronics Corp. aural (siren) and visual (strobe) high level alarm which will alert employees when the liquid tank volume reaches 95 percent or more capacity. Additionally, the Milltronics system gives a digital readout of the tank level. Diagrams of the tank and piping system is located in Appendices E-16 ("12,000 Gallon, 10'-6"  $\Phi$  Flanged & Dished Bottom Vertical Storage Tank With Flanged Fittings Fabrication Details"), E-17 ("Used Solvent Vertical Tank Installation Details"), and E-31 ("Solvent Pump Piping Installation Details").

The secondary containment for the waste tank is a monolithically poured steel reinforced concrete floor with four walls measuring 48' 8"  $\times$  20' 6"  $\times$  3' 5 1/2" (L  $\times$  W  $\times$  H) which holds about 25,800 gallons. Taking into the consideration the volume of the tank pad (2,170 gallons), the volume of the second tank up to 3' 5 1/2" (908 gallons), and a 25-year 24-hour rainfall event (1,870 gallons), the resulting secondary containment capacity for the single largest tank is 20,300 gallons (169 percent of the minimum required capacity). This secondary containment is shared with a similar tank of a compatible, used antifreeze.

The two drum washer units in the return and fill station meet the definition of “tanks” in 40 CFR 260.10. Spent solvent is poured into the drum washer unit and the container is placed on the drum washer unit roller brushes. These brushes are located inside the drum washer unit. When the drum washer is turned on, the container rotates on the brushes, cleaning the outside of the container. A nozzle located in the drum washer directs a stream of parts washer solvent against the inside bottom of the now upside down container, cleaning the container. The spent solvent falls to the bottom of the drum washer unit and is automatically pumped to the waste parts washer solvent tank.

There is a basket in each drum washer unit that collects sludge. The drum washer units each have a capacity of 162 gallons, total solvent plus sludge. The amount of material in the drum washer units will never reach capacity as the material is pumped to the waste parts washer solvent tank (to allow for proper operation of the drum washer unit) as it is put into the drum washer unit.

The return and fill station has secondary containment in the form of a sloped concrete floor, which drains into a sump that measures 22' × 2' × 3' 6" (844 gallons or greater than 500 percent of the minimum requirement). The drum washer units are positioned over the secondary containment sump to capture any material that may spill.

Spills or leaks will be detected in the course of normal operations or during the tank inspection procedures. As a part of these procedures the secondary containment sump is inspected for cracks and other deterioration. Run-on will be prevented from entering the secondary containment system by the dike wall.