

ATTACHMENT 6 CLOSURE PLAN

6.0 Abstract

LOCATION: Safety-Kleen Systems, Inc.
6625 West Frye Road
Chandler, Arizona 85226

EPA I.D. NO: AZD 981 969 504

This closure plan provides for the closure of the hazardous waste management units at the Safety-Kleen (SK) Chandler facility.

WASTE UNITS TO UNDERGO CLOSURE:

- a. Tank Storage – One 12,000-gallon above ground storage tank and concrete dike area for waste parts washer solvent and associated ancillary equipment.
- b. Container Storage – one container storage area of about 3,840 square feet with a total storage capacity of 6,912 gallons.
- c. Return and Fill Station – One return and fill dock structure with secondary containment and two drum washers with a capacity of 162 gallons each, used to transfer waste parts washer solvent to the aboveground storage tank.

6.1 Purpose

The Chandler service center operates as a storage facility for hazardous wastes. The hazardous waste management units (HWMUs) must be closed in accordance with the closure requirements of 40 CFR 264.110 through 40 CFR 264.115, as adopted by Arizona Administrative Code (AAC) R18-8-264.A. Closure of the facility will be carried out in accordance with the steps outlined in this plan and applicable Federal and State regulations. An estimated closure schedule and closure cost estimate is attached. The closure plan and closure cost estimate, as part of the permit, will be kept on site. The financial assurance documentation and Certificate of Liability Insurance are attached, as required by AAC R18-8-264.A.

Safety-Kleen will remediate all hazardous wastes from the facility to a level that is protective of human health and the environment, thereby achieving clean closure and eliminating the need for further maintenance and care. Upon completion of closure activities, the need for further maintenance will be minimized or eliminated. For purposes of this plan, it is estimated that the facility is expected to close in the year 2030.

SK has developed this generalized closure plan for decontamination of the HWMUs at the site. The closure plan includes the following:

- The estimated expected year of closure and a closure schedule.

- An estimate of the maximum inventory of waste in storage at any time during the active life of the facility for development of the closure cost estimate.
- Notification procedures.
- A description of how and when the facility will be partially and/or finally closed.
- Procedures for certification of closure activities by SK and an independent professional engineer.

6.2 Maximum Inventory of Wastes

The maximum containerized waste inventory at the SK Chandler facility waste management units are:

- a. Tank Storage – One 12,000-gallon (nominal) aboveground storage tank and concrete dike area for secondary and associated ancillary equipment.
- b. Return and Fill Station – One return and fill dock structure with secondary containment and two drum washers with a capacity of 162 gallons each, 324 gallons total.
- c. Container Storage – One container storage area with a total storage capacity of 6,912 gallons.

6.3 Notification and Schedule for Closure

SK will remove all hazardous waste and residuals from the facility to levels protective of human health and the environment and will therefore, eliminate the need for further maintenance and care. For purposed of this plan, the estimated date of facility closure is 2030.

Safety-Kleen will notify the Department in writing of any intent to close the facility at least 45 days before Safety-Kleen begins implementation of closure activities. The following general requirements apply to facility closure:

- As required by 40 CFR 264.113 (b), the closure will be completed within 180 days of the receipt of the final volume of hazardous waste, and/or receipt of Agency approval, or unless an extended closure period is requested by SK and approved by the Agency.
- Upon completion of final closure, Certification of Closure, prepared and certified by both an independent registered professional engineer and SK, will be submitted to the Agency.
- If the facility permit is modified, this plan will also be amended to reflect those modifications as appropriate. The request for modification and subsequent modified closure plan will be submitted to the Agency for acknowledgment and approval.

6.4 Security

During the performance of the closure activities, SK will maintain site and hazardous waste management security measures. These measures will include site security, fencing and warning signs. Security measures will be maintained until decontamination activities are completed.

6.5 RCRA Unit Closure Activities

Partial or facility closure will be implemented in accordance with this plan and any subsequent modifications. The contractor selected to implement closure will also be required to prepare a health and safety plan in accordance with applicable regulations for their personnel. The health and safety plan shall be kept on-site during the closure activities.

6.5.1 Aboveground Tank and Associated Piping

The aboveground storage tank (12,000-gallon nominal capacity) is situated within a concrete secondary containment area. At facility closure or partial closure (closure of the tank unit) the following will generally be necessary to remove hazardous waste and waste residues:

- a. Opening of the tank and removal of wastes;
- b. Decontamination of the tank interior and piping; and
- c. Decontamination of the containment area, unless other permitted tanks remain.

These procedures are briefly described below.

6.5.1.1 Opening of the Tank and Removal of Wastes

To safely open the tank and remove the waste material the following activities will be conducted:

- a. Waste material from the tank will be removed using a tanker truck pump (for used solvent) or similar equipment and transported to a permitted hazardous waste TSDF for reclamation and/or disposal.
- b. Following removal of free-liquid wastes to the extent practicable, the aboveground waste tank will be entered to remove residual waste and sludge from the bottom of the tank. Depending on the quantity and consistency of residual waste it may be removed using shovels, squeegees etc., and transferred to drums, or may be removed with a pump during tank decontamination (described below).

6.5.1.2 Tank Decontamination Procedures

Once residual wastes are removed, the tank and piping will be decontaminated. Decontamination procedures will be generally consistent with the following:

- a. The tank interior will be washed with a detergent-water solution and high-pressure spray. The interior may also be scraped and/or squeegeed to remove residual waste material. Pressure washing will continue until the tank interior is visually clean, and then triple rinsed. The quantity of wash water will be kept to a minimum to reduce the amount required for treatment/disposal. It is anticipated that approximately 700 gallons of wash/rinse water will be generated during tank decontamination activities (estimate includes piping and ancillary equipment).
- b. Decontamination water and residual wastes that accumulate at the bottom of the tank will be removed using a remote pump, buckets, or similar, and transferred to either a vacuum truck, tanker truck or into containers.
- c. The decontamination wash water and residual waste from the tank will be managed as a hazardous waste and transported for treatment/disposal at an appropriately permitted TSDF, or characterized as non-hazardous waste in accordance with applicable regulations.
- d. Piping and appurtenant equipment may be flushed prior to or during residual waste removal for the tank and/or return/fill station. Piping and appurtenant equipment will be decontaminated with a detergent-water solution and high-pressure spray.
- e. Depending on the disposition of the tank at closure, sampling of the final rinsate may be required. If the tank will be reused at the existing location or at an offsite location, a rinsate sample will be reused at the existing location or at an offsite location, a rinsate sample will be collected from the final rinse of the tank interior. If collected, the rinsate sample will be analyzed for constituents representative of the toxicity characteristic waste codes listed in the facility permit for storage (total VOCs, SVOCs and metals), using an appropriately certified laboratory. Rinsate sampling results will be compared to appropriate risk levels, such as USEPA Maximum Contaminant Levels (MCLs) for drinking water. The results may also be compared relative to background concentrations (i.e., a blank tap water sample of the water used for decontamination).
- f. If the tank and piping will be processed as scrap metal following decontamination (i.e., the decontamination structures no longer meet the definition of solid or hazardous waste in 40 CFR 261), rinsate sampling will not be required.

6.5.1.3 Decontamination of the Tank Containment Area

At the time of facility closure the tank containment area will be inspected and decontaminated in accordance with the following general procedures. Unless otherwise specified, the decontaminated containment structure will be left in place at the time of closure.

- a. The tank containment area dike and slab area will be inspected by an independent Professional Engineer for the presence of cracks, fissures, missing seals, etc. If found, visible cracks or gaps in the containment shall be sealed prior to commencement of cleaning to prevent migration of rinsate outside of the containment area. In addition,

- if unsealed cracks are fully penetrating, the underlying soil will be sampled during closure as described below.
- b. The containment dike will be swept to remove loose debris, and then washed with a detergent- water solution and high-pressure spray and then triple rinsed. The quantity of wash water will be kept to a minimum to reduce the amount required for treatment/disposal. Decontamination of the concrete will be repeated as necessary, until the clean levels have been met. It is anticipated that no more than 250 gallons of wash/rinse water will be generated during decontamination of the tank area.
 - c. A sample of the final rinsate will be collected and analyzed for similar constituents as for the tank system, described above. The results of the rinsate analysis will be used to verify effective decontamination of the containment area.
 - d. The decontamination wash water will either be managed as a hazardous waste and transported for treatment/disposal at an appropriately permitted TSDf or characterized as non-hazardous and treated or disposed in accordance with applicable regulations.
 - e. Soil samples will be collected if necessary based on the engineer's inspection. If collected, soil samples will be analyzed in accordance with applicable requirements, and as described below in the sampling plan.
 - f. As an alternative to leaving the containment in place for reuse, the decontaminated concrete containment structure may also be demolished and transported offsite for recycling or disposal.

6.5.2 Solvent Return and Fill Station

The return and fill station is used to collect and return the used parts washer solvents to the waste storage tank via the drum washer unit(s). At the time of final facility closure or partial closure the following steps will be conducted:

- a. The sediment in the drum washer units will be removed and containerized, labeled, and manifested as a hazardous waste and transported to a permitted hazardous waste TSDf.
- b. The drum washers and the dock area will be decontaminated using a detergent-water solution, high-pressure spray and triple rinsed. It is anticipated that approximately 450 gallons of rinsate will be generated during decontamination of the drum washers and dock area.
- c. Following decontamination, a sample of the final rinsate will be collected from the containment, and from the drum washer(s) if saved for potential reuse. Components of the return/ fill that will be scrapped at closure will not require rinsate sampling. (Note that the closure cost estimate includes the cost of scrapping the return and fill station structure).

- d. The decontamination wash water/rinsate may be discharged through the appurtenant piping system into the storage tank, which will be subjected to a separate closure procedure as described above or containerized in an appropriate storage device. The wash/rinse water will be managed as a hazardous waste and treated or disposed of at a permitted TSDF or characterized as non-hazardous waste and treated or disposed in accordance with applicable regulations.
- e. The secondary containment at the return and fill will be decontaminated using procedures consistent with those described for the tank containment area. Approximately 250 gallons of wash water are anticipated from decontamination of the containment area.
- f. Following decontamination, the containment area will be inspected by an independent Professional Engineer for the presence of cracks, fissures, missing seals, etc. If unsealed fully-penetrating cracks are present, the underlying soil will be sampled during closure as described below.

6.5.3 Container Storage Area

The container storage area is an area within the warehouse used to store/accumulate containers of used materials (e.g. used parts washer solvent, used immersion cleaner, dry cleaning waste, waste antifreeze, tank or drum washer sediment, paint waste, industrial solvents, or other non-regulated wastes or products). At the time of facility closure or partial closure of the container storage area, waste inventory will be removed and transported under manifest to a permitted hazardous waste TSDF. The contents of the drums will be treated or disposed of at a permitted TSDF.

At the time of facility closure or partial closure, the following steps will be conducted:

- a. The secondary containment structure (concrete floor, curbing, and collection trenches) will be inspected and decontaminated in the same manner as those described above for the tank secondary containment area (section 6.6.1.3). It is anticipated that approximately 500 gallons of rinsate will be generated during decontamination of the container storage area. The wash/rinse water will be managed as a hazardous waste and treated or disposed of at a permitted TSDF.
- b. A sample of the final rinsate will be collected and analyzed for constituents representative of waste codes listed in the facility permit, F-listed codes (e.g. F002, dry cleaning wastes, F003 and F005, paint wastes).
- c. The rinsate sample results will be used to verify effectiveness of decontamination. Decontamination of the concrete will be repeated as necessary, until clean levels have been met.
- d. If the independent Professional Engineer determines that the unsealed cracks are fully penetrating, the underlying soil will be sampled during closure as described below.

6.6 Decontamination of Cleanup Equipment

Equipment used to decontaminate the tanks, return/ fill station components, and container storage area will be cleaned along with and within the respective secondary containment structures. Therefore, the anticipated amount of wash water to decontaminate equipment was included in the estimated quantity generated for each unit. Small consumable equipment (e.g. mops, rags, disposable PPE, etc.), which cannot be cleaned will be containerized, managed as a hazardous waste and disposed of at a permitted TSDF, or characterized as non-hazardous waste and treated or disposed in accordance with applicable regulations.

Safety-Kleen does not anticipate that heavy equipment, such as cranes and backhoes, will come into contact with hazardous wastes. For example, a crane will be used to remove the storage tank only after the tank has been decontaminated. Therefore, decontamination of equipment should not be necessary during closure. However, if necessary, heavy equipment will be cleaned by scraping, brushing and/or using a pressure washer with a non-phosphate detergent/water solution with tap water rinse. The wash/rinse water will be containerized and managed as a hazardous waste and disposed of at a permitted TSDF or characterized as non-hazardous waste and treated or disposed in accordance with applicable regulations.

6.7 Soil Sampling During Closure

Following decontamination of each tank in tank storage and the return and fill area, and the container storage area, soil samples will be collected from beneath each containment area(s) in question. The number of soil samples at closure will be as follows:

- a. For the vertical tank containment area a minimum of 8 soil samples shall be taken in soils below the tank secondary containment.
- b. For the return and fill containment area a minimum of 4 soil samples shall be taken in soils below the area secondary containment,
- c. For the container storage area a minimum of 8 soil samples shall be taken in soils below the floor, sump and secondary containment area.

In general soil samples will be collected from immediately beneath cracks or gaps noted by the engineer during inspection of each containment area, which are determined to have the potential for wastes to migrate to underlying soils. The samples will be collected from native soils below the cracked or otherwise suspect areas using similar procedures as outlined in Appendix G-8.

It is anticipated that soil samples will be analyzed for constituents representative of the toxicity characteristic waste codes listed in the facility permit for storage (total VOCs, SVOCs and RCRA metals). Soil samples analyzed for VOCs will be preserved in accordance with Arizona guidelines in the field immediately after collection. Background samples will be collected for comparison.

Soil sample results will be compared to applicable closure criteria including the Arizona Soil Remediation Levels (Appendix G-7). The identification, characterization, and remediation of any

contamination that may exist beneath the containment areas shall be described in a work plan prepared following receipt of analytical results from any required soil sampling. The work plan will be submitted to the ADEQ for review and approval.

6.8 Facility Closure Schedule

Within 90 days of receiving the final volume of hazardous wastes, Safety-Kleen will remove all hazardous wastes from the site in accordance with the approved closure plan. Safety-Kleen will complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of waste or upon ADEQ approval of the closure plan and procedures, whichever is later. ADEQ may approve a longer period if Safety-Kleen demonstrates that:

- a. The activities necessary to remove wastes or close the facility will, of necessity, take longer than 90 or 180 days, respectively, to complete;
- b. The facility has the capacity to receive additional wastes;
- c. There is likelihood that a person other than Safety-Kleen will recommence operation at the site within one year;
- d. Closure of the facility is incompatible with future use of the site. In this case, Safety-Kleen will take all steps necessary to prevent threats to human health and the environment.
- e. Safety-Kleen will complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of waste. Safety-Kleen may petition the agency for an extension to the closure period to ensure that the facility has achieved clean closure levels that are protective of human health and the environment.

A closure schedule is attached.

6.9 Closure Certification

When closure is completed SK shall submit to the Agency certification, both by the operator and a qualified independent Professional Engineer registered in Arizona, that the facility has been closed in accordance with the approved closure plan. The closure certification will be presented in a Closure Certification Report, which will be prepared in accordance with applicable portions of 40 CFR 264.115, as adopted by A.A.C. R18-8-264.A. Information contained in the closure report shall include a brief site history, site plan, closure field notes, description of decontamination procedures, photos, soil sampling locations, laboratory analytical reports, tabular summaries of analytical results, volume of wastes and/ or wash water removed and copies of waste manifests. Any deviations from the approved closure plan will also be documented in the report. The Closure Certification Report will be submitted within 60 days of completion of the closure activities.

6.10 Closure Cost Estimate

The closure cost estimate for the facility is attached. Unit costs are based on third-party costs to perform closure operations. The closure cost estimate is adjusted annually to reflect inflation, in accordance with and as required by and detailed in 40 CFR 264.142(b) and (c).

6.11 Partial Closure

Partial closure of any unit will be performed using the procedures described above.

6.12 Post Closure

As discussed in Section 6.2 above, Safety-Kleen will remove all hazardous wastes and waste residues from the facility site during closure. There are no hazardous waste treatment or disposal units at the facility. Therefore, a post-closure plan is not required at this time.